Research on the Construction of Humanistic Airport

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Abstract. Humanistic airport is an important part of the construction objectives of “four types of airports”, namely safe airport, green airport, intelligent airport and humanistic airport. The construction of humanistic airport puts forward higher requirements for airport planning, design and operation management, emphasizing people-oriented and paying attention to passenger travel experience. The connotation, characteristics and problems in current planning, design and management of humanistic airports were analyzed. Drawing lessons from successful cases at home and abroad, this paper put forward suggestions and measures for the construction of China's humanities airport.

1. Introduction
At the conference on accelerating the construction of civil aviation infrastructure, the related issues related to improving the level of civil aviation infrastructure construction were systematically elaborated, and the construction objectives of “four types of airports” representing new ideas and requirements, namely, safe airport, green airport, intelligent airport and humanistic airport, were put forward. Safety is not only the bottom line of civil aviation production and operation, but also the bottom line of infrastructure construction. Safe airport is the basic requirement in airport construction. Green airport advocates the concept of green and low-carbon. In the whole life cycle of airport location, planning, design, construction, operation and abandonment, all kinds of energy and resources are efficiently utilized. Intelligent Airport uses advanced information technologies such as big data, cloud computing, internet of things, mobile interconnection, artificial intelligence and so on to greatly improve the level of airport operation, passenger service and airport management. Humanistic airports focus on passengers' travel experience and provide humanistic services. We should consider the airport space taste, environmental taste, cultural taste and service taste comprehensively, so as to truly achieve people-oriented[1].

Among the “four types of airports”, humanities airport puts forward higher requirements for airport planning, design, operation and management. This paper takes this as a breakthrough point to analyze the connotation of humanities airport and the problems existing in current construction and management, draw lessons from successful cases at home and abroad, and put forward suggestions and measures for the construction of humanities airport in China.

2. Connotation of humanistic airport
The term "humanism" refers to the basic activities and spiritual life trajectory of human beings, and is associated with their worldly educational activities and the significance of human value pursuit. In today's academic discourse or conventional interpretation, the meaning of the term "humanities" is various cultural phenomena of human society, and the idea of emphasizing human as the main body,
respecting human values and caring for human feelings[2]. Combining with the construction and development of airports, the construction of humanistic airports should embody the historical, regional and cultural connotations. Focusing on the principle of people-oriented, we should realize the goal of providing humanistic services and good travel experience for passengers, including:

2.1. Smooth process and efficient service
Each airline passenger's travel experience at the airport usually involves the following processes: transfer, inbound/outbound service, transit service, runway take-off and landing, ground taxiing in the flight area, shopping in the terminal building, food and waiting. The smooth connection of above mentioned processes, as well as the efficiency and convenience of their respective services, are the fundamental guarantee to enhance passengers' travel experience.

2.2. People-oriented and detail-oriented service
Starting from the actual needs of different types of passengers, it provides multi-level service products, forms differentiated services, meets the personalized needs of passengers (such as religious beliefs, services for the aged, the weak, the disabled, special catering, etc.), and highlights humanistic care. In addition, the airport is not only a node of the transportation system, but also a place where people are prone to emotional fluctuations, which is mixed with a variety of feelings, such as joy, sadness, longing, loss, joy, anxiety and so on. How to effectively continue positive energy emotions, alleviate or relieve negative emotions, airport design and managers need to start with details, stand in the perspective of passengers to provide humane and attentive service.

2.3. Space Design and Environment Creation Embody Regional Cultural Characteristics
Airport is not only a gateway to the outside world for a region or city, but also a symbol and business card of a city. Airports in different regions or cities should shoulder the responsibility of transmitting regional cultural atmosphere and displaying the spiritual outlook of the city. Airport terminal building should integrate regional features in architectural appearance, historical inheritance and folk customs to enhance Airport identification; embedding regional cultural elements in interior decoration timely to create cultural scenes and create cultural atmosphere; in service characteristics, it should focus on displaying cultural connotations and enhancing passenger service experience[3].

3. Current problems
The scale of civil aviation transportation in China has been the second largest in the world for 12 consecutive years. The annual passenger throughput has maintained a growth rate of more than 10% for many years. There are 32 airports with annual passenger throughput of 10 million, including 8 airports in the mainland of China with more than 40 million passengers. In the stage of rapid development of civil aviation transportation, Airport planners, builders and managers design and manage airports from the perspective of meeting the basic travel needs of passengers. There are still some shortcomings in the Humanistic Construction of airports.

3.1. Lack of distinctive features and distinct themes
With the development of economy and society and the increasing demand of air passengers for travel quality, it is very difficult for passengers to get a satisfactory travel experience with the multi-venue and one-sided terminal building, interior decoration and service content. For an ordinary passenger, it is difficult to distinguish the differences between different airports or to summarize in one sentence what special memories an airport has left for him. By borrowing the concept of "common city" in urban planning, many airports have gradually become "common ownership"[4]. That is to say, the development of airports relies too much on the promotion of economy and commerce, rather than on the support of history and cultural traditions, which has lost the characteristics of different regions and cities.
3.2. Lay stress on hardware investment and neglect software upgrading
For airport construction and management, hardware investment such as facilities and equipment is usually given priority, while soft measures such as service quality improvement, process improvement or personnel training are often subordinate. Advanced facilities and equipment can indeed improve the operational efficiency of airports, but their effectiveness cannot be achieved without reasonable process design, clear identification guidelines, and the intimate help of airport service personnel.

3.3. Weak smoothness of cohesion between different units or departments
As a huge and complex system, the smooth operation of airport requires the cooperation and seamless connection of different units (such as airport, airline, air traffic control unit) and different departments (such as AOC, ground service support department, baggage sorting department, etc.). Otherwise, there will be delayed arrival of passenger elevators or ferries in the long berth of the aircraft, long waiting time after boarding and experienced the phenomena of disembarkation-waiting-boarding again, frequent changes in boarding doors, etc., which seriously affect passengers’ travel experience.

3.4. Inadequate Humanized and Innovative Services
For large international hub airports, the special needs of passengers from different countries, regions, customs and religious beliefs should be considered in all aspects, such as the prayer room in the waiting area, as shown in figure 1, the vegetarian meals at the airport, and the changing rooms in tropical or cold areas. Compared with Skytrax (established in 1989, is an authoritative rating organization of international air transport based in London, UK), which ranks the best service airport in the world, there is still much room for improvement of large airports in China. In addition, China's civil aviation can learn from the advanced experience of foreign aviation developed countries to optimize the service mode. Airports should also innovate and improve the service mode in accordance with ICAO, IATA and other international regulations. For example, for domestic travellers, baggage checking and security are usually the two most time-consuming links. Whether the baggage self-service checking system can be used to divert part of frequent flyers (passengers who understand baggage checking restrictions and are familiar with airport routine procedures), or whether the passenger classification security checking mechanism can be used to properly simplify the security checking process of some passengers.

4. Case analysis
Many large airports in the world have made beneficial attempts in the construction of human airports and achieved good economic and social benefits.

Airport Schiphol in the Netherlands has brought Dutch history and culture into the airport in the form of museum exhibition, as shown in figure 2. It integrates public space with culture and art, and makes the airport an exhibition of Dutch history and culture, which has played a positive role in the promotion of Dutch history, culture and tourism.
Helsinki International Airport in Finland is not only an airport, but also an art exhibition hall[5]. The layout of the whole airport art and Exhibition category is more than 20 places, almost every boarding area will be embedded with one or more artistic elements, as shown in figure 3. Helsinki Airport strives to create a relaxed, friendly, artistic and interesting waiting atmosphere for passengers.

Incheon International Airport in Korea has opened a Korean traditional culture experience area, which effectively promotes Korean traditional culture to foreign tourists. Its slogan is "Korean brand representative". Incheon Airport attracts international tourists to use it as a transit station and an important part of tourism experience by setting up traditional cultural experience areas, such as Korean Cultural Street, Cultural Museum, and Traditional Cultural Experience Hall, which improves the commercial and social value of the airport, as shown in figure 4.

Taoyuan International Airport in Taiwan, China, integrates Taiwan's culture into the public space of the airport, vigorously promotes people, events, objects and scenery with Taiwan's characteristics, so that passengers can experience Taiwan's local conditions and customs in the terminal building. Taoyuan Airport pioneered the concept of public space planning, as shown in figure 5. From the earliest 14 theme airports to more than 30 today, Terminal 1A, 1B and Terminal 2 are designed with "Taiwan's Beauty, Taiwan's Light and Taiwan's Best" as their main plans respectively. Passengers can feel Taiwan's natural and cultural scenery at the airport.
Although China's mainland airports are gradually trying to construct humanistic airports, they are still limited to local exhibitions and lack of participation and interaction. They have not yet formed a complete system and distinct thematic features, such as the impression of the Forbidden City in the international terminal area of Beijing Capital Airport, the golden fish show area of Fuzhou Airport, as shown in figure 6, and the concept bookshop terminal experience hall of Nanning Airport[6].

5. Conclusion
The construction of humanistic airport has put forward higher requirements for airport planning, design and operation management. The airport is no longer a place providing only traffic services, but a scenario that can be a good memory for passengers, making travel valuable, meaningful and interesting. Unlike infrastructure construction, the construction of humanities airport is not an overnight success. Based on the above analysis, we put forward the following suggestions and measures:

1. Optimizing service flow and smoothly connecting links
The construction of humanistic airport is based on providing efficient, smooth and humanized process services for passengers. Imagine the complicated service flow, the long walking distance, the vague sign guide... How can we make passengers have the mood to stop and enjoy the humanistic landscape of the airport?

2. Make full use of terminal space to provide passengers with special service experience
The Humanistic Construction in the terminal is the key to the construction of the humanistic airport. It can provide services with regional, folk customs, food, music and other cultural characteristics for passengers. When passengers enter the terminal, every scene they see and every service they experience should embody the local cultural characteristics of the airport and show the unique humanistic connotation of the airport. This "uniqueness" is the cultural brand of the airport. For large international hub airports, the cultural brand of airports is an important factor to attract potential transit passengers.

3. Clarify cultural themes and highlight regional characteristics
China is a vast country with different regional characteristics, historical culture, customs and dietary preferences. Each airport should clarify its own cultural theme, highlight the unique temperament of the region, coordinate planning, harmonious integration, and avoid disorderly competition and homogeneous development in the process of building a humanistic airport.

4. Organic integration of airport commercial operation and humanistic construction
Successful airport business should not be limited to the sale of goods, but should jump out of business to run business, convey a positive value, a harmonious way of life, a beautiful dream. Business operation and passengers should not only be a one-way relationship of "buy-sell", but also a two-way interaction of "identity-aesthetics"; the relationship between airports and businesses should not be just "renter-lessee", but also build a symbiotic and prosperous airport humanistic ecological system.

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