

# Crisis and construction: An Analysis of National Emergency Management system Based on AGIL Model

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**Abstract:** *As a critical component of China's system for governance, emergency management system has been initially established with Chinese characteristics. The outbreak of COVID-19 is not only a challenging test of China's system and capacity for governance, but also reflects the expectation of accelerating the modernization of the national emergency management. Therefore, this paper has built an AGIL model based on the work of Parsons to analyse system of modern emergency management from the perspective of structure, and discusses the corresponding functions and restricting factors of each subsystems.*

**Keywords:** *China's system and capacity for emergency management, AGIL paradigm, COVID-19*

## 1. Introduction

At present, China is in the historical transition period, facing unprecedented contradictions and challenges. How to effectively respond to all kinds of risks and emergencies is not only a test of national governance capacity, but also a measure of the modern level of emergency management system. After having experienced SARS in 2003 and Wenchuan earthquake in 2008, China has built an emergency management system with “one case, three systems” as its core, and made a major breakthrough in the construction of the system. But the outbreak of COVID-19 at the end of 2019 exposed the system's shortcomings. In November 2019, actively promoting the modernization of China's emergency management system and capabilities was proposed at the 19th group study session of the Political Bureau of the 19th CPC Central Committee. The former requires the scientific and standardized design of the existing emergency management system, while the latter emphasizes the comprehensive ability to deal with public affairs effectively according to the efficient system.

Therefore, in the context of sticking to a holistic national security architecture, this paper is to shed light on how to construct a modern emergency management system and embed it in the China's system for governance[1].

## 2. Theoretical framework

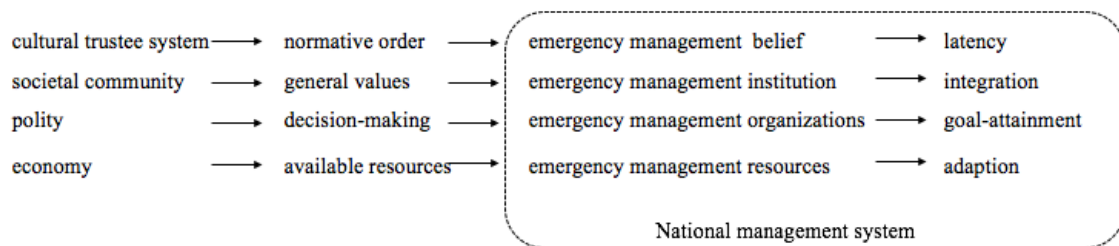
Talcott Parsons is one of the greatest developers of structural functionalism. He elaborated a “structural-functional theory” and put forward AGIL scheme including goal-achieving, adaption, integration and latency[2]. While the former two are in relation to the external environment, referring to achieving the goals by adaptation, the latter two are intended to coordinate the internal subsystem, which refers to achieving integration by maintaining the patterns. The well coordination and full play to respective functions of four subsystems including political, economic, social and cultural are integral to sustain effective operations of the system in a balanced way.

Besides, Parsons believes that there is a hierarchical structure among subsystems. From the perspective of information control, the cultural subsystem controls the social community, while the political system is regulated by the social community and restricts the economic system at a lower level. However, energy flows in an opposite way (see Table 1).

*Table 1: Interrelations of subsystems*

subsystem	exchange media	function	interrelation
culture trustee system	commitment	latency	information
societal community	influence	integration	↑
polity	power	goal-attainment	↓
economy	money	adaption	energy

This paper constructs a model of emergency management system to depict how the four subsystems and its functions work. Taken as a whole, this system is composed of such elements as resources supply and distribution, leadership and decision-making, laws and regulations, as well as values and objectives, which correspond to the four functions of AGIL paradigm above (see Figure 1).



*Figure 1: AGIL model of national management system*

### 2.1 Adaption

First of all, adaption refers to the active acquisition of resources from the dynamic external environment to support other subsystems to achieve the internal transformation, which is undertaken by economic subsystem. Specifically, the emergency response depends on various resources, mainly reflected in the following two aspects: one is that emergency resources guarantee the effective operation of emergency system. In the prevention and control of the COVID-19, the most outstanding measure was that nineteen provinces and equivalent administrative units assisted 16 other prefectures/cities in Hubei in the form of paired assistance. The National Health Commission, taking full account of the current situation of the epidemic as well as the gap in medical and human resources in the recipient cities, has established an upgraded mechanism to support the medical treatment of the COVID-19 in Hubei Province, except Wuhan City.

Besides, the continuous advancement of modern information technology provides crucial technical support for the modern transformation of emergency management. From the perspective of risk control, the government mapped risky regions by big data and made digital guidebooks on COVID-19 prevention for citizens by using various techniques to update the related information timely, thereby improving the awareness and response capacity of the whole society [3]. Moreover, public security agencies used big data to track the routines of infected people, improving the accuracy of pandemic control by finding out their close contacts. Big data can also predict the spread trend, and effectively assist the government in the investigation and decision-making of the epidemic.

### 2.2 Goal-attainment

Goal-attainment refers to setting and prioritizing overall system goals and mobilizing resources to achieve them. Specifically, the Communist Party of China (CPC) and government has a clear direction

for the actions and construction of emergency system, and mobilizes various kinds of resources to achieve goals.

First of all, the CPC's overall leadership leads the construction of emergency system for it is the core of strong leadership in the cause of socialism with Chinese characteristics. After the outbreak of COVID-19, Xi Jinping, General Secretary of CPC, made a profound judgment on the current situation, pointing out that Hubei and Wuhan were the top priorities for epidemic prevention and control and immediately sent a central leading group to Hubei Province to help solve the shortage of medical resources and personnel as well as other major issues, which strengthened the unified leadership and command of the national epidemic prevention and control[4].

Besides, according to Parsons "position-role" theory, the dominant position the Chinese government is in determines that it plays a crucial role in the construction of the national emergency management system. In terms of reality, the inherent characteristics of Chinese history and culture also determine that it is the government that contributes greatly to defeating the COVID-19. One of the important significance of the state institutional reform in 2018 is to construct an emergency management system and thus formed a emergency coordination network with the three major institutions of the Ministry of Emergency Management, the National Health Commission and the Ministry of Public Security as the core. Article 49 of the new *State Security Law of the People's Republic of China* also clearly regulates the establishment of a coordinated mechanism for national safeguard between central and local, inter-departmental, inter-military and inter-regional authorities. In the process of defeating the COVID-19, under the unified leadership of the CPC Central Committee, the National Health Commission led and organized 32 departments to jointly establish a prevention and control mechanism to prevent the COVID-19 from spreading within the city/region or beyond.

### **2.3 Integration**

Integration refers to how an organic system is formed by integrating subsystems and generating internal cohesiveness in order to maintain the balance and stability of the system. Specifically, it is mainly manifested as the normative role of the relevant laws, which is a value expectation formed in emergency activities and interactions between relevant authorities and organizations.

Since the 18th National Congress of the CPC, the principle of law-based governance in all areas requests higher standards for emergency response and gradually establishes the emergency legal system with the *Emergency Response Law* as the core and the emergency plan system being transverse to the edge and vertical in the end.

### **2.4 Latency**

Latent pattern maintenance takes the value as a core to inherit the common culture of society and ensure the continuous operation of the system. Parsons believes that in view of information control, the function of latent pattern maintenance occupies the highest level of the system, and restricts other subsystems downward. Therefore, China's emergency management system act on a holistic national security architecture and the core principle of people-oriented approach, which give emergency management an important cultural significance. In particular, the first meeting of the National Security Council in 2014 proposed a holistic approach to national security as a powerful ideological weapon to safeguard national security in the New Era. This highly epochal safety concept provides a new value guide for the construction and development of emergency management system. Besides, the concept of "people-oriented" is the fundamental principle in the rescue activities. Since the outbreak of COVID-19, General Secretary Xi Jinping has repeatedly stressed that the safety of people's lives and health should always be put first in the prevention and control of the epidemic.

## **3. The factors that restrict the function of emergency management system**

Only when the construction of emergency management system meets the requirements of modern governance can it follow the correct transformation logic for its development. There are two measures , one of which is the maintenance standard, which is to ensure the smooth operation of emergency management in the normal state, and when an emergency occurs, it can quickly transform into the emergency state. Another is advancement standard, which means emergency management system is required to operate in the both above situations.

It is clear that the latter requires greater governance capacity and institutional flexibility. Therefore, this paper takes it as a standard to measure current actions taken by the governments to control COVID-19 and finds out that the following four aspects constrain the upgrade of emergency system.

### ***3.1 Inadequate Emergency reserves and improper deployment***

Although China set up a central emergency service and material reserve system after Zhangbei earthquake in 1995, the reserve varieties are still limited and mainly aimed at natural disasters, financial crisis and other traditional risks, resulting in the difficult situation in which even many designated hospitals were struggling to meet the need of medical resources.

In addition, although the establishment of Ministry of Emergency Management alleviated deficient coordination caused by inappropriate departmentalization, it failed to fundamentally solve this problem. In the process of fighting COVID-19, the State Council set up a material support group to deploy and coordinate emergency supplies. However, due to the lack of practices in coordinated mechanisms and asymmetry of deployment information, emergency activities were caught in a dilemma in which the category of medical resources was vague, the status quo of enterprise production was ambiguous, emergency resources was supplied in a passive manner.

### ***3.2 Improper administrative decision-making and insufficient administrative coordination***

The actions of fighting against COVID-19 revealed two problems in emergency management institution. First of all, from the perspective of administrative decision-making, it is crucial to define functions of central and local governments according to the attributes of emergencies, natural or social, and also make it clear of local governments' duties and give them priority to deal with emergencies as well as give full play to the "two enthusiasms"[5]. In dealing with public health emergencies, taking into account their strong diffusion nature, local governments should take responsibilities at the first time with professional support from the central government, and consider if there is a need to initiate a nationwide emergency management system throughout the country. In the early stages of the outbreak of COVID-19, Wuhan officials reported the outbreak late or even conceal it for lacking the ability to recognize and deal with risks, or for their own private benefits, which led to missing the "golden control period" and further spread of the epidemic.

Besides, in view of administrative coordination, although the authorities emphasized jointly fighting against the epidemic, there is still a lack of coordination between local governments and its departments, and even the illegal expropriation of emergency supplies from other areas in many places.

### ***3.3 legal vacancy in emergent situations***

The construction of the legal system should not only become an important support for the normal operation of the emergency system, but also conform to the normative expectations in emergent situations. Specifically, law on emergencies requires the handling of an emergency in accordance with the law, which is to emphasize the application of the law to the event, while in a broad sense, when an emergency causes a large-scale emergent state, the scope of application of the law should also be extended to the social operation under the state of emergency. The former one is to take a major emergency as an opportunity to perfect the legislation, such as *the Emergency Regulations Regarding Emergency Public Health Incidents* and *Law of the People's Republic of China on the Prevention and Treatment of Infectious Diseases* after SARS, *Law of the People's Republic of China on Protecting Against and Mitigating Earthquake Disasters* and other natural disaster emergency and relief laws and regulations after Wenchuan earthquake. Therefore, an emergency management legal system with the *Emergency Response Law of the People's Republic of China* as its core has been formed.

However, the way to carry out legislative activities only for the event itself does not regulate how to transform to an emergent state[6]. This not only makes it difficult to implement the provisions of the constitution on the state of emergency, but also causes some disputes about the legality of some emergency measures that go beyond the constitutional order but have substantial legitimacy. In the course of fighting COVID-19, based on the consideration of strong infection of it and the need to control it, the government has carried out extensive isolation and blockaded a wide range of public places. This goes beyond the provisions of the *Law of the People's Republic of China on the Prevention and Treatment of Infectious Diseases* on specific regions and populations and is incompatible with the formal rule of law. However, these measures are substantively justified in the reality of the potentially

great risk of epidemic.

#### **4. The path of improving emergency management system function**

The National Conference on Emergency Management, held in January 2020, emphasized the need to modernize the emergency management system and capacity.

From the test of the current emergency management of COVID-19, in order to achieve the modernization goal, there are three paths to function better.

##### ***4.1 Optimize the structure of emergency reserves and improve the efficient dispatch mechanism***

Preparing for worst-case scenarios is a major principle for emergency resource reserve. Therefore, we should improve the emergency resources guarantee system from the aspects of pre-warning system, production capacity and regional layout, reserve and allocation, emergency procurement and delivery. Continuously increasing the quantity of emergency reserve and the varieties for all kinds of new risks, further standardizing reserve allocation and fund management, as well as building a new mechanism for capacity reserves are all crucial and practical ways to better respond to emergencies.

While constantly improving the multi-level and diversified reserve system including human, material and capital, it is crucial to optimize the matching emergency requisition procedure and cross-region deployment mechanism to achieve the goal of preparing well, finding well, allocating well and utilizing well[7]. Finally, an intelligent logistics platform need building to drive emergency reserve model into an “Internet Plus” era by collaborating with large logistics enterprises and fully utilizing internet technology.

##### ***4.2 Improve the comprehensive quality of emergency response of officials***

Officials play a key role in emergency response for the decisions they make in an imminent and urgent situation are a decisive factor for the result of crisis management. The increasingly dangerous impacts of emergencies propel the demand for cultural competency since decision-making through detailed information coupled with efficient communication can turn out favorable outcomes[8]. Therefore, it is necessary to improve the officials’ comprehensive emergency quality through specialists training such as the ability to make judgement and decisions, coordinate internal departments and external organizations as well as lead public opinion. In addition, nonroutine decisions in the event of an emergency means greater administrative risk, so preciser laws and stricter requirements are urgently needed to help officials leave the worries behind while requiring more responsibilities and stronger abilities for them.

##### ***4.3 Improve the special legal order under the state of emergency***

Based on the uncertain nature of emergencies, the formulation and introduction of relevant laws on emergency management also have distinct empirical characteristics, showing the basic law “revising laws after catastrophes”. It is proved that there have been a large number of laws and regulations in a short period of time after SARS in 2003 and Wenchuan earthquake in 2008.

The COVID-19 was a major practical test of China’s emergency legal system, which exposed its shortcomings and will be extensively revised. This round of revision should not only amend directly related laws such as *Law on Animal Prevention* or *Law of the People’s Republic of China on the Prevention and Treatment of Infectious Diseases* in the field of public health, but also address the legality problem of transforming to emergent state for the whole society. The basic idea is to tell apart the *Emergency Response Law*, one part of which will be undertaken for responding to routine emergencies and another will be introduced to establish the special legal order of social operation in an unconventional state, that is, the special exercise and boundary of state power, including declaring, extending and terminating the state of emergency. Besides, consequence assessments for special measures with substantive legitimacy need to be set up.

#### **5. Conclusion**

In summary, there were three major problems tested by COVID-19 in the current emergency

response system. Thus, three corresponding paths were put forward to effectively play the functional advantages of emergency system including constructing modern emergency reserve system, improving capabilities of officials for emergency response, and completing laws and regulations in emergent situations. Only in this way can we promote the modernization of emergency management system and capacity. However, there are still some limitations in this paper. AGIL model emphasizes the equilibrium and stability of the system, while the emergency management system is bound to be in dynamic change due to the uncertainty of emergencies, requiring more freedom and change of the system.

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