

# *Study on the Criminal Law Protection of Virtual Property*

Jingyi Liu<sup>1,a,\*</sup>

<sup>1</sup>*School of Law, Shandong University of Finance and Economics, Jinan, China*

*a. konglan@ldy.edu.rs*

*\*corresponding author*

**Abstract:** With the advent of the network era, more and more criminal cases involving virtual property have occurred. The protection of virtual property has become an issue of urgent concern to the legal profession. However, the current reality is that in the legal regulations and theoretical practice, there is no accurate legal qualification of virtual property. It is urgent and necessary to analyse the legal nature of the virtual property and the corresponding legal interests. At the same time, the criminal law research and protection of the relevant infringement on the basis of the related normative elements have also become one of the urgent issues at the present time. Based on the above, this paper researches and analyses the legal attributes of virtual property in the criminal law protection of virtual property by using the research methods of normative analysis, comparative research and case study. At the same time take into account the inadequacy of the criminal law protection research and analysis. Finally, it provides recommendations for the protection of virtual property in criminal law in the areas of legislation, justice, international cooperation and technical means.

**Keywords:** Virtual property, criminal law, legal attributes, criteria of value

## **1. Introduction**

In the era of digitalisation, virtual property is an emerging form of property, and its legal status and protection mechanism are increasingly receiving extensive attention from all segments of society. With the rapid development of network technology, virtual property not only covers virtual goods and virtual currencies in online games, but also extends to a wider range of areas such as digital artwork and social media accounts. However, compared to physical property, virtual property faces many challenges and controversies in its protection. From the standpoint of criminal law, there are a number of legal dilemmas in the current protection of virtual property, the main issue being whether offences committed against virtual property can be criminalised by applying the original property crime offences. Currently, offences relating to virtual property are most frequently committed in the field of e-games, which is also one of the areas closest to life. In this case, there is also the issue of the relationship between players, operators and third parties. Focusing on this, the inadequacies of the law are analysed through a point-by-point approach, and corresponding recommendations for legal improvement are made. At the same time, in conjunction with specific cases, it discusses the constituent elements and criminal liability of virtual property offences and the principles applicable to criminal law in the protection of virtual property. In the era of big data, where data is the core driving force for development, how to settle the protection of property in the form of data and how to alleviate the difficulties in identifying data crimes are issues worthy of in-depth study.

## **2. Overview of Virtual Property**

### **2.1. Meaning of Virtual Property**

With the development of cyberspace, virtual property is also gradually entering people's lives. Because of the lag in the law, the legal profession does not have a more strict and accurate definition of virtual property. But in general, virtual property often refers to the network based on the existence of virtual space, with a certain exchange value of property. Due to the different transaction environment and transaction mode, there is a huge gap exists between the virtual property and the real property. Therefore, in order to protect virtual property, it is necessary to distinguish and define virtual property [1].

There are two mainstream views on the categorisation of virtual property, based on different distinguishing criteria. One is to divide the virtual property into two kinds of virtual entrances and virtual assets, whose representative forms of expression are account categories and virtual currencies, props, etc. Another is to classify virtual property in combination with real property into narrowly defined cyber virtual property, virtual intangible property and virtual pooled property. The narrow sense of the network virtual property is virtual objects, mainly including the simulation of the real existence of material property, the expression of the virtual props and game coins and other virtual currencies in online games. Virtual intangible property, which consists mainly of the simulation of immaterial property in reality, such as intellectual property and other related wealth. Virtual pooled property, typically manifested in online shops, refers mainly to the dual value derived from the combination of labour and possessions in the real world [2]. Accordingly, the main research object of this paper is the network virtual property in the narrow sense classified according to the second classification standard and its protection and relief in criminal law.

### **2.2. Characterisation of Virtual Property**

Virtual property has a strong dependence on cyberspace because it needs to rely on it for its existence. This characteristic leads to the instability and difficulty of circulation of the monetary value of virtual property.

Firstly, the creation of virtual property is based on the development of virtual information technology on the Internet, which is highly dependent on cyberspace. Virtual property exists as a property interest based on the virtual space created by network technology. Secondly, the valuable attributes of virtual property are shown through circulation, but due to the existence of technical barriers to the transmission of data, the flow of virtual property is therefore limited to specific software so that its valuable attributes are not well expressed. On the contrary, virtual property shows more difficult circulation [3]. Finally, the most important reason and the most important characteristic that makes it difficult to be legally protected as virtual property is instability. The instability of virtual property is attributable to a number of factors, including the variety of forms it can take, poor circulation, and significant fluctuations in its value attributes. This inherent instability has led to a lack of clarity in the judicial determination of virtual property in China, as well as a dearth of effective laws and regulations to support the handling of legal disputes related to virtual property.

## **3. Legal Attributes of Virtual Property and Attribution of Rights**

### **3.1. Legal Attributes of Virtual Property**

With regard to the Criminal Law of the People's Republic of China, Article 92 of the Criminal Law provides a clear definition of the scope of "property" as pertaining to legal property related to people's lives, information materials and other property such as stocks and bonds. Such provisions encompass

both enumerative and descriptive elements. In the descriptive provisions, there is scope to include online virtual property within the scope of "property" [4].

### **3.2. Attribution of Rights to Virtual Property**

Virtual property is essentially a form of property with a legal interest. Its existence is contingent upon the platform provided by the operator, which has led to ongoing disputes regarding the ownership of virtual property and the attribution of other rights. By analysing and comparing these disputes, this paper will discuss the attribution of the rights of virtual property. In the meantime, a corresponding right attribution system is constructed for the virtual property of game data, according to the relationship between players, operators and third parties [5].

#### **3.2.1. Player and Operator**

The relationship between the player and the operator is established on the basis of a contractual agreement for the provision of gaming services. The aforementioned contract stipulates that the operator is permitted to freeze and ban players who are seeking a substitute trainer or engaging in other behaviours that disrupt the equilibrium of the game. Conversely, other behaviours are generally not addressed. Furthermore, the rights to game props, rechargeable props, and other related virtual properties are currently vested in the players. Consequently, if the operator's prohibition of the player's relevant property is based on the player's conduct that disrupts the balance of the game or infringes on the operator's interests, at this juncture, given the absence of subjective awareness of destruction, it does not constitute the crime of destruction of property.

#### **3.2.2. Operator and Third Party**

With regard to the attribution of rights between the operator and third party, the operator exercises control and protection of the player's virtual property through the data path. The third party, however, engages in acts of theft of the player's owned virtual property through the destruction or bypassing of the operator's protection system through alternative means. However, between these two subjects, the form of the virtual property is essentially identical, and thus the operator is able to restore the virtual property of the player that has been lost due to data corruption. Consequently, these two forms of crime cannot be considered as property crimes, and are more often treated as computer crimes.

#### **3.2.3. Player and Third Party**

In the event of a dispute between a player and a third party, where the third party infringes on virtual property under the player's control, the in rem nature of the virtual property will prevail. In either case, whether the property in question is of an account or item type, its nature is that of a property interest. Consequently, it can be the object of theft, robbery and other property crimes. The act of transferring game-type virtual property by a third party without authority or ultra vires necessarily violates the legal interests of data security, and establishes the offence of unlawfully obtaining computer information system data. In order to determine whether this constitutes a property offence, it is necessary to analyse the remedial obligations of the operator. As mentioned above, the operator's ability to recover the virtual property in question exists, so whether the violation of recoverable property constitutes a property offence needs to be determined in the context of the actual situation [6].

## **4. Infringement of Virtual Property and the Composition of the Offence**

### **4.1. Infringement of Virtual Property**

Virtual property because of the property attributes, there are theft, fraud, illegal copying and other common forms of infringement, the violation of the object legal interests of virtual property legal interests. In response to various forms of infringement, virtual property is typically treated as tangible property in practice. Consequently, violations against virtual property are typically classified as property crimes and are prosecuted and punished in accordance with the established criteria for such crimes.

The number of perpetrators of virtual property torts can also be classified as separate or joint torts, both reflecting the general characteristics of virtual and real property. Based on this feature, the provisions of the Civil Law on general and special torts are usually referred to in dealing with virtual property infringement cases.

### **4.2. Criminalisation of Virtual Property Offences**

The majority of cases of offences derived from virtual property continue to rely on a few basic offences in criminal law, such as theft. According to Article 264 of the Criminal Law, the offence of theft is defined as the act of unlawfully taking possession of public or private property. This may be accomplished in a number of ways, including by stealing in a larger quantity or repeatedly, by burglary, by using a weapon during the commission of the crime, or by pickpocketing. The object of the offence is a property interest, and it may be argued that virtual property may be recognised as one of the objects of the offence. In the context of an unending stream of virtual currency theft, game prop theft, and other related offenses, the sentencing of perpetrators will typically align with the established elements of the theft offense. However, virtual property exhibits distinctive characteristics, and in certain instances, the theft of virtual property cannot be fully encompassed by the act of theft [7].

On 6 October 2020, the defendant Zhao Shifeng, at his residence, utilised his account password, which he had previously stored in a secure location, to access the personal account of the victim Wang via mobile phone software. He then transferred 50,130 mother coins and 1,340 subcoins of virtual currency from Wang's account to his own personal account. The victim Wang discovered that the account had been compromised and contacted the defendant's acquaintances to assist in the recovery process. With the assistance of his acquaintances, the defendant Zhao Shifeng facilitated the return of the virtual coins to the victim. The transaction price of the online platform on the base date of the price determination of the stolen virtual coins was assessed to be RMB 537,374. The above case was convicted of theft in the first instance, but in the second instance, the People's Court quashed the first instance judgement of theft and changed the sentence to the offence of illegally acquiring a computer information system.

In this case, the defendant Zhao Shifeng's actual behaviour in the first instance verdict was found to be theft. This was based on evidence obtained from the investigation which showed that he transferred the victim's virtual currency into his own account. This constituted the act of theft and the constitutive elements of the act. The defendant's actions were unlawful and he peacefully transformed property owned by another person into his own possession. This violated the victim's legal interest in property. This evidence demonstrates that virtual property has been acknowledged in practice as a form of property with private attributes. Consequently, the theft of virtual property can be regarded as theft, regardless of its existence in virtual form within virtual space. The offence of theft is therefore applicable in this context. However, the court of second instance deemed the conviction of theft by the court of first instance to be an inappropriate application of the law. Therefore, the second instance changed the sentence to that of illegally obtaining a computer information system. This illustrates

that the object of the law, as determined by the court, differs from the object of the law that was violated by the offence of theft. Nevertheless, the offence of illegally acquiring a computer information system is defined as the act of violating state regulations, intruding into a computer information system outside a specific area or using other technical means to acquire data stored, processed or transmitted in such a computer information system under serious circumstances. The question of whether the actions taken by Zhao Shifeng in this case involved the use of technological means remains open for further consideration. Furthermore, the stolen virtual currency has been returned to the victim in a timely manner. It remains to be determined whether the determination of aggravating circumstances requires reaffirmation.

## **5. Problems and Solutions of the Legal Protection of Virtual Property**

### **5.1. Uncertainty of Legal Attributes and Construction of Offences for Protection**

The concept of virtual property is currently understood in a variety of doctrinal contexts. From the perspective of civil law, the main categories of rights associated with virtual property are property rights, claims and intellectual property rights. From the perspective of criminal law, there is a lack of clear and specific provisions defining the criminal law attributes of virtual property. As a consequence, there are still certain gaps in the judgement of cases of offences related to virtual property. This has resulted in some cases being qualified as theft, with sentences being determined based on the relevant elements of the offence of theft. In other cases, the accused have not been duly convicted and sentenced due to the constraints imposed by the principle of *nullum crimen sine lege*. Ultimately, the offence and the penalty could not be matched.

To address the aforementioned issues and propose corresponding solutions, it is necessary to provide criminal law support for the protection of virtual property by constructing clear offences. Firstly, by clearly defining the attributes of virtual property at the level of criminal law and combining them with existing offences, as well as clarifying specific offences, it will provide support for judges to have a legal basis for conviction and sentencing at the time of trial. Secondly, drawing on foreign practices, taking Korea and the United States as examples.

The Ministry of Culture of Korea proposed to the National Assembly that a new provision be added to the Game Industry Promotion Act, namely one that would prohibit the brokering of virtual currencies. This proposal was approved by the National Assembly on 14 December 2006. "No one is allowed to exchange, broker or buy tangible or intangible items (game points, game coins, giveaways) obtained through the game." However, the purchase of virtual goods from operators and transactions between individuals of virtual goods are not prohibited [8].

In the United States, data crime is defined as the unauthorised or unauthorised access to a computer and the acquisition of data. However, there is ambiguity regarding the precise meaning of "unauthorised access or exceeding authorisation" [9]. In the context of jurisprudence, the interpretation of "unauthorised access or access in excess of authorisation" by judges has undergone a process of gradual narrowing of application. One potential avenue for narrowing the scope of application is to limit the protection of publicly available data on the grounds that overprotection of publicly available data can lead to data monopolies, which would be detrimental to data companies and the digital economy [10].

Finally, in order to ascertain the current status of China's legal system, it is necessary to define the nature of virtual property in order to facilitate public acceptance and provide a social basis for future legislation.



## **5.2. Imperfect Legal Protection Necessitates Legislative Advancement for Issue Resolution**

In the current legal context, there are still certain blank areas in the protection of virtual property in criminal law. The purpose of promoting new legislation is not only to identify and protect virtual property from a civil law perspective, but also to clarify the characteristics and positioning of virtual property in criminal law.

A new way to tackle the problem is the Hong Kong government's approach. The Hong Kong Police Force has set up a special unit to deal with this new type of crime in the virtual world. In addition, the Hong Kong Police Force is very determined to crack down on virtual property crimes - the theft of virtual property, such as gaming equipment, is considered a criminal offence regardless of the amount of money involved. At the same time, the Hong Kong government has been amending a number of ordinances in order to deal effectively with the increasing number of computer and Internet-related offences. For example, under Section 27A of the Telecommunications Ordinance, any person who knowingly causes a computer to perform a function by means of telecommunications that gives him or her unauthorised access to any program or data held by the computer commits an offence and is liable to a maximum fine of \$20,000. Section 161 of the Crimes Ordinance (Cap. 200) provides for a maximum penalty of five years' imprisonment for a person who commits an offence or obtains access to a computer with dishonest intent to gain for himself or herself or to cause loss to another person. If the property is obtained by deception, the maximum penalty is 10 years' imprisonment under section 17 of Cap. 210 of the Ordinance.

## **5.3. Unclear Criteria for Value Determination with a Specified Method Provided**

Impacted by a variety of factors in practice, virtual property in the value of the determination of the existence of many obstacles. In order to protect the legitimate property rights and interests of citizens and achieve fairness and justice, the relevant departments to regulate the calculation of the value of virtual property in practice, and to develop a scientific and unified method of calculation is one of the current urgent need to solve the problem [11].

In answering this question, the criteria for determining value can be broadly divided into three approaches. Firstly, the specific amount of loss is determined according to the internal selling price of the virtual property, for example, when game props are stolen, the value of the stolen game props can be converted into the price of similar items within the game, so as to determine the specific amount. But the disadvantage is that it is difficult to accurately estimate the value of account-type virtual property [12]. Secondly, through the determination of specific value by the price in the market of virtual property transactions, the average market price can be identified as the price of virtual property for compensation by means of big data statistics and other means. At the same time, the disadvantage is that some of the virtual property in the market does not correspond to the buyer and seller, so sometimes it will form the price of virtual property is difficult to determine by the market price of the situation. Thirdly, it can be determined on the basis of the actual profit made from the theft of the virtual property, since the virtual property still has the corresponding property attributes and can therefore be traded on the market, thus generating a corresponding profit, which is often substantial. However, there are still times when the thief, in order to get out as quickly as possible, sets the price below the market price. In this case, if the actual profit of the thief to determine the value of virtual property will often lead to the loss of the economic interests of the victim, the victim is unfair.

## **6. Conclusion**

In summary, virtual property has become an important part of network transactions, and its virtual nature has become an important issue in the protection of criminal law, which requires relevant

departments to intensify the research and analysis of the relevant legal characteristics of virtual property, and accurately locate its nature in the law, so as to better bring into play the important role of virtual property transactions in promoting economic and social development.

Development can therefore be promoted by means of legislation, the judiciary, international co-operation and technical means, respectively. From a legislative point of view, legislation should clarify the legal status of virtual property, include it in the scope of protection of property rights and ensure that virtual property receives the same legal protection as traditional property. From the judicial point of view, the legal system for the protection of virtual property has been continuously improved through judicial practice to form an effective mechanism for the protection of virtual property. From the perspective of international cooperation, in view of the transnational nature of virtual property, strengthen judicial cooperation with other countries and regions, jointly formulate legal norms for the protection of virtual property, and establish an internationally unified legal system for the protection of virtual property. Finally, advanced technological measures such as blockchain and artificial intelligence can be used to enhance the security and protection of virtual property. In the current context, absorbing the advanced experience of relevant foreign laws and regulations and relevant jurisprudence and applying them to the construction of China's legal system to better protect virtual property is the most important issue to pay attention to at present. Addressing the criminal law protection of virtual property and providing virtual property with the same protection as real property can promote the healthy and stable development of the social economy while safeguarding the rights and interests of individual citizens.

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