Study of Formation and Change of Institutions and Customs in the Trade Transaction System

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Abstract

The purpose of this study is to analyze and clarify the process of formation and change in the institutions and customs of international airfreight. I categorize the institutions and customs for moving goods, money and documents into functional institutions and customs. Rights and obligations flow together with merchandise, foreign exchanges and documents. There are institutions and customs to govern these flows which are known as the coordinating institutions and customs. Formation of and changes to institutions and customs begin from functional ones. A coordinating institution or custom adjusts to the formation of or change in a functional institution or custom. This formation or change causes chain reactions but does not necessarily continue until the system becomes perfect. Some coordinating institutions and customs to remain half-finished. This phenomenon is called "incompleteness of coordinating institutions and customs." Problems with a coordinating institution or custom tend to be left untouched when the only means of settlement is to revise a functional institution or custom.

Keywords: institutions and customs, airfreight, functional institutions and customs, coordinating institutions and customs, incompleteness of institutions and customs

Introduction

It is possible to consider the business transaction, which is practiced as a kind of economic activity, as an aggregation of institutions and customs. The word institution here signifies the methods or organizations of transaction, which are made intentionally for the transaction system. The word customs here is used to refer to the transaction methods that are generated historically.

Once institutions and customs are generated, they are practiced for a certain period without change. The Strategic Complimentary, which is a concept of game theory, proves this. That is to say, "One system exists as a stable mechanism because the more universal a behavior pattern of the society is, the more strategically favorable it will be to choose that behavior pattern, and the more well-established it is as a selfrestraint restriction". ¹For example, in the case of entering into international transactions as a newcomer, transactions tend to be founded on well-established institutions and customs. As long as there is no reason for taking risks in carrying out a transaction, new approaches to the transaction are not likely to be created.

In long term, however, these kinds of institutions and customs are transitive. Some of the institutions are even innovated or modified simultaneously. In what kind of situations do those institutions and customs, the identities of which are too stable too change, become modified or transient? Is it possible to discover some kind of pattern in the process of transformation? This paper attempts to address these questions.

The subject of analysis in this paper is the "airfreight and trade transaction system". There are two reasons why this subject is significant. First, airfreight has developed rapidly since the end of World War II and especially since the 1970s. As a result, the institutions and customs of trade transaction have been changing. This is one reason which makes the airfreight and trade transaction system an appropriate subject for observation of 20th century business transaction systems.

Secondly, there are problems in the area of research addressed to trade transactions. A traditional area² of research, "International Trade Practices", is concerned with trade transactions and the subject of research is the institutions and customs of trade transactions. Its objectives are to introduce individual institutions and customs, identify problems, propose solutions and investigate them. Historically, trade transactions have played an important role in educating business people. The profitability of the research purpose can also be proved by such a role. However, because of their complexity and diversity, trade transactions still contain many possibilities as a site for research into institutions and customs. It is also possible to find concepts or theories from other economic or transaction systems. There was a time when several researchers showed an interest in the area of "trade customs theory"³, and there is relationship between these two subjects.

The core of this paper is an historical analysis of how transaction institutions and customs were changed by the development of the airfreight. This analysis will provide the basis of a plain-language explanation of the process of transformation of institutions and customs.

Airfreight and Observations on Institutions and Customs of Trade Transactions

The Development of Airfreight

The history of aircraft began in 1903 when the Wright brothers succeeded in the test flight. Eleven years later, the aircraft was used for military service in the First World War.

Towards the end of the war, residual crafts and survivor pilots were used to begin mail transport. Mail transport was first started between Rome and Torino in 1917 and between London and Paris in the following year. When the war was over, establishment

¹ Aoki Akihiko, Ono Masahiro. 1996. Analysis on Economic System Institutional Comparison. Tokyo: Tokyo University Press, p.2.

² For a discussion of genealogy and areas of research on civil economical trade, see Yokoyama Kenji. 2000. *Airfreight and Trade System*, Dobukan, pp. 1-16.

³ Ditto, pp.7-9.

of airlines was made possible as residual wartime aircraft and surviving pilots joined civil capital. By the year 1919, more than twenty airlines were established in Britain, Germany, and France. The International Air Transport Association (IATA) was founded in the August of the same year in order to coordinate the activities of the airlines of each country and to solve legal issues.

Due to the low demand for civil aviation in 1920s, civil airlines were found themselves under pressure due to lack of capital. A Germany operator called Lufthansa was the first airline that established with half of its capital offered by the government. This triggered some other European countries to establish national policy airlines, resulting in competition for airway development. Airlines became a means for enhancing national prestige through which powerful firms in those larger countries tended to cultivated their own interests and influence.⁴

One notable event of the 1920s was a unification of international regulation concerning airfreight. This was first formulated in the Paris Declaration and later fulfilled as the Warsaw Convention⁵ in 1929. The Warsaw Convention set limitations on liability and adopted the principle of responsibility for negligence leading to cargo damage and made the burden of proof the carrier's. The convention was ratified by Japan in 1953.

Owing to the high level of competition among government-supported airlines, airfreight developed to a significant degree. Yet such competition did not expand to the US, where the core of transport remained with the postal service. Around the '20s, the Ministry of Posts and Telecommunications explored some lines and the "law of air post" was enacted in 1925. Under this law, civil capital was introduced into the airfreight industry and an airway network among major cities was prepared in a short time.

During this period, safety and punctuality of passenger freight were the main concerns, but it was the successful crossing of the Atlantic Ocean by Lindbergh that increased the interest in aviation and demonstrated to investors that aircraft were a safe transportation tool.⁶ In the same year, the Pan American Airways was established and by the year 1929, the so-called Big Four⁷ were established as the driving force of the American airline industry.

Meanwhile, the US became the center of world economy in the wake of the First World War. Abundant capital flowed into the airline industry and resulted in stunning development in the industry. By the year 1930, the industry was so powerful that 43 firms possessed 500 transport planes, the airway network covered 50,000 km and 500,000 passengers were carried annually.⁸

The rapid emergence of the US airlines and the creation of Block Economy made the 1930s an era of competition for airway expansion between American airlines and European airlines. The expansion of international airways was focused on the colonies. France expanded to Vietnam, Britain to Australia, Holland to Indonesia, and Italy to Ethiopia. Despite the fact that this kind of expansion was unprofitable, the owner countries invested a great amount of money to fulfill it under the objective of blockage

⁶ Japan Aviation Research Office, above, p.520.

⁴ Japan Aviation Research Office. 1979. 20 Years' History of Japan Aviation. Japan Airline Corporation, p.519.

⁵ Convention for Unification of Certain Rules Relation to International Carriage by Air.

⁷ United Aircraft & Transport, Transcontinental Air Transport, American Airways, Eastern Air.

⁸ Japan Aviation Research Office, above, p.523.

economy alliance.9

Improvement in technology also played a major role in the expansion of long distance airways. Through the '30s to the '40s, the aircraft manufacturers Douglas, Lockheed, and Boeing achieved innovations in high-speed planes for long flight distances. The three plane modes of Boeing – 274, DC-2, and DC-3 – were said to be especially successful innovations in speed, profitability, and safety.¹⁰ Until then, airfreight had been focused on passenger freight, not on cargo freight. The world's first cargo freight route was started between New York and Los Angeles by American Airline in 1941.

Before the end of World War II, the US government had discussed the framework of the post-war international civil aviation with the purposes of preventing Japan, Germany, and Italy from entering the aviation industry, letting several airlines take over the US airfreight, prohibiting US government investment, determining the ownership of airfreight via negotiation among the countries, and making the US responsible for promoting civil aviation.¹¹ Then on November 12th, 1949, the US gathered its alliances and neutral countries and held a conference to discuss the establishment of an institutional framework for post-war international civil aviation. The conference, called the "Chicago conference", yielded three main products. The first was the Chicago Treaty, ¹² which is an enactment of common regulations of international aviation. The second product was the conclusion of the international aviation business passage treaty,¹³ which recognized free non-landing passage through other countries' territorial airspace and free landing for purposes other than transport. The third was the establishment of ICAO, ¹⁴ which was originally an intra-governmental organization for security and development of civil aviation but became an intra-governmental organization for information exchange and technology support due to the concept of the respect towards the freedom of airlines¹⁵ espoused by the US.

Although the conference made great achievements in determining the framework of post-war international aviation, the concrete operations of civil aviation, such as the setting of fares, were still inadequate and there was a mismatch of international aviation policy between the US and the UK. As a result, no concrete conclusion was reached. This eventually led to the transformation of the new IATA ¹⁶ in April 1945. The new functions of IATA were mainly fare adjustment and settlement.

Later, in February 1946, the US and the UK finally came to an agreement and signed the first two-nation treaty. The content of the agreement later became the model for two-nation agreements, also referred to as the Bermuda system.

Cargo Aircraft in Service

After the Chicago conference, the establishment of ICAO, the new IATA, and the US-Britain Bermuda treaty, significant developments in world airfreight were witnessed.

⁹ Masui Kenichi, Yamauchi Hiromichi. 1993. Airfreight. Tokyo: Koyoshobo, p.2.

¹⁰ Japan Aviation Research Office, above, p.523.

¹¹ Sakamoto Akio. 1988. Modern Aviation Theory. Tokyo: Seizando, p.19.

¹² International Air Services Transit Agreement.

¹³ Convention on International Civil Aviation.

¹⁴ International Civil Aviation Organization.

¹⁵ Sakamoto Akiko, above, pp.70-71.

¹⁶ International Air Transport Association.

The emergence of the jet plane enabled even greater advancements in the development of air cargo. The first civil jet plane, the Comet, came into service in 1949, and the Boeing 707 and DC4~8 demonstrated the advantages of speedy transportation of air cargo.

Japan Airlines, which restarted in 1951, commenced its international cargo transport in February 1954. A year after starting its service, the main items of cargo included passengers' baggage, emergency documents, reporting items, emergency medical care, and medical science items, to name a few. Business cargo increased and became the main item around 1964¹⁷, and mechanical parts and fresh food¹⁸ were added into the national cargo service. The use of air cargo increased 30% annually during the '50s and the '60s. Japan also ratified the Revised Warsaw Convention in 1967 and the country's airfreight business entered the international stage.

The use of air cargo was increasing so rapidly that in 1967, 17 kinds of standard containers were regulated. It is said that the utilization of the Boeing 747 was the dawn of the age of mass-transportation, for the plane possessed a carrying capacity of 30 tons alone in the cabin at the bottom the passenger cabin. In addition, the special cargo plane Boeing 747F possessed a capacity of around 100 tons and was also equipped with special containers and freezing containers by Lufthansa in 1971. The cargo plane was introduced into international cargo lines¹⁹ and began it service for Lufthansa from Frankfurt to New York in 1972.

The items exported as cargo during 1970s were mainly office machinery, chemical optical machinery, heated electron tube semiconductors, and communication machinery, to name a few. Imported items were mainly planes, chemical products, office machinery, non-iron metal, food, and so on.²⁰ Due to the 1974 oil shock, quantities of both import and export cargo was lower than the previous years, yet all other items were still growing at 20-30% annually.²¹

In the field of international treaties, the Guatemala Protocol²² was signed in 1971 and the Montreal Addition Protocol²³ in 1975. The content of the Guatemala Protocol was related to passenger freight and was enacted as the third new proviso, one of the provisos for the US's withdrawal from Warsaw Convention secession. The Montreal Addition Protocol was made up of No.1 to No.3 additional protocol and No.4 protocol. In the previous 3 protocols, limitation on damage liability amounts for passengers or baggage was determined in Special Drawing Rights (SDRs) by Franc. In the No.4 protocol, it was stipulated that the carriers' liability limitation amount indication carriers would be executed through SDRs. The item of cargo receipt was introduced and a system of strict liability of carriers was adopted.

The international airfreight competition law was enacted in 1980. The era from 1980s to 1990s is said to be the era of airway expansion for mass-transport aircraft.

¹⁷ Japan Aviation History Editing Committee. 1992. Japan Aviation History Showa War Sequel. Japan Aviation Association, p.402.

¹⁸ *Ibid*, p.403.

¹⁹ In addition, 747F was used by Northwest in its Pacific line from 1975 and by Japan Airlines from 1978.

²⁰ The Ministry of Finance ed. *Trade Statistics by the Ministry of Finance*, The Ministry of Finance, 1971 \sim 79.

²¹ The Ministry of Transport ed. Transportation White Paper, The Ministry of Transport, 1970~79,

²² Convention for revising the Hague Revised Warsaw Convention.

²³ Ibid.

²⁴ The so-called integrator.

International home-delivery firms²⁴ also developed petty cargo and courier services later on. The structure of the Japanese industry changed from "heavy thick long big" to "light thin short small" after the second oil shock in the late '70s. Japan Airlines opened its China line in 1984. China Airlines opened its Tokyo, Shanghai, and Peking lines in the same year. Furthermore, a Tokyo-Sydney cooperation cargo line was opened by Japan Airlines and Qantas. This kind of expansion continued in the 1990s.

During the same period, preparation of national logistical facilities was also promoted. In 1986, the Sapporo air cargo terminal and Kansai air cargo terminal service were established. Later, in 1989, air cargo terminals in Fukuoka and Yokohama were also established. NACCS²⁵ worked as the export and import unification system from 1985, after being introduced into air cargo import in 1978 and after extending to Itami Airport in 1980.

It can be observed that airfreight enabled the speedy transportation of highadded-value products that have high fare payment capacity. This greatly benefited industries since they were able to expand their markets, maintain their competitiveness and change of product designs regardless of manufacturing region. Exports which supported the growth of air cargo included VTRs, computers, semiconductors, cameras, optical machinery, automobile parts and medical machinery. Import cargo included fish, vegetables, fruits, medical products, leather products, clothing, and so on. The development of air cargo significantly aids economic internationalization. Economies of scale are realized in many industries and international market penetration is made possible. For instance, clothing and fashion products released in Europe can be obtained in a shop display in Japan within a week. Automobile parts are sent to factories all over the world to ensure the same product quality regardless of the region in which they are assembled.

The Trade Transaction System

Air cargo was gaining popularity. However, still there were some disadvantages such as the regulation of cargo collection. In order to ensure speedy airfreight, it became necessary to use air cargo agents. The air cargo agents system developed in response to the requirements of airlines. A consolidation system, which was frowned upon when first introduced by the US, was also recognized as profitable. Consequently, consolidation became one of the roles of forwarders.

Up until then forwarders had played the roles of domestic transporter, consigner, contractor, consolidator, shipper, airline agent, exporter, and insurance company, depending on the procedures involved in each transaction. This diversity of roles has meant that there are many divisions within one single forwarder. Thus various personalities can be found in different situations. This complex function of forwarders is called multiple-impersonation, and the multiple-function referred to is an essential characteristic of air cargo logistical information, which also influences other logistical formation.

In case of direct cargo, the shipper directly goes to airline and signs a transport contract with the air cargo agent. The parties to the contract here are not the same juridical person so no problem should arise. However, in the case of consolidated cargo, the shipper signs a delivery contract with the consolidator, and the consolidator becomes

²⁵ Acronym of Nippon Automated Cargo Clearance System.

the shipper when it signs a contract with the air cargo agent. The consolidator and air cargo agent are thus occasionally the same juridical person sharing the same interest. In this case, it is not difficult to imagine that the consolidator's desire for greater profit would surpass the cargo agent's function of meeting airlines' interests. Consequently, transport contracts are affected by the decision power made by the forwarder. This system of interoffice contract can also be considered as a self-contract, which is principally prohibited by article 108 of the Civil Code. To prevent this from occurring, a kind of contract called an interoffice contract is signed between different departments inside a single firm.

Multi-impersonation brings offers great convenience to the shipper, since exporters and importers can fully rely on forwarders and there is no need for them to possess international logistics knowledge to pursue their transactions. However, multiimpersonation raises major problems concerning commerce. This is because when cargo is transferred from exporter to importer, during the transferal procedures, it is crucially necessary to clarify the facts of commerce such as risk and the transference of ownership. Hence, it can be said that the international logistics is conducted in a "black box".

In addition, since international air transportation involves many countries, dispersion of fare is an important issue. Even though one of IATA's objectives is to adjust the difference in fares between countries, it has not been very successful since the US has been pressing for freedom of fare. However, the contract fare system²⁶ utilized by countries that adopted the freedom of fare system created a gap among dealers. This is because consolidators with high transport sales capacity tend to accept low contract fare rates, while small dealers with inadequate capacity are unable to do so. Nonetheless, the gap between airlines and consolidation fare²⁷ spreads in some region only since its existence depends on the level of competition among dealers in the region and the interoffice contract system mentioned earlier.

Another issue arising from the speedy transportation via airfreight is that shipping documents tend to arrive after the cargo, since the documents have to undergo many procedures before they can be issued. To address this problem, a non-distribution air waybill and commercial dispatch certificate is sent together with the cargo, since Custom entry can be carried out as long as necessary documents are sent together. Speedy airfreight also requires faster Customs entry in order to market the exported products as soon as possible. Customs entry facilities and staff are thus enhanced. In Japan and Britain, Customs staff are dispatched to the storage shed of forwarder airline in order to quicken Customs entry. In addition, the institution of simplified Customs entry, for small-amount cargo that occupies more than half of air cargo into bonded area, also plays an important role in ensuring speedy Customs entry. These kinds of modifications and expansions to existing Customs entry institutions have been effective with a certain amount of cargo. However, with the increasing pace of air cargo, this kind of transition has still proved inadequate. There was a time the cargo storage sheds were filled to overflowing and some cargo and documents even went missing, holding back Customs entry speed²⁸ and making the old system of Customs entry unworkable. Facilities for storage were then enlarged, and a new computerized Customs entry system

²⁶ Institutions with different dealer contracts and using different fare ratios.

²⁷ The difference can also be presented as Direct Cargo Freight Elasticity of Consolidate Cargo Freight.

²⁸ Ando Tiara. 1998. History of Custom Entry Institution. Japan Customs Business Alliance, p.424.

was developed. The countries of the West had promoted a plan to use a computer system in air cargo Customs entry from the '60s. Japan developed its system based on the LACES Plan of Britain, and the outcome was the NACCS, completed in 1978.

Air cargo insurance policies were mostly based on the form of average loss used in Britain. ICC (All risks), which was enacted by the Institute of London Underwriters in 1951, became the model for shippers insurance (shipper interest²⁹). Air cargo insurance proviso had been based on average loss insurance of marine insurance in the past, and now on the full risk security or ICC (A) proviso. Some revisions, such as shortening the insurance period owing to faster transportation, are made to appropriate air cargo. But as far as the risk of cargo is concerned, all matters of air insurance are included in marine insurance.

Some argue that since the accident rate of air cargo is lower than that of marine cargo due to its speediness of transport and low mobility of cargo movement, the air cargo insurance rate should be lower than the marine insurance rate. According to the "Report on national air cargo freight status quo"³⁰, the usage of trade terms that involve insurance was near 80%³¹; but this survey does not show the actual trend in insurance rates owing to the fact that insurance is not be required by the business contract. If the insurance rate of air cargo were to be surveyed, it has take into account the insurance that one insured for oneself. The usages of shipper insurance and IACC (All risks) or ICC (Air³²) are 6.7% and 81.6% respectively. It can be seen that direct insurance contracts with insurance companies or agents are overwhelmingly common.

We turn now to air waybills. There are two types of air waybill (AWB). The first one is called the House Air Waybill (HAWB), which is issued by the consolidator to the shipper, and the second one is called the Master Air Waybill (MAWB), which is issued by the airline to the consolidator. The contents of both types of air waybill are almost identical except for the difference in carrier. Air carriers can ask shippers to issue and send the air waybill³³, for the shipper is obliged to issue an air waybill³⁴ according to the Warsaw Convention. In practice, however, agents issue the air waybill to the shippers. As long as there is no disproof, the air waybill possesses valid certification on the signing of contract, receipt of cargo and transport proviso.³⁵ An air waybill description of weight, size, packing and number of cargo is also a valid certification.³⁶ From the regulation, the air waybill is identified as part of the transport contract for certification and receipt of cargo. IATA abandoned security issuance, but it is admitted³⁷ in the Warsaw Convention.

²⁹ Shipper insurance is a kind of small cargo insurance according to which, based on a comprehensive planned insurance contract between the airline and insurance company, the shipper only has to fill in the insurance column in the air waybill and cargo will be insured.

³⁰ Kobayashi Research Representative. 2004. Report on National Air Cargo Freight Status Quo. Report on Industry Administration Trend No.28, Japan University Industry Administration Institute, December 2004. ³¹ *Ibid*, p.114.

³² Using rate of IACC (All risks) and ICC (Air), different old and new bonds, is not made clear in this investigation.

³³ Warsaw Convention Article 5 (1). In the same article, air waybill was named "Air Consignment Note".

³⁴ When the Air Cargo agent makes the waybill instead of the shipper, shipper must pay procedure fees as regulated in this article.

³⁵ Warsaw Convention Article 11 (1).

³⁶ Warsaw Convention Article 11 (2).

³⁷ Warsaw Convention Article 10 (1).

Since there are two types of air waybill, further arguments were made regarding which one is to be accepted. Many disputes arose and many of the policies and regulations were even found to be incompatible with each other. Revisions were made in order to improve the clarity of the regulations. Since the consolidation rate of the main line rose to above 90%, the Credit Uniform Regulation finally recognized the HAWB issued by the consolidator as a carrier. However, there are still cases where air waybills are not accepted. Since the air waybill is issued after the carrier receives the cargo,³⁸ and the carrier must surrender its signature before the cargo is loaded into the aircraft,³⁹ the air waybill can also be considered as a cargo receipt. But still there are "blank ticket" cases when a documentary bill that satisfies L/C is sent from the exporter's bank to the importer's L/C issuance bank but the cargo, losses of cargo, or even fraud. And since the L/C transaction is based on the Independence Principle and the Strict Compliance Principle, as long as the content of documentary bill meets L/C provisions, the importer is obligated to pay regardless of whether or not the cargo has arrived.

The cause of most blank ticket cases is that the carrier fails to load the cargo into the aircraft. This may occur during consolidation procedures. To prevent this, it is obvious that the carrier must make sure that the cargo is loaded and written into the air waybill or to refuse to accept the air waybill issued by forwarder. In practice, however, the latter method cannot really be pursued since HAWB is regulated as an acceptable document by the Credits Uniform Regulation since 1983. Hence, without the method of On Board Notion, the dilemma would be everlasting.

In bill settlement on collection without the use of L/C, the business contract bill is paid or accepted under the condition of providing shipping documents to the buyer. Shipping documents thus act as a guarantee bond in this case. As a result, the bank name of the import place is enrolled as receiver of the air waybill, as in L/C settlement. However, according to the 1978 Credit Uniform Regulations Article 6, it is prohibited to make the bank the receiver without an agreement from the bank.⁴⁰ Nonetheless, in practice, the main bank of the import place is written in the receiver column of the air waybill without agreement beforehand. In export bill insurance concerning the trade insurance laws of our country, in case of settlement without L/C, after the bank of export place buys out the bill, the bank's loss is compensated by the unsettlement of the bill on the due date. In this case, for an air waybill that lacks negotiability, the receiver is made the bank of import place as a prerequisite. Needless to say, the Regulations of Uniform Rules for Collection are against this kind of practice, but it is fortunate that so far no major disputes and problems have been reported.

Our discussion now shifts to trade terms⁴¹, which show the expense watershed, separation point of delivery place and method, risk and possessive right in each transaction. The old provisos of FOB, C&F, and CIF are all developed from the

³⁸ Hague Revised Warsaw Convention Article 6 (2).

³⁹ Hague Revised Warsaw convention Article 6 (3).

⁴⁰ Ohara Miyuka. 1991. Point of Cost Settlement of Export and Import in the '90s – Trade Business Digest. Japan Duty Association. p.30.

⁴¹ Also called Delivery Terms.

⁴² "Conventional ship" is an expression used here to contrast with container ships. In conventional ships, cargo is loaded by the crane set in the ship's body, while in the case of container ships, cargo is handed over to carrier before loading in a container yard or container freight station. In the case of a conventional ship, cargo is handed over on the ship.

provisos of marine transport, not a container ship but a conventional ship.⁴² Since the emergence of airfreight, revisions of trade terms have been carried out to make the terms more suitable. The first revision of trade terms related to airfreight was in 1976. The International Chamber of Commerce adopted FOB Airport (FOA) of air cargo special use, as a new proviso of 1976 Incoterms. Since the usage of container cargo became very popular, the revision of Incoterms in 1980 included the addition of new provisos of FRC,⁴³ DCP,⁴⁴ and CIP⁴⁵ that correspond to FOB, C&F, and CIF in container cargo usage. The HAWB issued by consolidators as the identity of a contract carrier was also recognized as a shipping document in the 1990 Incoterms revision.

According to the new provisos, the handover place of cargo is not on ship, but inland, at a point such as the container yard and freight station where the container of cargo itself is handed over. Marine container cargo has the same transport form as the air cargo. In both cases, the shipper hands over the cargo to the carrier before loading using international transport means, thus there is not actual difference between FOA and FCR. This is to say, there are two identical provisos that are applicable to air cargo. FOB Airport was subsequently abandoned through a revision that enabled the free carrier to adopt any form of transportation as long as the cargo is handed over to carrier. However, since there was confusion concerning differences in places of handing over the cargo depending on the means of transportation, for instance railway, roadway, inland waterway, sea and air, the 2000 Incoterms abandoned regulations on each individual means of transportation. Instead, regulation was separated into 2 occasions. The first occasion is when the buyer's prepared transportation tool comes to fetch the cargo directly from the warehouse of the seller, or receives cargo in the city cargo terminal or container yard. The other occasion is vice versa. In the former instance, the seller is made responsible for loading into the transportation tool, while in the latter one, the cargo can be handed over to the carrier without unloading from the transportation tool.

In November 1977, the International Chamber of Commerce issued the ICC Model International Sales Contract⁴⁶, a model contract of sale, in order to promote use of air cargo trade terms. The purpose was to resolve the so-called "contract dispute". ⁴⁷At the same time, in order to expand the use of each proviso concerning container cargo and air cargo, FCA, CPT, CIP and some 7 provisos were given, as recommendation provisos of trade terms. FOB, CFR and CIF are treated as other provisos.

It can be seen that airfreight is a transportation tool in which cargo is handed over to a carrier. When the role of carrier is specified to an actual carrier or agent, handover time and place are comparatively clear. However, when the carrier is defined as a contract carrier and performed by a consolidator as a forwarder, the explanation of handover time and place become truly complex. This is because the forwarder possesses an identity of multi-impersonation as one commercial aspect of its multi-function, and definition of the place and time to receive cargo becomes a "black box" issue. It is thus very difficult to regulate "handover" in Incoterms, considering the carrier handover conditions. For example, the FOA of 1976 Incoterms regulated for "hand over to carrier inside airport", but in practice, most consolidators received cargo from the shipper's

⁴³ Free Carrier. Hereinafter, FCA.

⁴⁴ Freight/Carriage Paid to. Hereinafter, CPT.

⁴⁵ Freight/Carriage and Insurance Paid to.

⁴⁶ The ICC Model International Sales Contract.

⁴⁷ Yokoyama Kenji, above, pp.164-165.

warehouse. An "airport" specified in Incoterms became something of no real meaning.

To redress this problem, the 2000 Incoterms separated the regulation on FCA into to types: handing over done in the facilities of the seller, and other occasions. In the former, it is regulated that handing over is done when loaded into a specified transportation tool; in the latter, it is regulated that the instructions of the carrier must be followed when in the transportation tool. However, criticisms of this system were voiced frequently, including that "it is difficult to make the distinction in the case of EXW" and "it does not reflect the logistics process of consolidated cargo". One might be able to draw a conclusion that the cause of these problems is not the Incoterms, but the uncertainty of handover time and place caused by the "black box" phenomenon.

The "Investigation on trend of trade terms (trade form conditions) used in our country", published in 1997 by Japan University Industry Economy Institute demonstrated trends in trade terms used in Japan. This investigation started in 1995, and 171 questionnaire surveys (3,204 on trade terms) were done over a span of two years. The investigation also analyzed 134,803 trade terms from contract data of general firm A from January to December in 1995. At the time of the investigation, 19 years had passed since the 1976 Incoterms during which FOA was adopted. The results of the survey show that FCA and CIP together occupied 3.2% in export, while FOA itself accounted for 4.3% in import.⁴⁸ The data from general firm A also show that usage of container or air cargo proviso was less than 1% in both import and export. Furthermore, a similar study, the "Investigation on status quo of air cargo freight of our country" by Japan University Industry Economy Institute, published in 2004, shows that in response to a question about the usage of container or air cargo proviso, 4.3⁴⁹ of answers were either "Using" or "Using together with conventional ship proviso but container or air cargo proviso more". The difference between import and export is not clear. After comparing these two surveys, it can be clearly seen that no significant changes have occurred during the past 8 years.

Transformation of Institutions and Customs

With the emergence and development of airfreight, many distinctive institutions and customs have appeared, such as cargo agent institutions, consolidation institution, received shipment, interoffice contract, HAWB and received waybill. For instance, the consolidation institution was introduced and used by airlines with a lack of capability and unfamiliar with logistic procedures as a more effective way of collecting cargo. Consolidation developed by the use of low fare rates. As a result, multiform transport contracts emerged. It can be said that "airfreight business and forwarder's vertical separation was formed."

Agent institution or consolidation institution is one multi-function that shows forwarders possess multi-personality for logistical process. From a commercial point of view, this multi-function can be defined as multi-impersonation, which induces the black box phenomenon during logistical process. In the case of air cargo, loading is not carried out by the receiver of cargo, but by its carrier or agent who received cargo from the shipper before loading. This pattern has been practiced in air cargo from earlier times due to the need for speedy loading procedures. Moreover, from the time that the

⁴⁸ Statistical data from p. 102 of Kobayashi Research Representative, above.

⁴⁹ Aviation Policy Workshop. 1995. Modern Airfreight. Tokyo: Keisoshobo. p.101.

bottom cabin of passenger planes came into use, the carrier had been executing uniform regulation on trade terms, and provisos for airfreight and carrier's handing over were introduced.

These logistical characteristics of airfreight are explanations for air cargo' s various distinctive institutions and customs. The multi-impersonation of forwarders emerged from consolidation and induced the "interoffice contract" mentioned in the previous section. The non-negotiable HAWB is also used as a received contract, which consequently brought about the generalization of the institution of "bank receiver". Afterwards, the institutions of Release Order and Trust Receipt, were also generalized. Besides, as most of the air waybill is consolidated cargo, from the point that waybills came to be characterized as HAWB, the "blank ticket" problem emerged. In the case of Customs entry institutions, the need for a swifter entry resulted in the establishment of new institutions such as online entry and NACCS. Insurance institutions also emerged based on marine insurance at the early stages, while proviso enactments for air special use were made later on.

The new institutions and customs which have emerged can be classified mainly into two categories. The first category is that of functional institutions and customs. The institutions and customs in this category emerged from the new means of transportation. They were formed in order to realize rapid transportation of cargo through systems such as consolidation and received shipment. The second category is that of coordinating institutions and customs. The institutions and customs in this category were transformed and adapted after the new functional institutions and customs. This is because the movement of objects, money and documents is accompanied by the transferal of rights and responsibilities among the people concerned. Corresponding to the transformation of functional institutions and customs, coordination institutions and customs emerge to enable the transaction to be carried out smoothly. Owing to the fact that coordination institutions and customs, this situation can be termed "superiority of functional institutions and customs to coordinating institutions and customs".

There are some institutions and customs that do not always fall into one of these two categories of functional and coordinating. For example, the air cargo agent institution is supposed to be placed in the category of functional institutional customs, but at the same time it possesses a function that promotes the physical movement of cargo. The received shipment institution also possesses both functional and coordinating aspects. In other words, within one institution or custom, smaller institution and customs can also exist, and they can be classified as either functional or coordinating. The larger the institution or custom is, the greater the number of smaller institutions and customs exist, among which some are functional and some coordinating. This kind of situation is described by the term hermaphrodite institutions and customs. When comparison the functional institutions and customs are compared with coordinating ones in hermaphrodite institutions and customs, functional institutions always have priority.

Even though institutions and customs transform as a chain, the transformation does not always continue until coordination is complete. There are occasions when transformation stops halfway in coordinating institutions and customs. For instance, the new provisos of trade terms have been adopted in order to solve problems of received shipment in airfreight, but they are not widely used. Furthermore, following received shipment, air waybills were also received, but coordinating institutions and customs were not formed. As a result, the "blank ticket" problem emerged. The multi-function of the forwarder caused multi-impersonation in the aspect of commerce, which generated the problem of interoffice contracts. Despite the fact that interoffice contracts create a lot of legal problems, no coordinated effort was made to address the problems.

This phenomenon of interruption in the chain of transformation of coordinating institutions and customs is called "the incompleteness of coordinating institutions and customs". There are several reasons why this kind of transformation chain comes to an end halfway. The first is that the chain itself is not actually broken yet, but the transformation appears to have come to an end because an insufficient length of time has been devoted to observation. However, this is still not enough evidence to prove this, so it will not be discussed in this paper. Another persuasive interpretation is the "superiority of functional institutions and customs to coordinating institutions and customs" mentioned earlier in this section.

One example is the problem of blank tickets. More than half of air cargo is carried as consolidated cargo, owing to the cost efficiency for airlines in carrying large cargo rather than many small units of cargo. The cargo is thus handed out to carriers before the initial loading and the received shipment method was adopted. For this reason, the air waybill is issued as received. Thus, the blank ticket phenomenon in air cargo occurs because of the institutions and customs employed. One measure to remedy this problem is the rule that the bank must not accept the HAWB issued by consolidators, and that the air waybill is issued after the shipment is confirmed. However, this kind of remedy is unpractical since the over 90% of cargo is consolidated cargo, and immense problems would occur if the bank refused to accept the HWAB.

Another example is the problem concerning interpretation of trade terms. It can be expressed by the sentence of "the logistical process of airfreight is forwarder's multifunction", which is referred to as "multi-impersonation" in the commercial aspect. This multi-impersonation is a cause of the black box phenomenon because commercial process becomes vague and loses its accuracy. Therefore, we observe complicated and disordered expressions on carrier's handing over FCA provisions in Incoterms 1980, 1990, and 2000. Nonetheless, resolving the black box phenomenon itself in order to clarify the articles of Incoterms is both meaningless and impossible.

To conclude, "superiority of functional institutions and customs to coordinating institutions and customs" explains the one-sided chain of transformation of institutions and customs, while it is clear that there is no flow from functional institutions and customs to coordinating institutions and customs. Under this kind of hierarchical structure, when it is necessary to change or revise the superior functional institutions and customs, the inferior coordinating institutions and customs are not addressed and the problems of the latter are left neglected. As a result, the chain of transformation of coordinating institutions and customs to an end or remains incomplete.

Conclusion

Formation of and changes to institutions and customs begin from the functional side. That is because physical flows of merchandise, foreign exchange and documents are only substantial in an international transaction and are influenced by technological development. Once a propeller plane, a jet plane and a jumbo freighter were developed and introduced into transport modes for international trade and exchange, the associated institutions and customs were transformed. Other institutions and customs have also been influenced by the development of the mail service, telecommunications, transport modes, electronic data communication and so on.

A coordinating institution or custom changes and adjusts to formation or change in a functional institution or custom because the physical flows of merchandise, foreign exchange and documents involve the flows of rights and obligations. Coordinating institutions and customs change or emerge according to the change or formation of functional institutions and customs. As the word suggests, coordinating institutions and customs are always passive and develop later. I name this phenomenon "Superiority of Functional Institutions and Customs to Coordinating Institutions and Customs."

The formation or change of an institution or custom causes chain reactions but does not necessarily continue until the system becomes perfect. Some coordinating institutions and customs tend to be half-finished. I name this phenomenon "Incompleteness of Coordinating Institutions and Customs." It is possible to observe problems caused by "Incompleteness of Coordinating Institutions and Customs" no matter where this incompleteness exists. Empty documents, interoffice contracts and problems with "black box" trade terms are typical examples.

The above "Superiority of Functional Institutions and Customs to Coordinating Institutions and Customs" expresses the idea not only that chain reactions flow onesidedly, but also that chain reactions do not flow from a coordinating institution or custom to a functional one. In other words, problems regarding coordinating institutions and customs are left untouched when the only settlement is to revise a functional institution or custom. Therefore, such chain reactions come to an end in an unsatisfactory condition.

References

- Albaum, G. Strandskov, J. and Duerr, E. 1998. *International Marketing and Export Management*. London: Addison-Wesley Longman.
- Ando, Tiara. 1988. *History of Custom Entry Institution*. Tokyo: Japan Customs Business Alliance.
- Aoki, M. 2001. *Toward a Comparative Institutional Analysis*. Boston: Massachusetts Institute Technology.
- Aoki, M. 1988. *Information, Incentives, and Bargaining in the Japanese Economy*. London: Cambridge University Press, London.
- Aoki, M. 1984. *The Cooperative Game Theory of the Firm*. London: Oxford University Press.
- Aoki, Ono. 1996. *Analysis on Economic System Institutional Comparison*. Tokyo: Tokyo University Publishing.
- Aviation Policy Workshop, 1995. Modern Airfreight. Tokyo: Keisoshobo.
- Belay, S. 2000. *Export- Import Theory, Practices, and Procedures*. New York: International Business Press.
- Branch, A. 2000. Export Practice and Management. New York: Business Press.
- Branch, Ronald A., 2000. *Fundamentals of International Business Transactions*. Boston: Kluwer Law International.
- Bridge, Michael. 1999. The International Sale of Goods Law and Practice. London:

Oxford University Press.

Carr, Indira. 2003. International Trade Law. Berlin: Cavendish Publishing.

Coase, R. H. 1937. "The Nature of the Firm," *Economica*, London, 1937

- Crime, Robert. 1991. Shipping Law. 2nd edn. New York: Sweet & Maxwell.
- Dimatteo, Larry A. 2002. *The Law of International Business Transactions*. London: Thomson.
- Hillman, William C. 1987. Letters of Credit. London: Butterworth Legal Publishers.
- Hinkeiman, Edward G. 2002. International Payment. New York: World Trade Press.
- Ikeo, Huang, Iijima. 2001. Analysis on Japan-Korea Economic System Institutional Comparison. Tokyo: Japan Economic Publisher.
- Izawa, Takahira. 1958. Commerce Letter of Credit Theory. Tokyo: Yuhikaku.
- Japan Aviation History Editing Committee, 1992. *Japan Aviation History Showa War Sequel*. Tokyo: Foundation Japan Aviation Association.
- Japan Aviation Research Office. 1979. 20 Years' History of Japan Aviation. Japan Airline Corporation.
- Keiougijuku University Area Study Centre. 1996. *Logistics of Asia*. Tokyo: Keiougijuku University Publisher.
- Kitahara, Sadasuke. 1986. Introduction to System Science. Tokyo: Yuhikaku.
- Kobayashi Research Representative. 2004. *Report on National Air Cargo Freight Status Quo, Report on Industry Administration Trend 28.* Tokyo: Japan University Industry Administration Institute.
- Koestler, K. 1978. JANUS. Hutchinson.
- Kurusu, Tetsuji. 2003. Basic Trade Business Edition 10. Tokyo: Dobunkan.
- Lowenfeld, A. F. 1996. International Civil Trade. New York: Matthew Bender.
- Masui, Kenichi, and Yamauchi, Hiromichi. 1993. Airfreight. Tokyo: Koyoshobo.
- Moens & Gillies. 2000. International Trade and Business. London: Cabendish.
- Niibori, Satoshi. 1998. Practical Trade Transaction. Tokyo: Japan Economic Publisher.
- Nittsu General Institute. 1991. Logistics Handbook. Tokyo: Hakutoshobo.
- Ohara, Miyuka. 1991. Point of Cost Settlement of Export and Import in the '90s Trade Business Digest. Tokyo: Japan Duty Association.
- Parks, Alex L. 1987. *The Law and Practice of Marine Insurance and Average Vol. 1&2.* Boston: Cornell Maritime Press, Boston.
- Rogers, Everett M. 1982. Diffusion of Innovations. New York: The Free Press.

Sakamoto, Akio. 1988. Modern Aviation Theory. Tokyo: Seizando.

- Salanie, Bernard. 1997. The Economics of Contracts. Boston: The MIT Press.
- Sarcevic, Peter and Volken, Paul. 2001. *The International Sale of Goods Revised*. Berlin: Kluwer Law International.
- Schmitthoff, Clive M. and Dobson, Paul. 1991. *Charlesworth's Business Law. 15th edn.* New York: Sweet & Maxwell.
- Sellman, Pamela ed. 2002. Law of International Trade. London: Old Bailey Press.
- Seyoum, Belay. 2000. *Export-Import Theory, Practices and Procedures*. New York: International Business Press.
- Shippey, Karla C. 2003. International Contracts. New York: World Trade Press.
- Tokyo Bank. 1987. Trade and Letter of Credit. Tokyo: Business of Japan.

Trade Statistics by the Ministry of Finance. Tokyo, 1970~79.

Transportation White Paper. Tokyo, 1970~79.

Uniform Customs and Practice for Documentary Credits, ICC Publication 500, Paris,

1993.

Uno, Osamu, 1993. *International Air Cargo Marketing*. Tokyo: Hakutoshobo. Von, Neumann, J. and Morgenstern, O. 1944. *Theory of Games and Economic Behavior*. Los Angeles: Princeton University Press

Los Angeles: Princeton University Press. Wagatsuma, Sakae. 1986. *Civil Law General Rules*. Tokyo: Iwanamishoten. Yokoyama, Kenji. 2000 *Airfreight and Trade System*. Tokyo: Dobunkan.