

## Why Do Policy Brokers Matter? A Lesson for Competing Advocacy Coalitions

Wilbur Bing-Yan Lu<sup>1</sup>

### Abstract

---

Guided by the Advocacy Coalition Framework (ACF), the paper helps to understand the significance of policy brokers and the politics of adopting policy alternatives, emphasizing their crucial roles and the power of media in the context of the three-phase development of Taiwan's Su-Hua Highway policy change period (1990-2014). Based on empirical findings of in-depth interviewing, alternatives favored by majority public opinion do tell us substantial rationale underlying policy decisions. This leaves competing coalitions and members with maneuvering spaces of re-framing aspects of perceived reality where the role of mass media is a conduit more than a contributor.

---

**Keywords:** Advocacy Coalition Framework; Policy Broker; Subsystem; Su-Hua Highway.

### Introduction

As a subfield within political science, one of the defining features of public policy 'should be that it seeks to improve actual public policy' (Mead, 2005: 536). When politics clouds public decision-making, scholars urged to develop better theories and empirics for understanding policy processes (Sabatier, 1991). For policies concerning transportation infrastructures, economic development and environmental protection, dramatic changes may occur. To explain intense conflicts over policy issues, Sabatier (1988) and Sabatier and Jenkins-Smith (1993, 1999) developed the Advocacy Coalition Framework (ACF) which generally assumes that actors are self-interested and instrumentally rational. The framework challenges the implicit assumption of most political scientists that an actor's organizational affiliation is primordial (Sabatier and Jenkins-Smith, 1999: 127).

---

<sup>1</sup> Associate Professor, Department of Public Administration, National Dong Hwa University.

Coalitions seek to translate their beliefs into public policies or programs that usually consist of goals and directions to administrative agencies for implementing those goals (Sabatier, 1993: 28). The ACF regards policymaking as a continual process with no strict beginning and end and two to four competing advocacy coalitions, each with its own ideas about policy content, compete for dominance in a subsystem (John, 1998: 170).

Although Weible et al. (2009: 134-135) explicitly admitted that the ACF applications have overlooked the role of policy brokers, Weible et al. (2011: 352) and Sabatier and Weible (2014: 194) did not mention 'policy brokers' in the ACF flow diagram when they reviewed the ACF literatures in the past quarter century. According to some empirical studies, high-level civil servants very often play the role of policy brokers (Sabatier, 1987: 662) and political parties strive for political cohesion and influences (Ingold and Varone, 2011). Advocacy coalition participants, however, may also include journalists, policy analysts and researchers, as well as bureaucrats, politicians, and interest-group representatives (John, 1998: 169).

Through sharing belief structures of different coalitions and major policy actors, the ACF offers a retrospective explanation of Su-Hua Highway policy change (1990-2014) in a volatile environment of decision-making processes in Taiwan's democratic consolidation period since the late 1980s. Before democratization, Taiwan was under the rule of the Chinese Nationalist Party (Kuomintang, KMT; Kao, 2014: 21) which was the ruling party in Mainland China from 1928 to 1949 and on Taiwan since 1949, except for the Democratic Progressive Party (DPP) won the Presidential Campaign in 2000. After the 1990s, studies of policymaking process are still hampered by government's black box decision-making. One of the reasons is the policy decision-making process has been characterized by the dual and contrasting characteristics of stability and dramatic change ever since the 1990s.

By analyzing competing advocacy coalitions of the Su-Hua Highway policy, the ACF creates an added value to the policy change research. Many theoretical problems in the study of policy change need to re-consider an unresolved dilemma of the scope and timing of change include: how does time influence the scope of change; and when can any given change be considered fundamental or marginal (Capano and Howlett, 2009: 1-2). This empirical analysis presents a clue to understand the dynamics of focusing events, mass media, and policy brokers. While Individual policy actors vary in terms of belief systems, knowledge and backgrounds, one can expect some variability with respect to how they interpret problems and solutions (Nohrstedt, 2007: 37; Howlett and Ramesh, 2003: 163-164). To explore the role of policy brokers in subsystems, this analysis consists of two parts: theoretical and empirical.

The author summarizes briefly literature review of the ACF and policy brokers in the first part, whereas in the second part, the author tries to answer two research questions as follows: who are policy brokers with what deep core and policy beliefs; and under what institutional rules do policy brokers have influence on what policy alternatives.

## 1. Policy Brokers and the ACF

The ACF emphasizes the role of coalitions in policy change within subsystems over periods of a decade or more (Sabatier and Jenkins-Smith, 1993, 1999). But scholars do not examine whether coalitions consist of stable combinations of actors (Baumgartner and Jones, 1993; Worsham, 1997). Based on four premises (Sabatier, 1993: 16) and a three-tiered hierarchical structure to belief systems (Sabatier, 1998: 113), the framework offers a connection between ideas and coalition formation in policy systems and seeks to map changes in the coalitions that are driven by external changes (John, 1998: 201) or both exogenous phenomena and endogenous mechanisms (Zittoun, 2009: 67). Zafonte and Sabatier (1998) found that stakeholders with similar policy core beliefs are embedded in networks of perceived allies. For hypotheses presented by Sabatier and Jenkins-Smith (1993, 1999), Parsons (1995: 199-200) indicates that a number of ACF hypotheses are tested in qualitative and quantitative studies, covering two areas: the behavior of actors in the subsystem and policy-oriented learning. One of the hypotheses of Sabatier and Jenkins-Smith (1993: 219) can lead to the opposing coalitions and the role of policy brokers. Even when the accumulation of technical information does not change the views of the opposing coalition, it can have important impacts on policy by altering the views of policy brokers or other active stakeholders from all levels of government, the media, research institutions, and multiple interest groups (Weible and Sabatier, 2005: 181).

During the period of 1990-2014, several policy alternatives of Su-Hua Highway are based on science and technology of transportation engineering. The policy focused on scientific expertise about the risks and benefits of transportation technology applications, whereas the credibility of the scientific knowledge informing policy decisions is often affected by actors over increasing environmental protectionists within the policy subsystem (Collingridge and Reeve, 1986). In other words, although policy actors believe that science enables making better policy decisions than politics, delegating policy authority to scientists is still controversial in a science-and-politics interconnected world (Montpetit, 2011: 513-514). Given the ACF's focus on advocacy coalitions, policy-oriented learning is primarily concerned with changes over time in the distribution of beliefs of people within a coalition or within the broader policy subsystems.

Such changes in the distribution of beliefs will be a function of several different processes (Jenkins-Smith and Sabatier, 1993: 42), including: individual learning and attitudinal change; the diffusion of new beliefs and attitudes among individuals; turnover in individuals within any collectivity; group dynamics, such as the polarization of homogeneous groups or groups in conflict; and rules for aggregating preferences and for promoting or impeding communication among individuals.

By between-coalition learning within policy subsystems and belief systems of policy elites and brokers, the ACF may contribute to policy reasoning as a form of systems analysis that seeks to reconcile goals with means. While some policy researches lack institutional constraints and influences in the public sector, Montpetit (2011: 517) argues that science cannot serve as an instrument of policy-making. By distinguishing between three types of subsystems contexts (unitary, collaborative, and adversarial), Weible (2008) argues that political contexts do matter and the instrumental use of scientific knowledge is most likely in highly centralized unitary subsystems. For a policy issue experiencing five presidential campaigns, six legislative elections, and five country magistrate elections, the policy also challenged eleven Premiers, seven MOTC Ministers, eight EPA Ministers, and five Hualien County Magistrates during the democratic consolidation period since the 1990s. Although Kingdon (1995) and Baumgartner and Jones (1993: 103-125) identify the media as a conduit, reflecting policy arguments in the policy subsystems, the author argues for the role of media's conduit role, as a resource for members to influence policy outcomes (Sabatier and Jenks-Smith, 1993: 227), more than a contributor role, as a member of competing advocacy coalitions (Shanahan et al., 2008).

### **3. Su-Hua Highway Policy Decision-making Process**

As Taiwan covers an area of 36,000 square kilometers and three fourths of this area is mountainous (Su, 1999: 55), with the most scenic and culturally rich landscape in east Taiwan, tourism has been a primary source of Hualien's local revenues since the early 1970s. While Taiwan's economy slowly shifted from the industrial sector to the service sector in the late 1980s, the increase of foreign investment in the 1990s fueled the development of the service sector. One of the turning points for suburban tourism development was the announcement of the central government's 'two-day off per week' policy initiative in 2001, increasing demand of domestic travelers ballooned since the 1990s. Since then, the tourism policy turned from attracting foreign tourists to satisfy domestic travelers.

To respond to challenges since the 1990s, various actors are involved in the decision-making process of government actions. The Taiwanese government can be divided into central, provincial/municipal, and county levels, each of which has specifically defined power (Li, 2009: 118).

The executive branch from the President down to the Ministers of the Executive Yuan (Taiwan's Cabinet), and local country magistrates are mainly responsible for policymaking and implementation. Urban residents in west Taiwan explore remote and less accessible scenic spots (Tsai, 2007: 1-2) and wonderment and serene lifestyles of inter-culture experience. When more and more tourists from the metropolitan City of Taipei travel to distant locations in east Taiwan, including Taroko Gorge and east coastline with geographical wonders, the connection between metropolitan Taipei and Hualien, i.e., Suao-Hualien (Su-Hua) Provincial Road, is so busy that traffic jam has been a serious problem for local people in Hualien more than half a century.

With a portion built alongside very steep cliffs high above the Pacific Ocean, the Su-Hua Provincial Road is a dangerous yet scenic drive. Despite its breathtaking scenic views of the Western Pacific Ocean and expanding in the 1980s, the current 87-kilometer Su-Hua Provincial Road has frequently come under merciless onslaughts of typhoons, torrential rains, and earthquakes. To respond to various demands, the Ministry of Transportation and Communication (MOTC) initiated the proposal of building the Su-Hua Highway in 1990, with a budget of NT\$93 billion (\$31 billion USD) in eight years (The China Post, 2007) and starting from Su-ao, Yilan County and ending at Hualien County. The highway initiative was listed by the MOTC as a part of the "Round Island Highway Development Plan" in February 1990, one month later, KMT President Lee Teng-Hui announced the policy of "Industries Move to East Taiwan". However, after the first regime turnover in May 2000, the newly-elected DPP President Chen Shui-Bian declared that the highway will be built in August 2000, whereas his Premier Yu Shyi-Kun reprieved the construction project and the policy proposal was dismissed by the Cabinet-level Environment Protection Administration (EPA) to the MOTC one month before the second regime turnover in May 2008.

In July 2008, KMT Premier Liu Chao-Shiuan proclaimed a policy alternative of "Substitutive Road of Su-Hua Dangerous Area", followed by the immediate denial of the Presidential Office. While the Typhoon Maggie in October 21<sup>st</sup> 2010 brought torrential rains and caused serious damage along the Su-Hua mountainous area (Chu et al., 2013: 97), the landslide consisted of colluviums and weathered rock mass, and subsequently caused a debris slide (Lee, 2010). In November 6<sup>th</sup> 2010, the EPA passed the environment impact assessment (EIA) of the MOTC's another policy option -- "Improved Road of Su-Hua Dangerous Area". The final decision then had been made by the Cabinet-level Council for Economic Planning and Development (CEPD) and carried out by the MOTC, with estimated completion date of 2017.

To sum up, the three-phase development is as follows: the Su-Hua Highway Policy Initiative (1990-2008), the “Substitutive Road” proposal (2008-2010), and the “Improved Road” proposal (2010-2017). When public opinion is not uniform and simple, presidents and premiers face multiple layers of opinion and responding to each layer comes with different benefits and costs (Iyengar and McGrady, 2007: 287-288). Greater levels of news coverage, which is associated with greater levels of institutional attention (Smith, 1992), made the media’s influence goes beyond its ability forcing policy makers to pay attention to the Su-Hua policy issue. Politicians thus presented several alternatives, before and after the 2000-2008 regime turnover period, with: the “Su-Hua Highway Construction Plan” (\$3.2 billion USD) in Dec. 2002, the “Pilot Plan of East Taiwan in the 21<sup>st</sup> Century” (\$2 billion) in Dec. 2005, “Substitutive Road of Su-Hua Dangerous Area” in July 2008, and the finalized “Improved Road of Su-Hua Dangerous Area” (\$1.6 billion) in Dec. 2010.

#### 4. Research Design and Content Analysis

Patton (1990) discusses four types of triangulation, of which data triangulation and methodological triangulation are used in this empirical analysis. In order to investigate two research questions stated above, both content analysis and interviewing data had been collected and analyzed. By conducting content analysis, the first stage of the research process was an extensive search of newspapers editorials that helped the author to capture the nuance of public opinion and explain how mass media shape the policy process. In the second stage, twenty interviewees have been contacted and invited to participate in this research.

**Table 1: Research Design for In-depth Interviewees**

Phase Total	Highway Phase		Substitution Phase		Improvement
	(1990-2008)		(2008-2010)		(2010-2017)
Government Officials	1	--	1	2 (+3)	** = 5
Nonprofit Organization Leaders	1	--	1	1	3 (+2) = 5
Experts and Academics	1	--	1	2 (+2)	= 4
Journalists	1	--	0	1 (+2)	= 3
Others	1	--	1	2 (+1)	= 3
<b>Total*</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>10 (+10)</b>	<b>** = 20</b>

\* Ten out of twenty interviewees participated and/or were affected by the Su-Hua policy change, including 3 government officials, 2 nonprofit organization leaders, 2 experts and academics, 2 journalists, and one local interviewee.

\*\* For ‘X + Y’, ‘X’ indicates interviewees of the phase, whereas ‘Y’ indicates interviewees that experienced all three phases.

There have been many studies highlighting the impact of the mass media on policy agendas (Stewart, 2009: 195). The media's role, however, is empirically underdeveloped and even contradictory (Shanahan et al., 2008). By conducting content analysis, the author explored policy beliefs dissemination or policy beliefs pursuit to influence policy change. Editorials collection of eight major newspapers' includes two local and two business newspapers, as well as four major island-wide newspapers. With keywords of Su-Hua Highway or "Improved Road of Su-Hua Dangerous Area", during the period of Oct. 22<sup>nd</sup> 2010 (the Chinese tourists focusing event) to Nov. 6<sup>th</sup> 2010 (EIA passage), forty newspaper editorials were collected.

**Table 2: Newspapers Editorials Collection**

<b>22 Oct. – 6 Nov. 2010</b>	
<b>Island-Wide</b>	
Apple Daily News	10 (25%)
China Times	8 (20%)
Liberty Times	6 (15%)
United Daily News	3 (7.5%)
<b>Business</b>	
Commercial Times	0 (0%)
Economic Daily News	2 (5%)
<b>Local</b>	
Keng-Shan Daily News	10 (25%)
Eastern Daily News	1 (2.5%)
40 (100%)	

As Table 2 indicates, Economic Daily News expressed their concerns, with only two editorials focusing on the central government's disaster management and fiscal burdens, whereas Commercial Times did not have any editorial about the Su-Hua issue. Keng-Shan Daily News, as the largest local newspaper, viewed the "Improved Road of Su-Hua Dangerous Area", with ten editorials, as the second best policy alternative by emphasizing 'a safe road to go back home' and urged politicians in the Capital City of Taipei not to inject their values into rational analysis of the final EIA decision. Two major topics for island-wide newspapers' twenty-seven editorials concerned are the complex relationship of the bargaining and compromise process, and a number of civilians and environment protection groups making efforts to change the course of policy process.

Although reflection and discussions of scrutinizing two major camps shape the policymaking process positively and negatively, the media are embedded into complex political systems.

While local newspapers viewed transportation construction as an engine for the sluggish economic growth and local development and employment, island-wide newspapers focused on environment concerns and legitimacy of the environment impact assessment process. These editorials also identified stakeholder agencies and politicians, including the MOTC, EPA, Mainland Affairs Council, Hualien County Government, President Ma, (the former) Premier Yu, MOTC Minister Mao, Hualien County Magistrate Fu, and some other non-profit organization leaders.

The “Substitutive Road” policy alternative (2008-2010) proposed by Premier Liu in July 2008 opened up the possibility of EIA passage. The policy of building a highway along Taiwan’s east coast has been pushed to the national-level public agenda. The alternative of “Improved Road” policy alternative (2010-2017) proposed by the MOTC Minister Mao successfully earned the support of public opinion. Considering the national mood in the first couple of weeks after the tragic event, the MOTC tried to reduce the complexity of transportation technology and environmental protection to a manageable dimension of owning a right to go back home safe. Three weeks after the focusing event, the EIA finally had been passed.

## **5. Linking Competing Advocacy Coalitions and Policy Actors in the Subsystem**

The Su-Hua policy subsystem in the past decades can be sorted into the Development Coalition and the Protectionist Coalition. While both coalitions is composed of academics, mass media, and local communities, the differences between coalition members lie in local politicians and conflicts of the MOTC and the EPA. Belief structures of two advocacy coalitions are presented in Table 3.

Due to increased uncertainty about the dynamics and interdependencies, while decisions are taken in a world where nobody is in charge (Bryson and Crosby, 1992; Kickert et al., 1997), the focusing event in October 2010 had opened the policy window. From the budget scale perspective, the Development Coalition regards \$3.2 billion USD as a public budget from the central government, whereas the Protectionist Coalition proposes five local infra-structures as other policy options, such as East Taiwan Fast Network, Natural Bight Recovery and Hualien Development Fund, Emergency Helicopter Search-and-Rescue Squadron, Greater-Hualien Trolley System, and Rift Valley Round-Township Mini-Train Network. Based on the EIA Act, the procedure and the ‘Policy EIA’ stand on the way as an indispensable factor shaping the course of this policy. The MOTC attempts to mediate between the two advocacy coalitions, by vigorously consolidating exogenous and endogenous public opinion (Shanahan, et al., 2011: 550-551) of academics and interest groups in parliament’s public hearings.



**Table 3: Advocacy Coalition Belief Structures for Su-Hua Highway Policy**

	<b>Development Coalition</b>	<b>Protectionist Coalition</b>
<b>Coalition Members</b>	Ruling Party; President/ Opposition Party; EPA; EP Groups.	Central and Local Gov. Officials.
<b>(Others)</b>	Academics; Mass Media; Local Communities.	
<b>Nature of Man</b>	Man has dominance over nature. Man is part of nature, not superior to it.	
<b>Value Priority</b>	Economic growth and material living standards.	Ecological values.
<b>Problem Definition</b>	'A Safe Road Back Home'.	Destroyed wilderness.
<b>Government Role</b>	EPA Passage and Finance Support	EPA 'De-politicization'
<b>Policy-making</b>	Expert decision-making.	Participation of citizen and EP groups.
<b>Risk Perception</b>	Engineering technology may contain risks.	Risks and uncertainty co-exist.
<b>Attitude toward Experts/Academics</b>	Technical Bureaucrats	Protectionist Perspective

One of non-profit organizations' strategies of the Protectionist Coalition was heightening the level to the central government level. As an alliance of social movement organizations when it was an opposition party since the late 1980s, the DPP faced great pressures from alliances as a ruling party (2000-2008). The DPP leaders' non-decision or a formal denial about the policy can be regarded as a pursuit of political support from traditional supporters, and yet, a decision-making that is detrimental to earn support from the middle class favoring economic development and transportation infrastructure. While the Development Coalition emphasizes the ecological engineering technology, the Protectionist Coalition suggests a more participative and stricter EIA legal procedure. Members of the Protectionist Coalition utilize the internet and websites by monitoring decision-making process and policy measures, and updating information disclosure of EIA Committee hosted by the EPA. When Typhoon Maggie struck Taiwan's east coast in October 2010, with more than twenty deaths on the most dangerous section of the Su-Hua Provincial Road, serious damages by rain-fall caused debris sliding (Chu et al., 2013: 97-98).

Active participants of the Development Coalition ask for help from lawmakers in Parliament and the Hualien County Government and County Council. By organizing local petitions and several demonstrations in the capital city of Taipei, led by local politicians, visibility and reputation aid the EIA passage. When the MOTC Minister Mao, as a policy broker, responds to coalition members' strategies involving the use of guidance instruments (changes in budgeting scale, transportation technology and engineering information), as emphasized by three government official interviewees, he hardly changes the perceived seriousness of the public about policy specifics.

However, the MOTC's responses certainly altered the national mood and the policy priorities. Evidences from in-depth interviewing confirm that the forces transforming governance are 'the diffusion of administrative action...and the proliferation of political influences outside government's circles' (Kettl, 2002: 159; Lu and Hsu, 2013: 84). In Table 4, the author presents the belief structure of major actors and possible policy brokers in the past decades, with an additional explanation of 'Other Considerations'.

**Table 4: Beliefs of Major Policy Actors**

<u>Deep Core</u>	<u>Policy Belief</u>	<u>Second Aspects</u>	<u>Other Considerations</u>
<b>President Lee (1988-2000)</b>	<u>Economic Growth</u>	Building Highway; Industry Development	
<b>President Chen (2000-2008)</b>		Building Highway	Politics
Premier Yu	<u>Ecological Protection</u>	Against Building Highway	Politics
Premier Hsieh	<u>Ecological Protection</u>	21 <sup>st</sup> Century East Taiwan Pilot Plan	<b>3 billion USD for other Options</b>
Premier Su	Building Highway	<b><u>East Taiwan Sustainable Development Plan</u></b>	
County Magistrate Hsieh	Tourism and Leisure Farming	<b><u>Central Gov. Budgeting Support</u></b>	
<b>President Ma (2008-2016)</b>	Building Highway	<b><u>More Fast Train Coaches</u></b>	Politics
Premier Liu	<u>Transportation</u>	Substitutive Alternatives	<b><u>Highway/Budget Scale</u></b>
Premier Wu	Building Highway	MOTC Decision-making	
MOTC Minister Mao	Proposing Policy Alternatives	<b><u>Technology Matters</u></b>	
County Magistrate Fu	<u>Economic Development</u>	Building Highway	<b><u>Central Gov. Budgeting Support</u></b>

Although policy-oriented learning that alters secondary aspects of coalition members' belief systems is one of the basic arguments of the ACF, changes in the policy core aspects of governmental programs require perturbations in non-cognitive factors external to the subsystem (Sabatier and Jenkins-Smith, 1999: 123). After the Executive Yuan already approved the budget estimates, about \$3 billion US Dollars and issued the construction permit in December 2002, Premier Yu Shyi-Kun granted a stay of execution one year later. The EIA Committee of the EPA requested the MOTC to submit the 'Policy Environment Impact Assessment' in November 2004. Criticized by several interviewees, included four government officials, two scholars and two journalists, the 'Policy EIA' is basically a "political assessment".

The MOTC was encouraged to re-submit the 'Difference Analysis of Current Situations and Strategy Assessment Report'. In December 2005, Premier Hsieh Chang-Ting presented a policy of "the Pilot Plan of East Taiwan in the 21<sup>st</sup> Century" which was regarded as the alternative policy of the highway plan, with a budget estimate of \$2 billion US Dollars. When the MOTC completed the 'Policy EIA' in August 2006 and the EIA Committee of the EPA passed it in December 2006, Premier Hsu Tseng-Chang declared the policy implementation after January 2007. After examining the report of environment impact difference analysis, the EPA made "a conditional acceptance" as a final decision one year later in March 2008, whereas the Cabinet-level CEPD asserted that the policy should be finalized by the new President in April 2008. In the end, since the DPP lost the Presidential Campaign, the EPA dismissed the proposal back to the MOTC. After the second regime turnover in May 2008, Premier Lui Chao-Shiuan announced the "Substitutive Road" proposal, which was a formal policy option for the final solution in 2010 – the "Improved Road" proposal.

While to build or not to build remained controversial between different Premiers and governmental authorities, i.e., the MOTC, EPA and CEPD, and the policy objective was not clear, a policy alternative for achieving the objective has been not possible. To understand how real-world politics functions as a contextual element of institutional mechanics, this study suggests that considerations need to be given to the nature and extent of the interaction, beyond structured and formal, in determining policy outputs and blame management behavior in response to changes in public opinion and systemic governing coalitions. The CEPD attempted to keep the political conflict within reasonable bounds by finalizing the "Improved Road" proposal in December 2010. To gain political support and provide additional legal guarantees for environmental protection groups and local governments, the serious concerns of the MOTC Minister Mao Chi-Kuo was thus to find some reasonable compromises that will reduce intense conflicts. To achieve its policy goal, the MOTC moved in and out as being a brokering role. "Neutral" brokers (Sabatier and Jenkins-Smith, 1999: 155) or not, forces affecting policy change, as mentioned by interviewees, include: regime turnover and turnover in personnel; changes in socioeconomic conditions and/or national mood; and the way coalition members use expert-based scientific information to buttress and elaborate those beliefs.

Two interviewees emphasized Premier Hsieh's deep core belief and personal insistence. What the nonprofit organization leader and journalist emphasized is that Premier Hsieh was the only premier who presented a policy alternative, with \$3 billion USD for other local economic development options. To solve the long-term policy problem of 'overlapping societal cleavages' (Weible et al., 2011: 352), Premier Hsieh explained his win-win decisions in ways that allow him to win more political support.

Ever since the 2008 Presidential Campaign, nevertheless, there are several challenges for President Ma to counter the arguments that the government is responsible for destroyed natural landscape on east coast and the KMT is a business group dominated political party. The President, Premier and his cabinet members learned lessons from one of the focusing events in July 2008 when Premier Liu announced the decision of building the highway and thereafter political chaos.

## **6. Policy Brokers and Their Strategic Behavior**

Eleven out of twenty interviewees from different fields asserted the vital influence of mass media upon public opinion and national mood. At the times of serious life losses of the Chinese Tourist group in October 2010, the news coverage focused on the government's rescuing lives and damage control of the current dangerous Su-Hua Provincial Road. President Ma and Hualien County Magistrate Fu Kun-Chi, a former Member of Parliament, had profound influence upon the public perceptions of the focusing event and the importance of building a highway. President Ma made the final decision, whereas Magistrate Fu relied on elections to translate the political support of the public's desires into policy formation. For the latter, despite different political party-oriented mass media in Taiwan, Magistrate Fu is mastering of conceptualizing how news output is shaped.

According to their observation, major demonstrations in downtown Taipei always capture the public's attention and are favorites of the Taiwanese mass media. Fu, as a county magistrate, organized several protests to the central government agencies in Taipei city center, especially for the demonstration on the square in front of the Presidential Office in November 2010. The political gestures placed greater responsibility on the central government and the President in rejecting or delaying the construction plan. To attract a steady national audience in a highly competitive mass media marketplace and a politically polarized-oriented mass media environment, President Ma tried to avoid an overt simplified political bias that would damage his credibility and popularity in his first term 2008-2012 presidency.

When the problems that society is encountering change, the available resources change (Hogwood and Gunn, 1984: 250-253); and more important, in this ACF application, demands for certain types of policy may also change. While the debate has experienced five presidential campaigns, six legislative elections, and five county magistrate elections, in terms of party identification, the policy debate, in a way, has been a bi-partisan policy. Two major political parties, KMT and DPP can be identified by stereotype affiliation, pro-economic development and pro-social movement. However, to DPP local politicians in Hualien, the lack of a central platform for local politicians in Hualien means that they need to reiterate their positions on this policy issue at every election. When their positions in this policy issue link to election campaigns, DPP local politicians support the policy.

More important, in the past two decades, the DPP's presidential candidates and President Chen (2000-2008) did not oppose the highway construction plan. From the perspective of belief system structure, the factor of political party does matter. As a high-level official since the 1990s, before and after the 2000- 2008 regime turnover, Minister Mao Chi-Kuo is the most important policy broker in the policy subsystem. With expertise in the field of transportation technology and business administration and a MIT PhD degree in the USA, Minister Mao presents new transportation technology with persuasive political communications. The finalized "Improved Road" policy alternative is a 38.4-kilometer Provincial Road, including eight tunnels (23.8 km), three bridges (8.5 km), and roads (6.1 km). For the MOTC, the proposal had been no longer a highway and is basically a provincial road. As Taiwan's first ecological highway-quality design, the MOTC adopts ecological engineering technology, with slogans of *SAFE*, for example, *Smart, Advance, Friendly, Ecological* and etc. The MOTC Minister Mao made painstaking efforts to the 'political context' (as emphasized by two scholars, one retired MOTC Minister, and one nonprofit organizations leader).

To minimize opposition to the decision, according to three nonprofit organization interviewees, Minister Mao communicated with them and local community leaders against the policy by using the 'language' they use. More important, he made compromises by proposing alternatives and acceptable arrangements to ease adverse interests and reduce intense conflicts. As the news media "affect a much broader population than just those most directly involved with shaping the institutional agenda" (Birkland, 1997: 30-31), Minister Mao, held significantly more power and grasped the attention of mass media and the public by presenting policy narratives and arguments that are congruent with the Development Coalition's preferred policy outcome.

## 7. Conclusions

When Weible et al. (2011) reviewed the ACF in the past quarter century, they did not locate 'policy brokers' in the ACF flow diagram (Figure 1. in Weible et al., 2011: 352). The significance of policy brokers' strategic behaviors is an understudied facet of the ACF. While Lester and Wilds (1990: 316) hypothesize that "the greater the amount of conflict surrounding the issue under analysis, the greater the likelihood of utilization", this empirical analysis provides a point of contention with the ACF that the role of decision-makers and policy brokers in resisting or proposing policy alternatives and the influence of mass media upon the consensus-based institutional setting of the EIA Committee. The relationships between government agenda and public policy commitments made by presidents and premiers indicate that "the media and public agenda are exogenous to the policymaking process" (Jones and Baumgartner, 2005: 211).

By highlighting and framing the issue, the MOTC Minister Mao and Hualien Magistrate Fu, as major policy brokers, influence the weighting of information streams in the policymaking process. With sets of mediating options and persuasive policy arguments, they helped competing coalitions or forced coalition actors to reach negotiated agreements or 'an unsatisfactory, yet acceptable' alternative.

Although Sabatier and Jenkins-Smith (1988: 126) disavow institutional norms being a determining factor that affects individual behavior, evidences collected suggest that individual perception of the MOTC Minister present more moderate non-highway and scientific-friendly policy options. One of the turning points is the eco-engineering technology of transportation infrastructures, as the level of political conflicts escalated in the policy subsystem. With diverse policy core preferences, multiple actors are affected by the external tragic focusing event happened in October 2010. Changes in public opinion partly explain the final result of the EIA passage one month after the event. Focusing events did not change the normative core beliefs of active participants, whereas their policy core beliefs might be affected by political use of expert-based scientific information. Although the institutional rules are clear, as indicated in the EIA Act, that how policy brokers influence the formation of the final policy alternative is unanswered. Scientists and academics as well as science and technology in policy formation and decision-making process did not help to enhance participants' perception of science credibility. Scientific dialogues did not really exist between competing advocacy coalitions and among EIA Committee members.

This analysis indicates that policy actors' political beliefs and considerations, rather than scientific knowledge, generate science controversy. Given available in-depth interviewing data, the EIA Committee members were influenced by their responses to external events and public opinions. Especially for government representatives in the EIA Committee, they were highly affected by credit-claiming of political entrepreneurs who hold elected leadership positions in government that led to the pivotal decision-making point for policy change. In addition to the distribution of public budgeting decisions made by presidents and/or premiers, during the EIA legal procedure in the past decades, the media has shifted in its role from government tool and being heavily censored to watchdog for the Taiwanese people (Chai, 2000: 133). For future researches, in democratic consolidated countries or authoritative political systems, various representatives of the EIA Committee members where experts and academics did not have their chances to exert influence over government representatives.

Despite of information disclosure requested by the Parliament, discussions in the EIA legal procedure are hard to change committee members' individual perceptions of scientific knowledge on one hand, personal characteristics of committee representatives of government agencies cannot be over-expected on the other hand.

Beyond the institutional rules, when active publics and environmental protection groups blame too much bureaucratic discretions of the decision-making process and policy alternatives, the fragility of coordination between individuals and stakeholder organizations is hard to avoid. While politicians are motivated to adopt and enact policies supported by the public, going public rests on the assumption of Iyengar and McGrady (2007: 283-289) that public approval is necessary (for presidents and premiers) to govern. The fact that presidents and premiers present policies favored by majority public opinion does tell us substantial rationale underlying policy decisions. This leaves competing coalitions and members with maneuvering spaces of "re-framing aspects of perceived reality and making more salient in a communicating text" (Entman, 1993: 52; 2003).

Because of the way that newspaper editorials as well as journalists and editors respond to each other, the media plays the role of a conduit in the policy debate more than a contributor as an advocacy coalition. As a conduit to influence policy outcome, the media's propensity to feature the focusing event during the Oct.-Nov. 2010 period demonstrates the power of mass media, by affecting national mood at that time, upon the EIA Committee decision-making process is far more than minimal impacts. The media reports did have an effect upon the EIA passage. As a contributor, although Sabatier and Jenkins-Smith (1999: 183) identify the role of media as a member of competing advocacy coalitions, according to content analysis and in-depth interviewing of this research, only local newspapers expressed their serious concerns and which in turn dampen conflicts between competing advocacy coalitions at the local-level politics.

Given available data in this ACF application, the author provides a foundation for future studies of policy brokers' policy core beliefs and their influence on policy alternatives. The significance of the EIA Committee members and decision-making made in the legal procedure are also identified in this research. The greater the social and economic interdependencies in the policy subsystem, the greater the policy brokers' mediating roles are between advocacy coalitions. A collaborative subsystem is threatened by deep core beliefs of presidents and premiers as well as political conflicts and regime turnovers. Studying strategic behaviors of policy brokers and their interaction in different types of policy subsystem still requires more longitudinal datasets and methodological triangulation with attention toward more systematic observations and careful theoretical explanations.

## References

- Alger, Dean E., 1996, *The Media and Politics*, 2<sup>nd</sup> edition (London: Wadsworth Publishing Company).
- Allison, G.T., 1971, *Essence of Decision* (Boston, MA: Little, Brown).
- Baumgartner, Frank R., and Jones, Bryan D., 1993. *Agendas and Instability in American Politics* (Chicago, IL: The University of Chicago Press).
- Baumgartner, Frank R., and Jones, Bryon D. (eds.), 2002, *Policy Dynamics* (Chicago, IL: The University of Chicago Press).
- Bennett, W.L., 2001, *News: The Politics of Illusions*, 4<sup>th</sup> edition (New York: Addison-Wesley Longman).
- Birkland, Thomas A., 1997, *After Disaster: Agenda Setting, Public Policy, and Focusing Event* (Washington, D.C.: Georgetown University Press).
- Bryson, J.M., and Crosby, B.C., 1992, *Leadership for the Common Good: Tackling Public Problems in a Shared-Power World* (San Francisco, CA: Jossey-Bass).
- Capano, Giliberto, and Howlett, Michael, 2009, Introduction: The determinants of policy change: Advancing the debate, *Journal of Comparative Policy Analysis*, 11(1), pp. 1-5.
- Chai, Winberg, 2000. The transformation of the mass media in Taiwan since 1950: Introduction", *Asian Affairs*, 27(3), pp. 133-140.
- Chu, Yun-Han, 1999. The challenges of democratic consolidation, in: Steve Tsang and Hung-Mao Tien (Eds.), *Democratization in Taiwan: Implications for China*, (Hong Kong: Hong Kong University Press), pp. 148-167.
- Chu, Huang-Kuei, Lo, Cia-Ming, and Chang, Yu-Lin, 2013, Numerical analysis of slope stability at the 115.9k point of the Su-Hua Highway", *Journal of Chinese Soil and Water Conservation*, 44(2), pp. 97-104.
- Collingridge, David, and Reeve, Colin, 1986, *Science Speaks to Power: The Role of Experts in Policymaking* (London: Frances Printers).
- Entman, R.M., 1993, Framing: Toward clarification of a fractured paradigm, *Journal of Communication*, 43(4), pp. 51-58.
- Government Information Office (GIO), 1998, *The Republic of China 1998 Yearbook* (Taipei: GIO).
- Hogwood, Brian W., and Gunn, Lewis A., 1984, *Policy Analysis for the real World* (Oxford, UK: Oxford University Press).
- Howlett, M., and Ramesh, M., 2003, *Studying Public Policy: Policy Cycles and Policy Subsystems* (Toronto, Canada: Oxford University).
- Ingold, Karin, and Varone, Frederic, 2011, Treating policy brokers seriously: evidence from the climate change, *Journal of Public Administration Research and Theory*, 22, pp. 319-346.
- Iyengar, Shanto, and McGrady, Jennifer A., 2007, *Media Politics: A Citizen's Guide* (New York, NY: W. W. Norton & Company, Inc).
- Jenkins-Smith, Hank C., and Sabatier, Paul A., 1993, The dynamics of policy-oriented learning, in: Paul A. Sabatier and Hank C. Jenkins-Smith (Eds.), *Policy Change and Learning: An Advocacy Coalition Approach* (Boulder, CO: Westview Press), pp. 41-58.
- John, Peter, 1998, *Analysing Public Policy* (London: Continuum).
- Kao, Yuang-Kuang, 2014, Civic engagement and policy-making in Taiwan: The case of the Great Bitan revitalization project, in: Bennis Wai Yip So and Yuang-Kuang Kao (Eds.), *The Changing Policy-Making Process in Greater China: Case Research from Mainland China, Taiwan and Hong Kong* (Oxon, UK: Routledge), pp. 17-36.



- Kickert, W.J.M., Klijn, E.H. and Koppenjan, J.F.M., 1997, Managing networks in the public sector: Findings and reflections", in W.J.M. Kickert, E.H. Klijn, and J.F.M. Koppenjan (Eds.), *Managing Complex Networks: Strategies for the Public Sector* (London: Sage Publications), pp. 166-191.
- Kubler, Daniel, 1999, Ideas as catalytic elements for policy change: Advocacy coalitions and drug policy in Switzerland, in: Dietmar Braun and Andreas Busch (Eds.), *The Power of Ideas: Policy Ideas and Policy Change* (London: Routledge), pp. 116-135.
- Lee, Y.L., 2010, Aerial surveys of geological disasters along Su-Hua Highway, *Ti-Chih*, 29(4), pp. 21-25.
- Lester, James P., and Wilds, Leah J., 1990, The utilization of public policy analysis, *Evaluation and Program Planning*, 13, pp. 313-319.
- Li, Tzung-Shiun, 2009, Taiwan's government and administration, in: Markus Porsche-Ludwig and Chin-Peng Chu (Eds.), *The Political System of Taiwan* (Verlagsgesellschaft, Baden-Baden: Nomos), pp. 117-129.
- Lu, Bing-Yan, 2009, Agenda setting and alternative choices of Su-Hua Highway decision-making: A multiple streams perspective", *Soochow Journal of Political Science*, 27(4), pp. 171-240.
- 2014, The media power of manufacturing policies: The policymaking process of Su-Hua Highway in Taiwan," in: Bennis Wai Yip So and Yuang-Kuang Kao (Eds.), *The Changing Policy-Making Process in Greater China: Case Research from Mainland China, Taiwan and Hong Kong* (Oxon, UK: Routledge), pp. 137-154.
- Lu, Bing-Yan, and Chang, Yung-Ming, 2006, A study on the framework of policy advocacy coalition: The case of Su-Hua Highway", *Political Science Review*, 30, pp. 131-164.
- Lu, Wilbur Bing-Yan, and Hsu, Yi-Chung, 2013, Achieving values through governance as pattern of power-sharing: Challenges of Taroko's public leadership", *Open Public Administration Review*, 25, pp. 83-118.
- May, Judith V., and Wildavsky, Aaron B. (Eds.), 1978, *The Policy Cycle* (Beverly Hill, CA: Sage Publications).
- Mead, Lawrence M., 2005, Policy research: The field dimension, *Policy Studies Journal*, 33(4), pp. 535-557.
- Montpetit, Eric, 2011, Scientific credibility, disagreement, and error costs in 17 biotechnology policy subsystems, *Policy Studies Journal*, 39(3), pp. 513-533.
- Myers, R.H., 1996, A new Chinese civilization: The evolution of the Republic of China on Taiwan", *The China Quarterly*, 148, pp. 1072-1090.
- Nohrstedt, Daniel, 2007, *Crisis and Policy Reformcraft: Advocacy Coalitions and Crisis-Induced Change in Swedish Nuclear Energy Policy* (Uppsala, Sweden: Department of Government of the Uppsala University).
- Kingdon, John Wells, 1984, *Agendas, Alternatives, and Public Policies* (Boston: Little, Brown).
- 1995, *Agendas, Alternatives, and Public Policies*, 2<sup>nd</sup> edition (New York: Harper Collins).
- Parsons, Wayne, 1995, *Public Policy: An Introduction to the Theory and Practice of Policy Analysis* (Cheltenham, UK: Edward Elgar).
- Patton, Michael Quinn, 1990, *Qualitative Evaluation and Research Methods* (Newbury Park, CA: Sage Publications).
- Roberts, Nancy, and King, Paula, 1991, Policy entrepreneurs: Their activity structure and function in the policy process, *Journal of Public Administration Research and Theory*, 1(2), pp. 147-175.

- Sabatier, Paul A., 1987, Policy-oriented learning and policy change, *Knowledge*, 8, pp. 649-692.
- 1988, An advocacy coalition framework of policy change and the role of policy-oriented learning therein," *Policy Sciences*, 21, pp. 129-168.
- 1993, Policy change over a decade or more, in: P.A. Sabatier and H.C. Jenkins-Smith (Eds.), *Policy Change and Learning: An Advocacy Coalition Approach* (Boulder, CO: Westview Press), pp. 13-39.
- 1998, The advocacy coalition framework: Revisions and relevance for Europe, *Journal of European Public Policy*, 5, pp. 98-130.
- Sabatier, P.A., and Jenkins-Smith, H.C. (Eds.), 1993, *Policy change and learning: An advocacy coalition approach* (Boulder, CO: Westview Press).
- 1993, The advocacy coalition framework: Assessment, revisions, and implications for scholars and practitioners, in: P.A. Sabatier and H.C. Jenkins-Smith (Eds.), *Policy Change and Learning: An Advocacy Coalition Approach* (Boulder, CO: Westview Press), pp. 211-235..
- 1999, The advocacy coalition framework: An assessment, in: P.A. Sabatier (Ed.), *Theories of the Policy Process* (Boulder, CO: Westview Press), pp. 117-166.
- Sabatier, P.A., and Weible, Christopher M., 2014. "The Advocacy Coalition Framework: Foundations, Evolution, and Ongoing Research", in Sabatier, P.A., and Weible, Christopher M. (Ed.), *Theories of the Policy Process*, 3<sup>rd</sup> edition, pp. 183-223, Boulder, CO: Westview Press.
- Schneider, M. and Teske, P., 1992, Toward a theory of the political entrepreneur: Evidence from local government", *American Political Science Review*, 86(3), pp. 737-747.
- Shanahan, Elizabeth A., McBeth, Mark K., Hathaway, Paul L., and Ruth J. Arnell, 2008, Conduit or contributor? The role of media in policy change theory, *Policy Studies Journal*, 41(2), pp. 115-138.
- Shanahan, Elizabeth A., Jones, Michael D., and Mark K. McBeth, 2011, Policy narratives and policy processes, *Policy Studies Journal*, 39(3), pp. 535-561.
- Smith, Conrad, 1992, *Media and Apocalypse: News Coverage of the Yellowstone Forest Fires, Exxon Valdez Oil Spill, and Loma Prieta Earthquake* (Westport, CT: Greenwood Press).
- Stewart, Jenny, 2009, *Public Policy Values* (New York, NY: Palgrave Macmillan).
- Stromer-Galley, Jennifer and Jamieson, Kathleen Hall, 2001, The transformation of political leadership, in: Barrie Axford and Richard Huggins (Eds.), *New Media and Politics* (Thousand Oaks, CA: Sage Publications), pp. 172-190.
- Su, Cherng-Tyan, 1999, Tourism development in Taiwan, in: Kee Pookong and Brian King (Eds.), *Asia-Pacific Tourism: Regional Co-Operation, Planning and Development* (Elsternwick Victoria, Australia: Hospitality Press), pp. 125-145.
- Teisman, Geert R., and Buuren, Arwin van 2003, Models for research into decision-making processes: On phases, streams, rounds and tracks of decision-making, in: Eduardo Araral Jr., Scott Fritzen, Michael Howlett, M. Ramesh, and Xun Wu (Eds.), *Handbook of Public Policy* (London: Routledge), pp. 299-319.
- Tsai, Hong-Chin, 2007, Agricultural globalization and rural tourism development in Taiwan," *Asian Journal of Management and Humanity Sciences*, 2(1-4), pp. 1-13.
- The China Post, October 9, 2007, Typhoons revive call for Su-Hua Highway, Taipei: *The China Post*.
- Wang, Chi-Nien, 2009, The transformation of the political culture in Taiwan, in: Markus Porsche-Ludwig and Chin-Peng Chu (Eds.), *The Political System of Taiwan* (Verlagsgesellschaft, Baden-Baden: Nomos), pp. 55-76.

- Weible, Christopher M., 2008, Expert-based information and policy subsystems: A review and synthesis, *Policy Studies Journal*, 36(4), pp. 615-635.
- Weible, Christopher M., and Sabatier, Paul A., 2005, Comparing policy networks: Marine protected areas in California", *Policy Studies Journal*, 33(2), pp. 181-201.
- Weible, Christopher, Sabatier, Paul A., Jenkins-Smith, Hank C., Nohrstedt, Daniel, Henry, Adam Douglas, and deLeon, Peter 2011, A quarter century of the advocacy coalition framework: An introduction to the special issue", *Policy Studies Journal*, 39(3), pp. 349-360.
- Worsham, J., 1997, *Other People's Money: Policy Change, Congress, and Bank Regulation* (Boulder, CO: Westview Press).
- Zafonte, M., and Sabatier, P., 1998, Shared beliefs and imposed interdependences as determinants of ally networks in overlapping subsystems, *Journal of Theoretical Politics*, 10(4), pp. 473-505.
- Zahariadis, Nikolaos, 2014. "Ambiguity and Multiple Streams", in Sabatier, Paul A., and Christopher M. Weibel (eds.), *Theories of Policy Process*, pp. 25-58, Boulder, CO: Westview Press.
- Zittoun, Philippe, 2009, Understanding policy change as a discursive problem, *Journal of Comparative Policy Analysis*, 11(1), pp. 65-82.