

Research on the Properties of Rights Related to Online Accounts

Zeyu Zheng¹

¹ Faculty of Law, Macau University of Science and Technology, Taipa 999078, Macau SAR, China
Correspondence: Zeyu Zheng, Faculty of Law, Macau University of Science and Technology, Taipa 999078, Macau SAR, China.

doi:10.56397/SLJ.2023.06.16

Abstract

Account-based virtual property (or “network account”) is a new type of property born in the digital age. By registering, users sign a service contract with an operator to obtain an exclusive account. Regarding the properties of their related rights, our laws are not clear, so they are prone to legal disputes.

It was found that these rights are claims arising from service contracts, but they have the characteristics of property rights. This is the same as the theory of “materialization of claims”, which is contrary to the theory of dichotomy of property and debt. Therefore, if we take the “materialization of claims” of leasing rights as a reference, we can analyze the properties of rights related to network accounts and interpret some real problems with the conclusion.

Keywords: account-based virtual property, network account, leasehold, claim materialization, right attribution

1. Introduction

Article 127 of the Civil Code of China follows the provisions of the General Principles of the Civil Code on virtual property, reflecting the protection and recognition of virtual property by law. As a typical virtual property, virtual property of account type (later referred to as “network account”) is naturally protected and restricted by the law. With the development of digital network, virtual property has become more and more deeply rooted in people’s daily life, and the real demand for the study of virtual property has also increased. On May 31, 2021, the Supreme People’s Court released the Ten Typical Cases of the Internet, which involved

many issues of virtual property and promoted the research of scholars on related rights.

Scholars have found that the rights associated with the network account are supposed to be claims arising from the service contract between the user and the operator, but they have the characteristics of property rights themselves. This is reminiscent of the theory of materialization of claims, and the most typical one is the issue of “leasehold”. Professor Liang Huixing said in his “Study of Chinese Property Law”, “In recent times, not only the tendency of property rights becoming claims, but also the phenomenon of claims becoming property rights, and the property rights of leasehold is

one of the examples.” (Liang Huixing, 1998)

Therefore, whether the rights related to online accounts have been “materialized” like “lease rights”, and whether the rights related to online accounts can be analyzed in depth with reference to this. Finally, the conclusions of the analysis can be interpreted into some practical problems to prove the necessity and relevance of the research on the rights related to online accounts.

2. The Theory of “Claim Materialization” of Leasehold

2.1 The Traditional Dichotomy Theory of Property Claims

The traditional theory of dichotomy of property and debt attaches great importance to the distinction between property rights and claims, and there are various doctrines such as “three distinctions” and “five distinctions”. Professor Wang Hongliang’s view on the difference between property rights and claims is cited here. Claims and rights in rem are different in nature. Claims are relative rights while rights in rem are absolute rights; rights in rem have exclusivity while claims have equality; rights in rem are essentially the right to dominate things while claims are the right to claim against the opposite party. Property rights and claims co-exist, and property rights have priority effects. (Wang Hongliang, 2016)

2.2 Changes in Leasehold and the Proposal of “Materialization of Claims”

At the time of Roman law, the scholarly recognition of leasehold is a general claim. The right to lease originates from the debt relationship arising from the lease contract, and is undoubtedly a claim. Therefore, due to the relativity of the debt relationship, the Roman law adopted the principle of “sale breaking lease”, i.e., the leasehold right was considered a claim and denied its effectiveness against third parties. (Pietro Penfante, 2017) However, the recognition of the right of perpetual tenancy in French law and the provision of “sale does not break lease” in the French Civil Code after World War II changed the traditional view of leasehold rights as general claims, and gave leasehold rights the effect of property or property-like rights. (Luo Jiezheng, 2010) Subsequently, countries followed the system, and the phenomenon of “materialization of leasehold” emerged.

After years of research, jurists not only have difficulty in defining property rights and claims in a clear and uniform manner, but also the emergence of “materialization of leasehold” has blurred the line between them. As a result, scholars have questioned the strict distinction between the two in the traditional theory. As mentioned above, Professor Liang Huixing has raised a question on the “property right of leasehold”. The term “materialization of claims” has thus emerged.

2.3 “Materialization” of Leasehold

Nowadays, there are three theories on the nature of leasehold, namely, “claim of leasehold”, “materialization of leasehold” and “property right of leasehold”. Nowadays, the most accepted one is the “materialization of leasehold”. Referring to the theory of Professor Wang Zegan, the main purpose of the materialization of leasehold is to show that leasehold is a claim, not a property right. Its “materialization” is manifested in the antagonistic effect of property rights, so that the lessee can claim the continued existence of the lease right in the face of the change of ownership of the leased property or other property rights. (Wang Zegan, 2015) Although this “reinforced” credit right has a tendency to change to property rights, at this stage, it only reveals the individual characteristics of property rights, and is only a right with the characteristics of property rights. (Bauer & Stirner, 2004)

3. “Materialization” of Rights Related to Online Accounts

3.1 Account-Based Virtual Property and Its Related Rights

Professor Jiang Bo divides virtual property into three categories: account-based virtual property, object-based virtual property, and monetary virtual property. (Jiang Bo, 2015) In this paper, we are talking about account-based virtual property, i.e., network accounts, such as email accounts and social accounts. In this paper, we discuss account-based virtual property, such as email accounts and social accounts. The rights related to account-based virtual property discussed in this article are mainly related to the rights acquired by the registrant through registration and the rights owned by the operator.

3.2 Claim Attributes of Rights Related to Network Accounts

According to the traditional theory¹, the user party and the operator obtained the rights related to the network account through the conclusion of a service contract, which is undoubtedly a claim arising from the debt relationship arising from the service contract. Both parties to the contract based on the contract is the right to request the other party to perform its contractual obligations, the effect is relative, belongs to the claim nature of the claim.

3.3 “Materialization” of Rights Related to Online Accounts

3.3.1 Property Object Attributes of Online Accounts

(1) Network Accounts Are Intangible Property in the Legal Sense

First of all, as a kind of virtual property, the network account should belong to the property in the legal sense. According to Professor Peng Wanlin’s summary, in law, to become legally protected property must meet three conditions: validity, scarcity and legality. (Peng Wanlin & Qin Youtu, 2018) Network account is the user’s ID card and pass in the network world, the user needs to use it to complete most of the operations in cyberspace, so it is obviously valid. Second, each account is exclusive to the user, with distinctive personal characteristics of the user, is unique and unrepeatable, and therefore has scarcity. Again, as virtual property, the law has clearly provided for its protection according to Article 127 of the Civil Code of China, so it has legality. In contrast, virtual property of account type basically meets all the necessary conditions for being property, so we consider it to be property in the legal sense.

Then, we can judge whether it is intangible property. According to the generalization of the concept of intangible property by Professors Ma Junju and Mei Xiaying, “intangible property” often has three different meanings: firstly, it does not have a certain shape, but occupies a certain space, and has independent economic value and can be dominated by people, such as sound and light; secondly, it refers to intellectual property; thirdly, it follows the Roman law and refers to any right other than the ownership of tangible things as “intangible property” or “incorporeal property”. Roman law, any right other than the ownership of tangible things is called “intangible property” or “incorporeal things”. (Ma Junju & Mei Xiaying, 2001) In contrast, online accounts obviously do not belong to

intellectual property rights, nor do they differ from the “incorporeal things” referred to in traditional Roman law, but they have an independent economic value and are at the direct disposal of users. The question is whether it occupies a certain space in terms of existence. On the physical level, virtual property is composed of “electromagnetic records” that exist in the server, and although it does not have a certain form, it is a physical substance, like electric current, and occupies a physical space, i.e., disk space. Since electric current can be a thing, a network account composed of electromagnetic records can also be a thing. Furthermore, although the network virtual space on which the network account is based is a space of virtual reality, it has extremely high similarity to the real world and has commonality in many fields. With the development of technology, it is impossible to predict whether it will eventually become an extension of the real world.

(2) The Theory of “from the Physical to the Value-Based”

The overemphasis of traditional property theory on the corporeality of the object of right and the conceptual conflation of property rights and ownership have led to difficulties in its rational interpretation of incorporeal and other property rights. Therefore, scholars have thought about weakening the emphasis on corporeal objects and turning to a more pragmatic value. The reason is that whether a thing is corporeal or incorporeal, it can embody value or use value in social life. The domination of a certain object is essentially the domination of its value or use value, which is why we should classify them as objects for regulation in law. Professor Meng Qinguo proposes that “a thing is the value of property that can be directly dominated by a specific subject.” (Meng Qinguo, 2020) Professor Gao Fuping also puts forward the theory of the value of property rights, arguing that “in modern society, people’s demand for property rights has shifted from enjoyment (use value) to circulation (value)”, so we should take the traditional rules of property rights as the basis, focus on absorbing some new trends of property rights valorization, and transform the traditional property law to adapt to the development of society. (Gao Fuping, 2003)

The value and disposability of virtual property are indisputable, but its corporeality has been the focus of controversy. Based on the

value-based theory mentioned above, the value-based nature is taken as the main judgment standard of the object of property rights. The virtual property can be directly dominated by a specific subject and has property value, so it is considered that the virtual property has the property object attribute, and the corresponding virtual property of the account class should also have the property object attribute.

3.3.2 The Rights Related to Online Accounts Have the Nature of Property Rights

The academic community generally believes that property rights should have two main characteristics, namely, absolute and dominant. (Liu Jia'an, 2015) With regard to dominance, it can be reflected from three perspectives: first, the operator enjoys direct dominion over the property; second, the use and change of the property is not controlled by the operator, but is the result of the user's specific behavior during the service period, and the specific disposal of the property depends entirely on the user's own activities; third, the operator and the user's. The third is the "collaborative" exercise of dominion by the Operator and the User. (Lin Xuxia, 2009)

With regard to its absolute nature, it is mainly manifested in its property-like antagonism, which is mainly reflected in the antagonism between the rights of the user and the rights of the operator. After completing the registration, the user of the account can independently and exclusively possess and use the income of the online account, and other legal subjects cannot prevent the right holder from exercising these rights, including the operator of the account. This right can even be confronted with the operator's ownership, for example, the operator cannot arbitrarily transfer the account, and cannot arbitrarily use or dispose of the account without the user's permission. All of these can reflect its antagonistic power against the right in rem.

4. Analysis of the Attribution of Related Rights with Reference to "Materialization of Leasehold"

4.1 Vesting of Leasehold Rights

We have divided the lease right into two stages of rights, one is the claim that arises when the contract is validly concluded, and the other is the right with the nature of property that is acquired after the contract is performed.

First is the contract formation stage. The lessor and the lessee acquire the right to demand the other party to perform the obligations of the contract through the conclusion of the lease contract. This right is derived from the debt relationship arising from the service contract, and its effect is relative in nature, and is undoubtedly a claim in nature. Both parties to the contract acquire this right, but it only takes effect with respect to the contract. The parties do not have any direct rights to the leased property, nor do they have direct dominion and possession over it, nor do they have the right to use and benefit from it. Therefore, even if one party refuses to perform its contractual obligations, the other party cannot ask the court to compel the transfer of any rights regarding the leased property, but can only request the defaulting party to actually perform its contractual obligations or be liable for breach of contract. Similarly, the legal relationship established between the lessor and the third party at this stage is valid, and the lessee can only pursue the lessor's liability for breach of contract, but cannot claim rights against the third party.

Then comes the performance of the contract. The lessor transfers the possession of the leased property and the right to use the proceeds of the leased property to the lessee, but the ownership is still enjoyed by the lessor. Here comes the controversy over the "materialization of leasehold", i.e., the debate over whether the right to use the proceeds of the leased property belongs to property rights or claims. According to the viewpoint of "materialization of leasehold", the leasehold right is a claim with the characteristics of property, but not a property right. This right is enjoyed by the lessee.

In summary, the lessor has the right to claim ownership of the leased property and to request the lessee to perform its contractual obligations; the lessee has the right to request the lessor to perform its contractual obligations and to claim the proceeds from the use of the leased property with the characteristics of property rights.

4.2 Attribution of Rights Related to Network Accounts

Referring to the previous analysis of lease rights, we also divide the rights related to online accounts into two parts.

First is the contract formation stage. The user

party fills in the registration information and accepts the form terms and conditions provided by the operator, i.e., the user agreement. At this point, it can be considered that this is a legal relationship between the user party and the operator by signing a service contract. If the subscriber is required to pay the consideration, it is regarded as a dual contract and the operator acquires the right to request the subscriber to perform its contractual obligations in the nature of a claim. If the operator provides the service without compensation, it is regarded as a unilateral contract and the operator does not have the right to request the subscriber to perform its contractual obligations in the nature of a claim.

Then there is the post-performance of the contract. Similar to lease rights, the operator, i.e., the service provider, fulfills its contractual obligations and transfers the possession of the account and the right to use the proceeds to the subscriber, who then acquires the right. Similarly, whether the right to use the proceeds here is a property right or a claim, the theory of “materialization of claims” and the definition of the properties of lease rights suggest that the right should also be a claim with the characteristics of a property right.

To sum up, the operator has the ownership right of the virtual property and the claim right of the user to perform the contractual obligations; the user has the claim right of the operator to perform the contractual obligations and the claim right of the proceeds from the use of the virtual property with the characteristics of property rights. Thus, it is possible to echo the dichotomy of property rights and claims, and to incorporate them into the system as claims, so as to avoid the emergence of rights that are independent of the system and between property and debt.

5. Relevance of Confirming the Attribution of Rights Related to Online Accounts

5.1 Remedies for the Rights of the User Party (Vulnerable Party)

Virtual property is a product of the digital age, and its birth is still very short compared to property in the traditional sense. Compared with the former, which has been accepted and studied by human beings for a long time, our understanding and study of virtual property is still far from mature. However, with the development of digital networks, virtual

property has become more and more deeply rooted in people’s daily life, and the corresponding legal issues and disputes have increased. The study of virtual property and its rights is therefore extremely relevant and in demand.

In the legal relationship concerning virtual property, the user is often in a weak position. This is because the user is usually weak in legal awareness and knowledge, while the operator often has a professional legal team and a lot of human and financial resources to deal with legal issues. Moreover, when acquiring the rights related to virtual property, the user party usually needs to accept the form terms and conditions provided by the operator, i.e., the user agreement, and at this level the user party should also belong to the disadvantaged party. Therefore, for the disadvantaged user party, we protect their legal rights and interests from being infringed by defining the attribution of the relevant rights and providing remedies. The following are some specific cases and situations:

(1) When virtual property is infringed, it is often difficult for the user to obtain remedies. If we do not clearly define the properties and attribution of the relevant rights, the operator can avoid responsibility. For example, “Yu Binhua v. Guangzhou Huado Network Technology Co.”² The legal protection of the virtual property of the user Yu Binhua is established by combining the rights and obligations of both parties in the network service contract, and the operator should have the obligation to protect the security of the network virtual property. Therefore, the user party can exercise its right to request the operator to fulfill its contractual obligations at the stage of contract formation, and request the operator to fulfill its security protection obligations under the contract.

(2) How to obtain remedy for the user’s rights when the operator uses its ownership rights to affect the normal exercise of the user’s rights. For example, if an operator mistakenly blocks a user’s account in the process of dealing with “self-service” or “external hang-ups”, does the user have the right to recover it? Or if the operator transfers the virtual property to other users, does the user have the right to recover it? If we refer to the right of lease, the user can claim the right of property against the operator’s ownership based on the property nature of the right to use and benefit from the virtual property and the protection of the vulnerable

party. Although there is no similar provision in the actual law, our determination of the property nature of the right to use revenue actually promotes the protection of the rights and interests of virtual property. And in real cases, the courts have not denied the antagonistic effect of the right to use proceeds of virtual property across the board. For example, in the “Guangzhou Internet Court Announces Ten Typical Cases Involving Data and Virtual Property”, “Su Pulu and Hangzhou Netease Leihuo Technology Co.”³ In this case, the court put forward the factors to be considered and the principles to be followed by the relevant subjects on the scope of virtual property rights and interests in online games, i.e., to consider the source of online virtual property, the degree of domination, the relevant contractual agreement and other factors, and to follow the principle of honesty and credit and not to damage the public interest to make a specific judgment. Therefore, even in the trial, the court will judge whether it is effective against property rights according to the specific circumstances of the case.

In conclusion, it is necessary to distinguish the attributes of the rights related to virtual property and their attribution. This distinction is important for applying different legal rules, solving disputes over virtual property, maintaining proper transactions of virtual property, and guiding parties to properly exercise their rights and fulfill their obligations.

5.2 Favorable to Regulate the Flow of Virtual Property Transactions

In recent years, with the rapid development of the network industry, network virtual property trading has in fact developed into a huge industrial chain. For account-type virtual property, there are now many account trading websites, such as Netease “Zangbaoge” and Trading Cat. However, so far, the law has not yet recognized the legality of online virtual property trading, and the virtual property trading market is still in a gray area in China. With regard to account virtual property, there are often provisions in user agreements that restrict private transactions, but in fact, many operators provide trading functions and platforms, which means that trading of account virtual property is feasible without political and legal factors. In other words, it is feasible to exclude political and legal factors from the trading of virtual property. Then, for these transactions provided by the operators and supported by the platform,

what rules should be followed in law and how to solve the relevant legal issues, which requires an analysis of the relevant rights and their attribution. What are the rights of the virtual property that the user is trading? What is the role of the operator in it? What rights and obligations do each party have? All these need to analyze the relevant rights and their attribution. For example, according to the previous discussion, what the user is trading is the right to use the virtual property, which is a claim with the characteristics of property rights. Then, the transfer of the virtual property should be subject to the obligation of notification according to the rules of claims, and the transfer will be subject to the ownership rights of the operator. However, the property right of the right will have a countervailing effect on the limitation of the operator’s ownership.

In the case “Guangzhou Internet Court Announces Ten Typical Cases Involving Information and Virtual Property”, “Luo Jiayi and Lei Hao, Guangzhou NetEase Computer System Co.”⁴ The case established the rule of following the principle of autonomy of private law to determine the rights and obligations of the parties in the case of a platform specializing in providing virtual property trading services, under the current controversy in the theoretical and practical circles about the nature of game character trading. Here, the relevant rights of virtual property and its attribution were analyzed and defined, and the operator agreed in the service agreement that “transaction” only refers to the transfer of the right to use virtual goods, and the transaction of the account-type virtual property between users in the same online game is essentially the transfer of the transferee’s claim to the operator, which is a transfer of claim. It is a transfer of claims.

In summary, the definition of the attributes of virtual property-related rights and their attribution is conducive to the regulation and development of the entire virtual property trading market. With the development of virtual network technology, virtual property is increasingly penetrating into the daily life of citizens, and the legalization of the virtual property market is inevitable. Referring to the practical experience of countries and regions around the world, such as South Korea, the United States, Taiwan, etc., the prohibition of virtual property transactions will eventually go to the legalization of regulation. The legalization

will certainly bring a large number of legal issues to be analyzed, so the determination of the rights and obligations of the parties involved in the transaction is undoubtedly an important basis for analyzing these issues. Different determinations will lead to different conclusions and have important impacts on the rights and interests of the parties. Therefore, in order to avoid disputes caused by unclear knowledge of the relevant rights, it is extremely necessary to define the attributes of the rights related to virtual property and their attribution.

6. Conclusion

The traditional theory of claims in rem makes a strict distinction between rights in rem and claims, but the theory of “materialization of claims”, which is mainly based on “leasehold” and “sale without breach of lease”, has challenged this tradition. This tradition has been questioned by the theory of “materialization of claims” which is based on “leasehold” and “sale and purchase without breaking lease”. The so-called materialization of leasehold is to show that leasehold is a claim, not a property right, but has the power of antagonism in property, so that the lessee can claim the continuation of the leasehold for the acquisition of ownership of the leased property or other property rights.

Network account (account-type virtual property) is a kind of virtual property, which is an intangible property generated in the digital era. Through an in-depth study of the attributes and attribution of the relevant rights, we find that the rights should be claims arising from the service contract between the user and the operator, but they have the characteristics of property rights, which are very similar to the “materialization of lease rights”. Therefore, we analyze the properties and attribution of the relevant rights of online accounts with reference to the “materialization of claims” of lease rights. By dividing the relevant rights into two stages: contract formation and post-contract performance, we conclude that the operator enjoys the ownership of the virtual property and the claim to request the user to perform its contractual obligations; the user enjoys the claim to request the operator to perform its contractual obligations and the claim to the proceeds from the use of the virtual property with the characteristics of property rights. This conclusion can also echo the dichotomy system of property rights and claims, and the relevant rights will be recognized as claims in the system

to avoid the emergence of rights independent of the property debt system.

Ultimately, we interpret some real-world problems with the conclusions drawn from the analysis to demonstrate the necessity and relevance of the study of the rights related to online accounts. There are two main perspectives, the rights remedy perspective for users who are disadvantaged parties, and the favorable perspective for regulating the flow of virtual property transactions. From the perspective of rights remedy, by defining the attributes of the rights related to virtual property and their attribution, it can enable the users to seek the correct means of rights remedy when their virtual property is infringed or when they face the abuse of power by the operator. It is also conducive to the court’s determination of the responsibility of the relevant subjects. From the perspective of regulating virtual property market transactions, the definition of the attributes of the relevant rights and their attribution helps to identify the rights and obligations of the parties involved in the transactions, so as to avoid disputes caused by unclear knowledge of the relevant rights by the parties to the transactions, or to make reasonable judgments on the basis of the specific disputes, so as to protect the rights and interests of the parties.

The increasing penetration of virtual property into people’s daily lives has increased the real demand for the study of virtual property. According to the practical experience of countries and regions around the world, virtual property may even take the path of marketization. This means the emergence of legal problems and disputes, and therefore the need for relevant legal research to regulate and solve them. We hope this article will contribute to the relevant research.

References

- Bauer, Stirner. (2004). *German law of property (first book)*. Zhang Shuanggen, translation. Beijing: Law Press.
- Gao Fuping. (2003). From physical object to value object: A historical investigation and jurisprudential analysis of the object of property rights. *Journal of East China University of Political Science and Law*, (5), 3-13.
- Jiang Bo. (2015). *Research on judicial protection of virtual property*. Beijing: Peking University

Press.

- Liang Huixing. (ed.) (1998). *Research on Chinese Property Law*. Beijing: Law Press.
- Lin Xuxia. (2009). The nature of virtual property rights. *Chinese Jurisprudence*, (1), 88-98.
- Liu Jia'an. (2015). *Theory of property law*. Beijing: China University of Political Science and Law Press.
- Luo Jiezheng. (trans.) (2010). *French Civil Code*. Beijing: China Legal Publishing House.
- Ma Junju, Mei Xiaying. (2001). Theoretical and legislative issues of intangible property. *Chinese Jurisprudence*, (2), 103-112.
- Meng Qingguo. (2020). *The Dual Structure Theory of Property Rights — A Theoretical Reconstruction of China's Property Rights System*. Beijing: Law Press.
- Peng Wanlin and Qin Youtu. (eds.) (2018). *Civil law (eighth edition)*. Beijing: China University of Political Science and Law Press.
- Pietro Penfante. (2017). *Textbook of Roman law*. Huang Feng, translation. Beijing: China University of Political Science and Law Press.
- Wang Hongliang. (2016). *General theory of debt law*. Beijing: Peking University Press.
- Wang Zegan. (2015). *Studies on civil law doctrine and jurisprudence*. Beijing: Peking University Press.

¹ Based on the relationship of debt, the creditor can obtain a claim against the debtor. The legal act that creates the relationship of debt is usually a contract. For details, see Wang Hongliang. *General Theory of Debt Law*. Beijing: Peking University Press, 2016.

² Yu Binhua v. Guangzhou Huado Network Technology Co., Ltd. Network Service Contract Dispute, Guangzhou Internet Court (2019) Guangdong 0192 Civil Judgment No. 70.

³ Su Pulu, Hangzhou Netease Leihuo Technology Co., Ltd. Network Service Contract Dispute, Guangzhou Internet Court (2021) Guangdong 0192 Civil No. 19973 Civil Judgment.

⁴ Luo Jiayi and Lei Hao, Guangzhou NetEase Computer System Co., Ltd. in a dispute over confirmation of contract invalidation, Guangzhou Internet Court (2019) Guangdong 0192 Civil No. 13270 Civil Ruling.