An Analysis on the Relationship Between Intelligence and Think Tank

Xue-hui JIN, Yu-juan ZHANG and Wei ZHANG
Beijing Institute of Science and Technology Information

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Abstract. This paper defines two basic concepts—intelligence and think tank, analyzing and explaining research objects, the theory system and their methods, probing into the difference and relation between the two from these aspects. By comparison we find the former pays more attention to information and information activities, and the latter mainly to how to play a role in policy making, but they also depend on with each other. It’s useful to better understand them and promote learning from each other and cooperation between the two.

Introduction

Exactly speaking, as two totally different nouns, “intelligence” and “think tanks” can’t be directly compared. But if “intelligence institutes and intelligence activities” and “think tanks and their activities” are regarded as two independent research objects, it’s no problem to compare them.

In western countries the rise of think tanks can be traced back to the first three decades of the twentieth century. It examines and places in context the birth of the Russell Sage Foundation, established in 1907; the Council on Foreign Relations, established in 1921; and the Brookings Institution, established in 1927[1].

Then think-tank research has been began since 1970s, marked by the publication of the book Think Tanks (Dickson Paul, 1971)[2]. It can be seen that think-tank research is almost half a century later than its practice.

In China according to available information, think-tank research has been raised of many researchers from various disciplines such as international relations, editing & publishing, sociology and intelligence science, etc. Mao ZHENG and Li GUO appealed to intelligence institutes to engage in public policy research[3]. Immediately Lin LIN directly used intelligence institutes should be established as think tanks as a theme, to look forward to intelligence institutes having the ability to put forward their own independent and valuable insight as think tanks did[4]. That was confirmed in China the intelligence researchers had been leading awareness of the importance of think tanks. They had reached a consensus over intelligence work serving governmental policy makers.

In China the historical relationship between intelligence and think tanks has already been established both in the two aspects of social practice and theoretical research. Some research topics of intelligence science, strategic intelligence, national competitive intelligence and governmental competitive intelligence for example, already have public policy consultation functions. Because of some similar functions, making comparison between intelligence with think tank from the perspective of theoretical research is feasible. That will help to clarify an ambiguous impression in people’s minds about the difference and connection between the two, and help the two to play better roles in decision-making consultation by learning from each other.

The Comparison of the Basic Concepts and Research Objects

Definition of Intelligence and Its Research Objects

There has always been a controversial topic about the objects of intelligence science and no unified answer. That can be seen from various explanations of intelligence.

In China, intelligence is a loanword and introduced from Japan in the early 20th century. The concept of intelligence is first derived from the military field. The first definition of intelligence
appeared in *Lexic Sea* published in 1915, which defined it as military message for enemy’s movements. It can be seen from the later different definitions that the intelligence is a developing concept. Its meaning has been gradually transferred from military to scientific and technological, economical and political fields. Seeing from its literal meaning, in general intelligence refers to events reported. In order to distinguish it from news, this paper defines it as information collecting, sorting, selecting, analyzing about enemy/competitors/the other party’s, competitive environment and ourselves’ message, and then delivering final results to users. In this sense, the concept of intelligence includes two essential factors at least: information and the process of information activities with a color of heavy war/competition overtones. They are the main objects of intelligence science. This conclusion will be proved once again in the latter chapters.

**Definition of Think Tank and Its Research Object**

There are various names similar to think tanks, such as brain tank, outside brain, think factory, idea brokers, brain trust, intelligence research center, consultant corporation and so on. What can be seen from the various names is think tanks are organizations, groups or individuals which provide their users with decision-making suggestions. This kind of easy definition may cause the dissimilation of the concept, because the basic research objects and research problems become elusive. It is easy to define a university, association, research institute or research center and organizations which are engaged in research and development, but with too broad definition people are unable to reach agreement when they are asked what the research objects and targets of think tanks being. It is easy to distinguish from universities, research institutions, associations and research centers for people, but when facing the question of what think tanks being they are often confused[5].

Foreign scholars regard think tanks as a stable, non-profit and relatively independent organization serving public policy[6]. Because of the difference of national institution and imperfect law in our country, it is very difficult for Chinese think tanks to be “independent” and also “non-profit”. Seeing from the development of think tanks there isn’t a uniform mode for think tanks. Just as James G. McGann said “When I see it and know it is or not”[7].

However, according to different definitions of think tank, without thinking about the organization nature, the concept of think tank includes two essential factors at least: first, the think tank is a stable body; second, public policy research and consulting. The concept of think tank includes two essential characteristics at least: a stable organization and the functions of serving public policy. According to this we can distinguish it from universities, institutions and research centers.

**Comparative Analysis**

The similarities and differences in the aspects of research objects and basic issues between the two is as shown in table 1.

<table>
<thead>
<tr>
<th></th>
<th>first-class objects</th>
<th>second-class objects</th>
<th>basic research tasks</th>
<th>characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>(1) intelligence,</td>
<td>(1) data, information</td>
<td>5W1H (Who, Where,</td>
<td>informative, time-based,</td>
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<td></td>
<td>(2) intelligence</td>
<td>and documents, etc.</td>
<td>When, What, Why and How)</td>
<td>competitive,</td>
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<td></td>
<td>institutions,</td>
<td>(2) operation and</td>
<td></td>
<td>mysterious</td>
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<td></td>
<td>(3) intelligence</td>
<td>management of</td>
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<td></td>
<td>process</td>
<td>intelligence</td>
<td></td>
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<td></td>
<td></td>
<td>institutions</td>
<td>(3) the process of</td>
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<td></td>
<td>intelligence activities and</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>its rules, methods and tools</td>
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<tr>
<td>Think tank</td>
<td>Think-thank</td>
<td>the operation and</td>
<td>voice for the public,</td>
<td>forward-looking,</td>
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<td></td>
<td>organizations,</td>
<td>management of think</td>
<td>advising the government</td>
<td>comprehensive,</td>
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<td></td>
<td>public policy</td>
<td>tanks, the basic law</td>
<td></td>
<td>consultative,</td>
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<td></td>
<td></td>
<td>of public policy</td>
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<td>openness</td>
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<td>process and how to</td>
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<td>appropriately exert</td>
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<td>influence on it</td>
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</table>
From the above comparison, the main differences of research objects between intelligence and think tank are: intelligence science emphasizes on studying on information including recording information, oral information, physical information. And recording information dominates, such as journals, books and patents, standards and some non-public internal data (the grey literature). So basic principles, basic law and methodology system put forward or introduced from outside by intelligence researchers are mainly used for exploring information and information activities, including information collection, processing, storage and analysis. Its main function is to help users overcome the problem of information asymmetry, answering questions about "Who, Where, When, What", then getting results such briefings and various analysis reports (technology assessment reports, technology trends survey reports, etc.). Deep intelligence service is to help users answer the question of "Why", reveal the reasons and hidden rules behind the events, getting results such as technology forecast reports and technology trend reports, etc. But deeper intelligence service, decision-making and action suggestions for answering the question of how to do (How) for example, went unheeded[8][9]. However, this is just a key step transferring intelligence service to the service of think tanks, and one side of intelligence serving decision-making embodies in this[10].

But then again think tanks providing decision-makers with suggestions is also decision-making intelligence service, telling decision-makers how to do (How). Intelligent organizations focus on serving enterprises, scientific institutions and government bodies, but think tanks focus on governments.

Comparison of Basic Theory System

Basic Theory System of Intelligence Science

Intelligence research has formed a discipline -- intelligence science after scholars at home and abroad hard work, and the book of As We May Think (V. Bush, 1945)[11] is regarded as the pioneer of it. Developing till now, there is not recognized theory system for intelligence science. In order to fully understand the thoughts and theories of it, the paper summarizes basic principles and rules as figure 1.

![Diagram of the theory system of intelligence science](image)

Figure 1. The theory system of intelligence science.

The paper selectively introduces theories and rules of intelligence science as follows:

1. DIKW chain. DIKW model (Knowledge Pyramid) is often used to explain the difference and similarity among signal, information, data, knowledge and intelligence. Scholars from intelligence science constructed an information chain comprised of facts, data, information, knowledge and intelligence[12].

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(2) Discrete distribution theory and the law and rules from it (labor-saving law, Bradford’ Law, Lotka’s law, Zipf’s law, literature growth and aging law). The minimum units of intelligence research such as data, information, knowledge, etc. are recorded in the kinds of literature and information carrier in the state of discrete distribution [13]. It hinds complex rules behind this phenomenon, and Bradford’s law is the most famous of them. The main idea of Bradford’s law and the later developed study is as follows: the set can be divided into a core field and some in successive fields at external frontiers if literature units (articles, authors, key words) are sorted in descending order in their carrier set, and the number of literature carriers from carrier set is \( N_1:N_2:N_3 = 1:a:a^2 \) if in the core field and some fields at frontiers the numbers of literatures unites is equal.

Lotka’s law describes the relationship between the author and the number of his papers, used to measure the “scientific productivity” gap between the productive authors and lower-producing authors.

Zipf’s law reveals the frequency and the class of words in a literature multiplication will be a constant. Zipf use labor-saving law to explain this phenomenon—a word with too high frequency with low application value, used by authors just for labor-saving.

(3) Order principle and knowledge application theory and scientific communication theory. Knowledge system has its order, and the core task of information system is to optimize the order of the knowledge units in a free state. Brooks believes the task of information/intelligence science is to study the relationship between World2 and World3, and to collect, organize, analyze and disseminate the knowledge recorded for people to use it. These above activities are the basic mechanism for the survival and development of science, and they are called scientific communication.

(4) Decision-making system theory. An American expert from intelligence science M.C. Yovits defined intelligence as the usable data and information for decision making.

The intelligence theories also include Debons’ information system model, Tai-hong LU’s SUA theory, Chong-de Wang’s principles theory, Yi-min YAN’s stack theory, etc.

**Theories Used for Think-Tank Research**

The book of *think tanks* (Paul Dickson, 1971) is regarded as the beginning of the study of think tanks. Although think tank research hasn’t been an independent discipline till now, this doesn’t prevent us from comparing intelligence with think tank. The reason is that the research production of think tank has been very high such as books, papers and graduation theses.

The research on think tank focuses on these aspects of the development history, the influence, operating mechanism and case analysis of think tanks. Among them, the influence study on think tanks is a non-faded topic [14][15][16]. The theories applied to studying the influence of think tanks are as follows: theory of pluralist democracy, elite theory and state theory from politics, and multi-stages theory, the theory of policy network, the theory of policy innovation and diffusion and
scientific consultation theory, etc. from public policy science, knowledge utilized theory from public administration science, social capital theory and the theory of social transformation from sociology, technocracy from philosophy of science and technology. Some researchers reveal how experts, advisors or the best brains to pay the role in social governance from the perspective of history.

**Comparative Analysis**

Through comparison it can be found that the difference and relationship between intelligence and think tank is mainly reflected as follows:

First, the former’s research objects mainly are signal, data and information and focusing on information and information activities, and the latter mainly focuses on the research topic about how to play a role in public policy.

Second, the former’s theory system is more mature and stable, and the latter has not yet formed a recognized theory system.

Third, it’s undeniable that the public policy consulting without information and intelligence can’t go on. And intelligence service has the function of public policy consulting. The main difference is the emphasis point. The former focused on information and information activities, and the latter pay more attention to serving public policy.

**The Comparison of Methods**

**Methods of Intelligence Science**

The staff from intelligence science collect, organize and analyze the original information by means of the special methods and tools and then achieve value-added information products such as an idea, a suggestion, a number of program reports. Intelligence work’s function of think tank mainly realize through these products. We summarize the methods and tools of intelligence science as following Figure 3.

![Method framework of intelligence science](image-url)

**Figure 3. The method framework of intelligence science.**
Methods for Think-Tank Research

We summarize the methods for think-tank research as following table 2.

<table>
<thead>
<tr>
<th>The methods for measuring the influence of think tanks</th>
<th>Direct measure method</th>
<th>(1) successfully submitting the suggestions to decision makers; (2) getting the comments and instructions from decision makers; (3) your suggestions and ideas cited by policy documents; (4) The frequency of participating in the hearings or consultative sessions organized by governments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect measure method</td>
<td>(1) media citation; (2) media interviews; (3) the measure methods for influence in the Internet of think tanks; (4) The degree of the closeness of the relationship between think tanks with policy makers; (5) how many members holding several governmental positions; (6) how many members coming from governmental departments; (7) questionnaire survey and statistical analysis.</td>
<td></td>
</tr>
<tr>
<td>The methods for decision-making consultation</td>
<td>Qualitative analysis methods</td>
<td>(1) system analysis; (2) Delphi method; (3) brainstorming; (4) case analysis; (5) war game; (6) investigation; etc.</td>
</tr>
<tr>
<td>Quantitative analysis methods</td>
<td>(1) bibliometrics; (2) patent analysis; (3) webometrics; (3) econometric modeling methods; (4) investigation; etc.</td>
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</tr>
</tbody>
</table>

The Comparison

The difference between methods of intelligence and think tank is as follows:

First, intelligence research has its own set of methods that is the secret weapon to realize value added for intelligence science. But the method set for think tank research is still loose and weak and fragmented.

Second, the methods for collecting, mining and sorting information and data have a big proportion in a set of intelligence methods. But think tank methods are preferred to analyzing the process of advising on public policy and assessing its effectiveness.

Third, the extent of quality evaluation for intelligence products is much more limited than think tanks'. Intelligence service takes the user satisfaction as the highest standard, but latter influence on public policy as the highest standards. Which related to the difference of their organizational ideals and management institutions. The revolving door mechanism for talents flow and its ideas of “voice for the public” and “advising the government” lead to the successful or failing standard for think tanks--the extent of close connection with policy makers and the public. But the intelligence work is more low-pitched, undemonstrative and mysterious than think tanks.

Fourth, in order to provide higher-quality products, think tanks will be widely adopted many various methods from economics, sociology, energy and environment science, biology and so on, and their products have stronger professional and comprehensive than intelligence science.

The correlation between them is as follows:
First, they use a lot of same methods such as scientometrics and statistics. Second, they both pay great attention to whether the results are directly used by their users, but it’s their common problem for how to directly measure this indicator they face with.

Summary
From the above analysis we find the core difference between intelligence and think lies in the different working and studying emphasis. The former focuses on information and information activities, and the latter on the research of public policy. But it’s undeniable that the public policy consulting without information and intelligence can’t go on, and intelligence service has the function of public policy consulting. So researchers and staff of from these two fields would be ill-adviced to learn each other.

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