

From Experts to Policy Entrepreneurs: Event System Theory Analysis on the Case of Optics Valley in China

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Abstract: Experts usually provide government decision-making advice as members of think tanks, while act as policy entrepreneurs has rarely been studied. Under what conditions and how will experts act as policy entrepreneurs? Drawing on the case of proposal scholars with strong professional knowledge in the Optics Valley of China, we suggest a framework from the perspective of event system theory for addressing this question. Through in-depth interviews and accessible archives supplemented by Web Crawler, we analyze the strategies and process experts represented by Professor Huang adopts to increase influence on policy design and by proposing that the combination of new policy issues, resource mobilization and participation in substantive political discussions. Our findings highlight how experts act as a policy entrepreneur opens not only policy windows but also yokes together actor networks to make policy agendas happen. We contribute by clarifying the role of experts in creating policy windows and the agenda-setting and decision-making system of triple interaction among government, experts and the public.

1.Introduction

One of the most visible developments in the policy process has been the increased proliferation of a new type of policy-oriented actor: policy entrepreneurs (Mintrom and Vergari, 1996; Brettell, 2009; Hammond, 2013). Policy entrepreneurs are usually defined as policy advocates who get involved in the public process, promote public issues become public policy (Kendon, 1984; Mintrom and Norman, 2009). It can be found anywhere in the policy community, including within or outside the government (Kendon, 1995). Due to the unique characteristics of policy entrepreneurs (Roberts, 1996) and authoritarian political system, when analyzing the influence of policy entrepreneurs, the literature has focused mainly on bureaucrats within the government rather than actors outside the government (Arnold, 2015). According to these studies, policy entrepreneurs within the government are the research object of widespread concern thanks to the source of information about policy process (Dunleavy 1992; Niskanen 1971; Peters 2001), these bureaucratic entrepreneur don't just include high-level decision makers, but also street-level bureaucrats (Neomi, 2017, Einat and Nissim, 2018).

Policy entrepreneurs are likely to appear in many parts of the policy process, including policy formulation (high-level bureaucrats), policy implementation (low- and middle-level bureaucrats), etc. Some experts seek to develop or adopt innovations intended to improve the policies, which places these actors in a new category of policy entrepreneurs (Zhu, 2008). Experts are special policy participants who can best present their research findings to maximize the impact of their policy implications (Rietig, 2014). In practice, experts have been participating in the policy process as members of think tanks (Wang, 2015; Feng, 2011) and mainly playing the function of policy advisory (Zheng, 2016), the possibility that experts could be policy entrepreneurs and affect policy design has rarely been addressed.

The academic question of the current study is to analyse under what conditions experts act as policy entrepreneurs seeking to change policy and identify the strategies that experts adopt to increase their influence on policy design. By case study and event process analysis, these academic questions explored through the case of experts with strong professional knowledge in the context of the Optics Valley of China. This case is an example of the broader phenomenon of public policy in times of technology innovation and industry-university-research cooperation. Based on the dynamic analysis of the case, we introduce the event system theory to analyze the case in multiple dimensions and levels. We argue that under some conditions, experts may go beyond the policy advisory function of think tanks and use entrepreneurial strategies to influence policy design. The study aims to contribute to policy and administration science by filling knowledge gaps about the potential of the micro-level actions of actors outside the government to effect macro-level policy changes (Mintrom & Luetjens, 2017) and to become part of the political game. Moreover, it contributes to studies of policy entrepreneurs by expanding knowledge about the conditions that motivate their actions as well as the strategies they use. It is conducive to scientific and democratic decision-making to deepen the understanding of the role of individual action in the social structure, helping to understand the main body of policy action and realize the multiple participations.

2. Policy Entrepreneurs and Experts

Policy entrepreneurs are “those who organize and use collective power to change the way public resources allocated” (Lewis, 1980). Whether in the government or society, they are renowned for their innovative skills. Policy entrepreneurs are keen to find the motivation for organizational change and actively provide solutions to policy challenges for organizations (Crow, 2010). In particular, policy entrepreneurs are more willing than other policy participants to devote time and energy (sometimes even money and reputation) to breaking the existing policy balance, selling their favorite policy ideas to others and trying to turn them into new decision-making solutions (Kingdon, 1995).

Compared with other policy participants, policy entrepreneurs have the following characteristics: First, policy entrepreneurs are willing and able to take risks (Kingdon, 1995). Out of concern and recognition for the community or concern for certain social issues, they always actively promote certain specific policy issues and strive to promote the policy agenda. Secondly, they are good at using a wealth of expertise and strategies to facilitate major policy options (Paula J; King; Nancy C; Roberts, 1992). Third, they also have good management and leadership potential and are critical thinkers. Fourth, the biggest difference between policy entrepreneurs and other policy participants is that they have the spirit of perseverance and can participate in the promotion of new policy and successfully maintain it (Nancy C; Roberts, 1992).

In Kingdon's model, three quasi- or semi-independent “streams” of political, problems and policy (solutions) events and activities periodically flow together across realms. The three streams would join together to provide a window of opportunity for entrepreneurs to move their preferred

issues and solutions onto government agendas. Policy entrepreneurs play a key role in seizing the opportunity to open policy window and combining policy streams, problem streams and political streams. In order to put policy ideas on the policy agenda, policy entrepreneurs also need to adopt diversified behavioral strategies. On the one hand, policy entrepreneurs outside government departments actively promote certain social issues, attract public attention, prompt them to think, and through various ways to form pressure for the government to solve the problem. On the other hand, policy entrepreneurs within the government are constantly gathering organizational strength, building policy networks and patiently waiting for the ripe time to come (Sandra A, Waddock, James E, Post, 1991). Researchers also elaborated on the individual abilities and political skills of policy entrepreneurs (Michael Mintrom, Phillipa Norman, 2009). Policy entrepreneurs often form teams of entrepreneurs and take collective action to promote policy change (Richard C. Feiock and Jered B. Carr, 2001).

Policy entrepreneurs can be found anywhere in the policy community. They may be within or outside the government, in elected positions or appointed positions, or interest groups or research organizations (Kingdon, 1995). According to the three criteria of whether a policy entrepreneur has a formal position in the government, whether he plays a leading role or whether he is elected or not, the policy entrepreneur group is divided into: policy entrepreneurs (three not all), bureaucrat policies entrepreneurs (not having the latter two conditions), executive heads policy entrepreneurs (with the first two conditions), and political policies entrepreneurs (all three conditions are available).

Experts are a special policy participant. Experts are important actors in shaping political decisions in many areas of 'low politics' such as environment, climate change, sustainable development, human rights, economic development or trade across multiple levels of governance (Biermann 2001, 2002; Gulbrandsen 2008; Jasanoff 1990; Lahat 2011). Because of their rich professional knowledge and strong technical ability, they have been involved in the policy process as a member of the think tank (Wang, 2015; Feng, 2011). They mainly play the role of policy consultation (Zheng, 2016). In reality of system division, communication and participation channel blocked, the policy impact is very limited. They are similar to decision-making departments in a loose relationship between superiors and subordinates. Their talent movement system, communication and cooperation patterns, and evaluation mechanism face high institutional costs (Chen & Huang, 2017). Compared with other policy participants such as government officials, entrepreneurs, non-governmental organizations, citizens, etc., their action modes and strategy choices are quite different.

Experts have unique characteristics. Their main advantages lie in their familiarity with the field and their close relationships with those who operate within it, their ability to identify social needs and windows of opportunity for action, and their ability to influence the citizen (Ricucci, 2005). In addition, their professional expertise in their field makes others consider them neutral authorities with broad-based knowledge who are sometimes even willing to risk their jobs to provide assistance to citizens they believe worthy (Maynard-Moody & Musheno, 2003). The citizen often trusts them, because it regards them as operating without political interests (Arnold, 2015).

Given these unique characteristics, do their entrepreneurial activities differ from those of other policy entrepreneurs? The emerging knowledge regarding experts who engage in entrepreneurial policy activities led us to investigate this phenomenon, drawing on the case of the "Optical Valley of China" policy development. Our findings enable us to suggest a framework that explains how, under certain conditions, experts may go beyond the use of innovations during policy consultation and use strategies aiming to influence policy design. The study seeks to elaborate upon the skills, knowledge, and connections, as well as organizational and political environment that encourage expert policy entrepreneurship.

3. Event System Theory and " Optics Valley of China "

Event system theory mainly focuses on and explains the dynamic influence degree of essential event attributes (time, space and intensity) on the organization according to the interaction relationship between system levels (Morgeson et al., 2015). Events influence organizational phenomena through interaction with the external environment. The degree of influence depends on the intensity of events, including the novelty, criticality and interruption of events. At the same time, in order to reflect the dynamics and the interaction with the environment, the theory holds that events also have a strong spatiotemporal attribute, that is, when the event intensity is certain, the time point of the event occurrence is more in line with its development needs (timing), the longer the duration, the closer the initiation is to the advanced level (origin), the wider the spread, and the closer the entity (distance between the event and the entity), the greater the impact of the event on the entity (Liu, Liu, 2017). Therefore, event system theory holds that the study of events should systematically consider the attributes of event intensity, time and space, as well as the different effects of these attributes on different individuals, teams and organizations themselves, and then carry out in-depth research. Such as, the impact of major events on the charitable behavior of enterprises in the community (Tilcsik, Marquis, 2013); Industrial events affect the relationship between enterprises in the industry (Madhavan, 1998); Wang and Du (2016) used the event path analysis method to study the events in the interaction process between a typical latecomer and foreign enterprises in the past 40 years, and discussed the realization process of "from outside to inside" logic of latecomer under the structure of double dependence on resources; Beeler et al. (2017) studied the change of sales organization through the event analysis method; Bruyaka et al. (2017) observed the negative events Yu Fan et al. (2016) used event system theory to study the mechanism and risk assessment of crowd stampede in public places. It can be seen that the application field of the event system theory is expanding. Also, the study of event system theory on the individual level is also increasing. For example, Morgeson (2005), Morgeson and Derue (2006) used event analysis method to study the problem of leadership; Zellmer Bruhn (2003) studied the problem of emergency and team knowledge absorption; Bacharach and Bamberger (2007) studied the emotional problem of firefighters after 9/11; Koopmann et al. (2016) studied the impact of work events on employee happiness. Johnson and Johnson (2017) studied the impact of event characteristics on the credibility and adoption of recommendations.

At the end of the 20th century, when the "Silicon Valley" turned from low tide to high tide again, following the IT industry, the optoelectronic industry in the world rose abruptly and it became the most cutting-edge field of the global high-tech industry. In China, the battle for the brand of Optical Valley has already begun in Guangzhou City, Changchun City, Xi'an City, Shanghai City, Fuzhou City and so on. However, Professor Huang's suggestion has attracted the attention of the leaders of Hubei Province and made a significant decision to build the "Optical Valley of China". In 2001, after urban disputes, scholars' petitions and the government's approval, the relevant ministries and commissions of the central government officially approved the construction of a national optoelectronic industry base relying on Wuhan East Lake New Technology Development Zone, and "Optical Valley of China" was officially born. Relevant ministries and commissions of the central government, Hubei Province, Wuhan city and Donghu national independent innovation demonstration zone have issued more than 50 supporting policies in finance and taxation, technological and financial innovation, equity incentive, innovation and innovation, development of strategic emerging industries and other aspects, initially forming support The policy framework system of science and technology innovation and industrialization in the demonstration area has first become a business card of China's science and technology innovation.

As a dynamic policy process, it is very appropriate for the " Optics Valley of China" Plan to adopt event system theory for analysis(Zhang,2018). Event system theory can not only sort out the logical chain of cause and effect between events after events occur but also grasp the impact and consequences of events as a whole and the intensity of events according to the conditions of event evolution. Spatial and temporal attributions can effectively predict the occurrence and effect of follow-up actions.

4. Research Design and Methodology

Based on the particularity of China' s policy environment, individual experiences, opinions need to be understood in a macro context. Case study can investigate and grasp the complexity of the case object through observation, sorting out and analysis of cases and make a solid analysis and description of the research object (Weick, 2007; Yin, 2009), which is of great significance in discovering new theories and enriching existing theories(Eisenharde & Graebner,2007; Siggelknow,2007). We adopt the case analysis method according to the typicality of the research topic in the phenomenon and the complexity of the content. As an exploratory case study, this article adopts a research method that is helpful to refine the law and conduct an in depth vertical analysis on a single case (Eisenhardt, 1989).

Selecting typical cases is a common practice based on a case study methods (Eisenhardt, 1989). Eisenhardt points out that for case study methods, random samples are not only unnecessary, but also generally undesirable. Pettigrew (1990) has even repeatedly stressed that case studies are more appropriate to select typical and extreme situations. Yin (1994) holds the same view that case study requires sample selection to be important. The case of " Optics Valley of China" is a typical science and technology policy development. The project led us to realize that some experts were using entrepreneurial strategies. We wanted to understand the conditions that motivated them to act and identify the elements that led them to adopt such strategies.

To account for the diverse perspectives of representatives from each major actor, semi-structured interviews of approximately 30 to 40 minutes were conducted with randomly chosen representatives of each actors. The interview sample includes both accounts from non-governmental experts, who put forward policy proposals and lend democratic legitimization to the input, and civil servants, who are process point of experts seeking institutional support. In addition, we triangulated our findings from the methods above with supplementary textual sources, including legislative documents and print and online press sources, such as reports from the media. We chose the 45 texts we analyzed based on their relevance to the research topic.

5. Event Process Analysis on the Policy of " Optics Valley of China "

In the event system theory proposed by Morgeson et al. (2015), events include three dimensions: (1) event intensity, which refers to the novelty, interruption and criticality of events. (2) Event space, that is, the origin of events and how they spread in the organization. (3) Event time refers to when an event occurs, how long the impact will last and the evolution of the intensity of the event.

The characteristics of events, the number and position of personnel, can be used as an alternative variable to measure the intensity of events (Connor, 1988), event strength changes with the scale of participation, the more people involved in the event, the higher the influence on the government. With the increase in the number, the positions involved are more and more extensive, and the importance to the government is also increased. In particular, the slogan of " Optics Valley of China " is novel, and the more innovative the event, the more likely it is to change or produce behaviors, characteristics and events. The development prospects of the optoelectronic industry will greatly

promote the economic development of this industry and achieve the government's economic development goals. Once it is regarded as an important work or even a “central work“, it will change the allocation of resources, event intensity is increasing.

Event intensity varies with duration, when an event occurs, it will interact with the entity or environment, resulting in the change of the overall intensity, which can adjust the relationship between the event intensity and the result (Langley, 2013). Considered the duration of the proposed planning and impact, the interaction between social environment and organization seem to extend the time boundaries of the planning and development process of Optics Valley. Therefore, the scope of discussions will extend to the third stage, that is, not only to enter the policy agenda of the Municipal Government, but also to expand the agenda of the central government.

The space of events refers to the extent of the origin of events and the extent of their spread in the organization (Morgeson,2015). The proponent of Optics Valley is scholar in universities, compared with the government implementing the policy, the event originated from the outside of the organization. With the plan submitted to the municipal Party committee, the event spread outside the system into the government, event space involves two levels: University and municipal government. When the plan is listed as a central task and the event intensity is upgraded, the plan can continue to spread from bottom to top, enter the central authorities agenda, and extend into the media and citizen. After the interaction of event intensity and event space diffusion, the impact of event expanded to more levels.

According to the three dimensions of the event(see Table 1), the proposed process of the “ Optics Valley of China ” and related policy can divide into three stages(see Figure 1). The first stage is beginning with Professor Huang. As experts and scholars, he come into contact with the development of the International Optoelectronic industry. In order to fully grasp this development opportunity, Professor Huang proposed the construction of the “ Optics Valley of China ” . In the second stage, after Professor Huang submitted the plan to the Municipal Government, the Municipal Government finally set up a leading group to carry out this work. In the third stage, Professor Huang published articles in newspapers and firmly supports the construction of the Optics Valley of China after the IT bubble occurred. The People’ s Congress and the CPPCC Committee of Hubei nationality firmly supported the construction. Finally, the construction of the “ Optics Valley of China ” is supported by many central ministries and commissions.

In the late 1990s, the optoelectronic industry represented by optical fiber communication thrived at home and abroad. The combination of optical fiber communication networks and mobile communication makes more and more people feel the enormous economic and social benefits brought by the real-time and convenience of information exchange. It is changing people's way of life. Optical fiber communication promotes the vigorous development of optical fiber, optoelectronic devices and optical communication systems.

As a new industry, the optoelectronic industry has enough novelty. It is different from the traditional industry in the past, and its development trend is noticeable. In 1998, Professor Huang participated in a visit to Taiwan organized by the National Natural Science Foundation Committee, showing a demonstration of Wuhan's dominant optoelectronic research and production enterprises in China, all of which located around Huazhong University of Science and Technology (Huazhong University of Science and Technology).

This is very similar to the Silicon Valley of the United States, the rapid development of Silicon Valley, so that “Valley“ has become a synonym for high-tech, which became me a subsequent proposal of the “ Optics Valley of China “ inspiration (interviewee, Professor Huang)

In October 1998, Professor Huang, a professor of Huazhong University of science and technology(HUST), and professor Zhou, the then president of Huazhong University of science and

technology, talked about the idea of vigorously building the optoelectronic industry in Wuhan, which was greatly supported by professor Zhou. They negotiated and submitted the proposal--" *Building Wuhan East Lake New Technology Development Zone into ' Optics Valley of China ' "* to Wuhan Science and Technology Commission in the name of the HUST, and anticipated with confidence that "In the next 50 years, the economic development of Wuhan will depend on optoelectronics!" (From the proposal).

At the end of 1999, the international IT wave developed rapidly while the bubble was quietly taking shape. Some developed countries, represented by the United States, overestimated the market at that time by suppliers of optical fiber communication-related products. In the face of its negative impact on the development of the "Optics Valley of China", Professor Huang wrote a report entitled " *Hold Fast to Optoelectronics* " to the Secretary of the Municipal Party Committee, which published in Changjiang Daily.

In the United States, for example, they have invested about \$15 billion more in the development of related products in the field of optical fiber communications. This blindness, which violates the market rules, will inevitably lead to a large backlog of optoelectronic devices to communications equipment and serious losses of related companies, and even some companies have closed down. (From the Changjiang Daily)

In March 2000, at the third session of the Ninth CPPCC National Committee, several CPPCC members, such as Professor Xu and Professor Liu, proposed to vigorously develop the optoelectronic industry and build Optical Valley in Wuhan (proposal 1331: vigorously develop the optoelectronic industry and propose to build China's Optical Valley in Wuhan).

On May 7, 2000, the Hubei Association of science and technology hosted a symposium of academicians and experts in the construction of the "Optics Valley of China" in Wuhan. Professor Zhou and the other seven academicians signed the proposal on accelerating technological innovation and developing China's optical- electronic information industry, calling for the construction of a national optical electronic information industry base "Optics Valley" in Wuhan to promote the restructuring and expansion of China's optical-electronic information industry.

At that time, we realized that it was necessary to form a certain influence to attract the attention of policy makers, so we launched our own network to publicize the " optical valley" , and the joint signature proposal was the most compliant way. (interviewee, Professor Zhou)

On May 9, 26 academicians and experts of the Chinese Academy of Sciences and the Chinese Academy of Sciences in Wuhan jointly signed the proposal, requesting the approval of the Central Committee and relevant national ministries and commissions for the construction of the "Optics Valley of China" in Wuhan.

The report indicates the substantial progress and rough line planning of the construction of Optics Valley, listing the status of domestic optics valley disputes, analyzing the basis and advantages of the region, elaborating the overall development ideas, during the period of the tenth five year plan.(From the proposal)

In May 2000, Hubei provincial Party committee, the provincial government and Wuhan municipal Party committee and the municipal government made a major decision: relying on Wuhan East Lake high tech Zone, to build a national optoelectronic information industry base, known as "Optics Valley of China"; on May 8, the provincial Party committee and provincial government presided over the first meeting of the leading group of the national optoelectronic information industry base (Preparatory) which announced the establishment of the leading group of the optoelectronic information industry base. (Professor Zhou was then deputy leader of the leading group) .

In July 2000, the Ministry of science and technology and the Ministry of Foreign Affairs approved the Donghu New Technology Development Zone as APEC Science and technology park.

In February 2001, the Ministry of science and technology of the people's Republic of China approved Donghu New Technology Development Zone as the national Torch Plan photoelectric information technology industrialization base.

In March 2001, the Ministry of science and technology officially approved the construction of the national optoelectronic information technology industrialization base based on Wuhan East Lake high tech Zone; in July 2001, the former State Planning Commission officially approved the establishment of the national optoelectronic industry base in Wuhan East Lake high tech Zone, further confirming the status of "Optics Valley of China" as the "national team" of optoelectronic industry. As a result, "Optics Valley of China" has entered the historical stage of general construction.

On July 6, 2001, the State Planning Commission officially approved the establishment of the national optoelectronic industry base in the East Lake New Technology Development Zone, namely: Wuhan · Optics Valley of China.⁷

6. Action Strategies of Policy Entrepreneurs

In the process of establishing a policy agenda, many experts provide policy advice as policy advisors, while some will become policy entrepreneurs. Experts embody various new strategies by distinguishing policy entrepreneurship activities from other types of policy entrepreneurs. Throughout the process of and proposal to the government and final introduction of the " Optics Valley of China " and their support from the state, Professor Huang and other experts' identity changed from an academic expert to a policy entrepreneur. After the window of opportunity was opened, they adopted various strategies to win the support of the government and finally established the science and technology policy agenda. Through the analysis of the activities in the case, three unique behavioral strategies have been formed: acquiring professional knowledge, " selling " policy options, and building actor networks.

6.1 Identity Advantage: Acquiring Professional Information and Establishing Core Belief System

Public understanding of science or citizen/citizenship understanding of science, an essential paradigm for understanding the relationship between modern social sciences and the public, and also a linear cognitive framework. On the one hand, in China's current institutional environment, the channels for ordinary citizens to participate in public policies through institutionalized means are not smooth, and the government's response to citizens' demands is low, so experts become "intermediaries" between citizens' demands and government's response; on the other hand, science and technology policy involves a higher degree of knowledge and expertise, and the threshold for public participation is also high, so the government's response to citizens' demands is low. Experts and scholars of related specialties have more space to play in their professional fields, and science and technology policy is also a stage for their talents.

In the case study, policy entrepreneurs obtain professional domain information through three aspects. Firstly, Professor Huang has engaged in the research of Optoelectronics for a long time. He has a particular understanding and accumulation of the optoelectronics industry. Secondly, when Professor Huang participated in academic exchanges, he realized the advantages of developing the optoelectronic industry in Wuhan, which became the inspiration source of the concept of Tiguang Valley. Finally, during his academic visit to Britain, he met President Zhou and was encouraged to realize the development prospects of the optoelectronic industry, and to strengthen the determination of the optoelectronic industry to go all out.

6.2 Political Resources: Selling Policy Ideas

Policy entrepreneurs interact with policy actors to promote their policies. Specifically, there are three types of policy actors: organizations or individuals that directly exercise or influence decision-making power, including political parties, governments, legislatures, courts, politicians, bureaucrats, etc.; organizations or individuals that indirectly affect decision-making power, including interest groups, public media, think tanks, people's representatives, citizens, etc.; and objects of a policy role, including target groups, society, group or individual.

In the process of policy participation, experts always try to choose the most effective action mode to achieve influence, and their actions can roughly divide into two categories: direct and indirect. Direct behaviors include writing to policymakers, submitting research reports, being invited to participate in policy consultation meetings and seminars held by the government, etc.; indirect behaviors include publishing articles publicly, receiving media interviews, publishing works or publishing articles on emerging media, etc. Generally speaking, Chinese experts prefer to influence decision-makers through a direct approach. If not, experts will not influence decision-makers through indirect channels of public opinion. This is because public opinions have political risks of offending the government and are vulnerable to public criticism (Wang, 2008: 68).

In this case, policy entrepreneurs mainly sell policy plans by influencing individuals and the public who directly exercise decision-making power. Professor Huang used the group visit held by Wuhan municipal Party committee and government to make a speech and further elaborated the development prospect of the optoelectronic industry and the advantages of developing the optoelectronic industry in Wuhan. He used the influence of his scholars to promote his own "Optics Valley of China", to get the attention of the Secretary of the municipal Party committee and other municipal governments. In the face of the negative impact of the international IT bubble on "Optics Valley of China", professor Huang taught the party secretary to report and publish his report in the public media to demonstrate his firm position and defend the policy plan.

6.3 Adhesives: Linking Multiple Actors to Form Policy Networks

The consistent individual behavior of policy entrepreneurs constitutes a group action mode, similar to actor-network, the establishment of actor-networks often requires common goals and informal relationships, through this multi-level action network, policy entrepreneurs can increase the social capital needed for policy activities. Policy entrepreneurs establish actor networks by maintaining contact with specific groups in a variety of ways.

In this case, Professor Huang and the president strive for a common goal. Because of the dual identities of school and administrative positions, the president has become a key point of communication between experts and administrative leaders. Experts reach out to high-level policy participants through the president crossing the boundary between the school and the government, establish informal relations, reach consensus on decision-making, form a leading group for the construction of Optics Valley, and use the influence of group members to win the support of the state and mobilize the masses. This action network includes local and national level personnel (provincial and municipal leaders and members of the CPPCC National Committee, etc.), involving schools and government departments, across the central, provincial and municipal levels, and increasing the possibility of successful policy activities.

Table 1 Three-Dimensional Analysis of Event Processes.

Time		Stage 1	Stage 2	Stage 3
Intensity	Number	Huang	A leading group	The largest number of people

	Capacity	Professor	Mayor	NPC,CPPC,citizen
Space	Direction	Outside the government	Municipal Government	Central ministries and commissions
	Arrangement	University	University,local government	Society and multilevel government
Identity		Experts	Policy entrepreneurs	Policy network

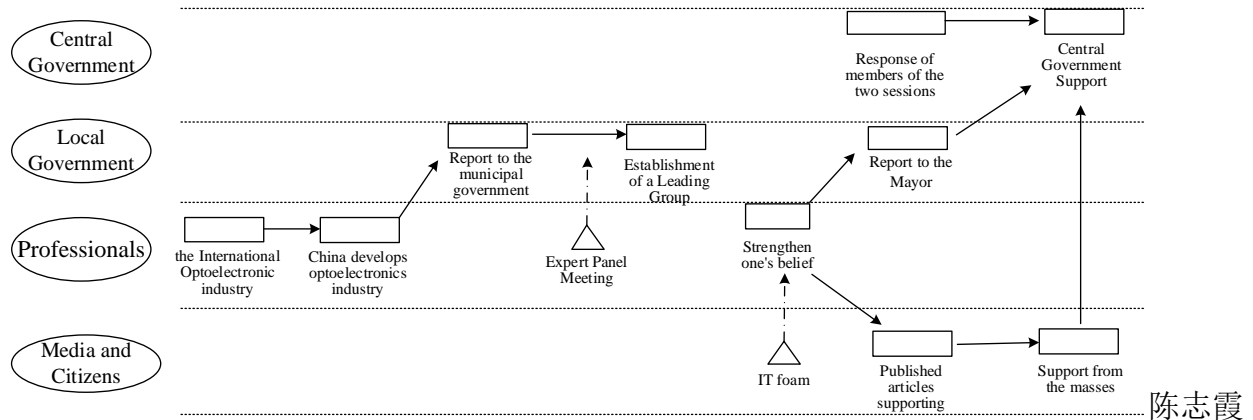


Fig.1 Three Stages of Event Processes

7. Discussion and Conclusion

Experts have adopted three strategies at the individual level to complete the transition to policy entrepreneurs. Through the analysis of the event system, it shows that the macro policy democratization trend and policy attribute are the keys to the success of the expert policy entrepreneurs. Applying the test case of Optics Valley, we demonstrated the expert's policy entrepreneurs use identity advantage, political resources and policy networks to influence science and technology policy outcomes.

Such entrepreneurs applied several strategies in their efforts to influence policy design: clever use of identity advantages and expertise, acquiring professional information and establishing core belief system, establish policy networks with other experts and form influential alliances. In part, these strategies were similar to those used by other policy entrepreneurs within the government. However, they differed in that they have a specific professional voice, especially in the era of the rapid development of science and technology, the trend of government decision-making democratization requires the government to include the opinions of non-governmental personnel in the decision-making process, and experts with rich professional knowledge will undoubtedly play an important role. Even if those in power prefer industrial development policies, the location of their industries is still a questionable issue. They facilitated the policy process for Wuhan to stand out in the battle for optoelectronic location. The policy process cannot be successful without other actors, and it cannot start without the enthusiasm of policy entrepreneurs.

This article has revealed contribute to the studies of policy entrepreneurs by offering a new type actor in which to understand their influence on policy process. Our findings demonstrate that under certain conditions, experts may become part of the political game, not just by engaging in informal practices that providing decision-making consultation as a member of a think tank (Arnold, 2015; Brodtkin, 2011), but also through their direct involvement in the design of that policy. Furthermore, our article expands knowledge about the entrepreneur strategies adopted by experts to promote policy development, and innovatively use the event system theory to conduct a three-dimensional analysis of the case.

The establishment of the policy agenda is a complex political process, involving the game and interaction between different policy subjects. In the study of policy entrepreneurs, the concepts of “location“, “resource“, “strategy“ and “softening“ are used to describe the status, role and ways of individual under the structure. Policy entrepreneurs can use various strategies to soften and persuade members of the policy community through continuous advocacy of policy ideas and seize key opportunities to promote the process of public policy. It can be seen that under the framework of a modern political system, individuals do not always adapt passively, but can take many more active actions on their initiative. Dahl (2003) notes that “pluralism is a regime that realizes the popularization of political participation and the liberalization of open competition“. Multiple participation is not disorderly participate and vicious competition. A deep understanding of the motives, characteristics and functions of policy actors, especially those who are conscious and capable like policy entrepreneurs, will help the ruling party and government departments better guide them, and absorb beneficial policy issues, programs, opinions and even criticisms into their decision-making process. With the continuous acceleration of China's modernization process, the role of professional knowledge in the process of public policy system has become increasingly prominent, and the phenomenon that various elites actively participate in the policy-making process has also become a new trend. The case of “ Optics Valley of China ” shows that the policy of local governments in China should not only be attributed to one actor, but also the experts with technical expertise may be transformed into policy entrepreneurs, becoming the critical force to promote the policy agenda. The occurrence of policy entrepreneurs and the process of policy establish are influenced by events, time and people, the strategies and efforts used to get support by the government are most necessary. Experts are not only policy consultants of “talking on paper“, but also active promoters of the establishment of policy agenda.

At the same time, the science and technology policy selected in this paper has “knowledge complexity“ (Zhu, 2011). To a large extent, it depends on the expertise of experts. Experts have the advantage of professional knowledge relative to decision-makers, which makes it possible for experts to transform into policy entrepreneurs with particular operating space. Therefore, this transformation mechanism may be related to policy attributes. In the future, there will be further explored.

Under the background of the limited and open policy process in our country, as policy entrepreneurs, experts show remarkable characteristics in action strategies, On the one hand, informal networks should be used to cooperate with local leaders and take joint action to gain more inclination of resources; on the other hand, other actors should be used to expand social influence and win support from all parties. It is worth noting that experts, unlike other types of policy entrepreneurs, not only exert their talents, but also regard this activity as the realization of their social value, the public interest and other complex factors when promoting policy agenda-setting. Therefore, in the future, experts and scholars will act as policy entrepreneurs. The motivation needs to be further explored.

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