The Landscape of Gap Built Upon Environmental Subjects: A Case Study of Stuttgart 21, Germany

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Author: Chih-Kan Hsieh

Supervisor: Richard Langlais

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Abstract

This research explores the project Stuttgart 21, which is going to reconstruct the main station of Stuttgart city and build new tunnels to connect the node with the high-speed line. This project has been triggering controversies over issues such as cost, risk, ecology, and public participation, and thus raised intense conflicts between supporters and opponents. Thus, this research aims to explore how both sides manage to claim their own legitimacy that can potentially stop or progress Stuttgart 21, and aims to outline how those actions of legitimacy claiming shape the landscape of gap. With materials from online news / forum / articles and the interviews conducted in field work, this research found that both sides – as environmental subjects – had their own interpretations of what proper actions should be, which were shaped and controlled under specific governmentality. In other words, governmentality served as the basis of legitimacy claiming. Without constructive discussions among the affected, all the actions of both sides seemed not to research the settlement but made the landscape of gap formidable. Moreover, the landscape of gap also exists within the cons side, which means the nature of decision making is complicated beyond the dichotomy based on pros and cons. With the findings and discussions, the research hopes that Stuttgart 21 can serve as the exemplification that will contribute to reaching legitimate and accountable decision making in the future.
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List of Acronyms and Abbreviations

BUND  Bund für Umwelt und Naturschutz Deutschland (Federation of Friends of the Earth Germany)
DB  Deutsche Bahn (German national railway company)
SPD  Sozialdemokratische Partei Deutschlands (Social Democrats)
S21  Stuttgart 21

List of German Vocabularies

Beteiligungsrecht  “participation rights” in English
Eisenbahn-Bundesamt  “Federal Railway Authority” in English
Hbf/Hauptbahnhof  “main station” in English
Juchtenkäfer  “hermit beetle” in English
Mahnwache  “vigil” in English
Parkschützer  “park protector” in English
Schlichtung  “arbitration” in English
Schlossgarten  “castle garden” in English
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Abstract

This research explores the project Stuttgart 21, which is going to reconstruct the main station of Stuttgart city and build new tunnels to connect the node with the high-speed line. This project has been triggering controversies over issues such as cost, risk, ecology, and public participation, and thus raised intense conflicts between supporters and opponents. Thus, this research aims to explore how both sides manage to claim their own legitimacy that can potentially stop or progress Stuttgart 21, and aims to outline how those actions of legitimacy claiming shape the landscape of gap. With materials from online news / forum / articles and the interviews conducted in field work, this research found that both sides – as environmental subjects – had their own interpretations of what proper actions should be, which were shaped and controlled under specific governmentality. In other words, governmentality served as the basis of legitimacy claiming. Without constructive discussions among the affected, all the actions of both sides seemed not to research the settlement but made the landscape of gap formidable. Moreover, the landscape of gap also exists within the
cons side, which means the nature of decision making is complicated beyond the dichotomy based on pros and cons. With the findings and discussions, the research hopes that Stuttgart 21 can serve as the exemplification that will contribute to reaching legitimate and accountable decision making in the future.

**Key words:** Stuttgart 21, environmental subject, governmentality, legitimacy, landscape of gap, sustainable development, risk society, participatory mechanism

1. **Introduction**

Public participation, as Soneryd (2004, 60) points out, indicates to the processes that “facilitate communication, engagement or even citizen power.” In addition, involving the public in the process of decision making seems to be seen as an effective approach of dealing with issues in regards to environmental issues (van den Hove 2006, 10). All these statements can echo the so called deliberative turn in environmental governance, which means an “increased attention in environmental politics to procedural qualities such as participation, dialogue, transparency and accountability” (Bäckstrand et al. 2010, 3). Deliberative turn also signifies that the focal point of public participation is not the “participation” but the quality of process where different participants can deliberate together on issues that affect themselves (Isaksson et al. 2009, 296). With deliberation, the legitimacy of decision making can be reached, diverse perspectives from different actors / stakeholders / communities / individual can be heard, diverse information and knowledge will be transparent and exchanged, and learning from each other and thus refining his or her original points can be potentially achieved (Gutmann and Thompson 2004, 10-12).
However, involving diverse actors in decision making process could give rise to controversies instead of consensus among participants. For instance, Boholm’s (2008) study points out how government circumvented residents’ questions by offering irrelevant propaganda. Topal’s (2009) study also sheds clue on how government used public hearing as the way of gaining legitimacy even though the others still seriously harbored doubts. These cases both indicate to Foucault’s concept of governmentality, which refers to the process of shaping individual’s behavior by interplaying powers and agencies (Backstrand and Lovbrand 2006, 54). However, reaching legitimacy by enlarging the spectrum of participants can be challenged. For example, Khan (2004) outlines how a too-late participation led to the illegitimacy of renewable energy plant siting. Rantala’s (2011) study on Finnish forest sector also portraits how people’s interpretations of legitimacy regarding policy making were shaped by diverse factors. Under this situation, government has to either take actions to anchor legitimacy or (re)act according to other actors’ actions. Namely, not only the participants with less power (such as citizens) but also government with more power are shaped by the context / environment they located. This situation reflects that every actor involving in one issue could be seen as environmental subject, which points to the governed individual who has “come to think and act in new ways in relation to the environmental domain being governed” (Agrawal 2005a, 23).

Therefore, my research is going to explore the dynamics of decision making process and the landscape of gap shaped by environmental subjects’ actions of legitimacy claiming. This research portraits the transportation node project Stuttgart 21, which has been crafting a grand canyon between supporters and opponents due to the controversies over environmental (e.g. groundwater and old trees might be at stake and geology provokes fear among citizens),
cultural (e.g. present train station as a heritage has to be reconstructed), and economical (e.g. more jobs and lands for development will be created or not) sustainability. The main research questions are followings:

(1) What actions did both sides employ in order to claim their legitimacy?

(2) How is the “landscape of gap” being shaped and outlined by their legitimacy claiming?

The legitimacy here refers to supporters’ and opponents’ claiming of why Stuttgart 21 should / should not be progressed respectively. Since legitimacy is constructed, shaped, defined, used, and competed by multi actors who involved in the context of decision making (Connelly et al. 2006, 267), this study will not dive into the theoretical exploration of legitimacy. Similar principle is applied to what I mean by participation. In this study, participatory mechanism covers broad spectrum from representative democracy to demonstration.

This paper will be organized with a number of sections. The first section is a brief history of Stuttgart 21 and the conflicts between supporters and opponents. The second section is literature reviewing. I will begin with governmentality and environmental subject, both of which serve as the basis of following discussions about risk society followed by changing nature of decision making process. All the discussions will subsequently shed light on what landscape of gap means in this research. The third and fourth ones are method / data and the findings respectively; the former depicts how the latter is being organized. The fifth part is discussion, which opens dialogues with theory and concept used in the second section and thus addresses and answers the research questions. The final section is conclusion, which
summarizes the whole research and point to both what the limitations are in this study and suggestions for further researches.

This research aims to make contributions to the constructiveness of decision making process and to the understanding of dynamics among diverse actors involving in environmental issues. In addition, by shedding light on how the pros and cons competed for the legitimacy over sustainably controversy Stuttgart 21, this research can also potentially enrich the concept of human ecology, which refers to giving more attentions to the interaction, interrelation, and interdependence between human beings and surrounding environment (Lawrence 2003, 32-34). Due to double language barriers – German and English – this research may not only trigger perplexes in terms of vocabulary utilizing nut also present only one façade of the landscape. Therefore, this study can serve as the step stone for further research conducted by people who can overcome the obstacles I have faced.

2. A Brief Glimpse of the Case: Stuttgart 21

Stuttgart, the capital of state Baden-Württemberg located in Southwestern Germany, combined with its surrounding metropolitan area, is home to many automobile industries such as Mercedes and Porsche, and thus it is also noted for the innovation and powerful economy¹. This character could be reflected by the economic structure of this region, which is concentration on “vehicle construction, mechanical engineering, and electrical engineering

and electronics branches of industry” (Strambach 2002, 222). In addition, Stuttgart area is not only the cluster of high technology but also one of the strongest and most prosperous commercial metropolitan areas in Germany². Furthermore, the swath stretching between itself and Ulm is seen as one of the vital corridors for Europe³. However, present railway connecting Stuttgart and Ulm has been run since 1850 and thus unable to fulfill the requirement for modern transportation⁴. With all these premises, the Stuttgart-Ulm rail project, which contains two subproject – Stuttgart 21 and Wendlingen-Ulm new-build line⁵ – has emerged and been seen as vitally important to Germany’s modernization⁶. The latter aims to build a new high-speed line between Wendlingen (Neckar) to Ulm while the former – the case study of this research – is going to reconstruct main station of Stuttgart city and build new tunnels to connect the node with high-speed line⁷.

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³ “’Green Will have to give way’ on Stuttgart redevelopment,” Spiegel International, April 21, 2011, Thursday, [http://www.spiegel.de/international/germany/0,1518,758491,00.html](http://www.spiegel.de/international/germany/0,1518,758491,00.html) (accessed November 12).


Actually, around 100 years ago, the concept of through station had surfaced on stage. As the effect of technical issue at the time, this plan had perished\(^8\). Instead, there came the terminal station, which was presented by Paul Bonatz and Friedrich Eugen Scholer, in the competition in 1910\(^9\). Since 1928, the present station has stood in Stuttgart city\(^10\). With time’s progressing forwards, this once-discarded plan has resurged. On 18th April 1994, a joint presentation of the concept, which aimed to transform present node into an underground through station, was delivered by Deutsche Bahn (DB), Stuttgart city, and other levels of government\(^11\). In January 1995, there was a study confirming that the technical issue of Stuttgart 21 was feasible. However, this statement was coming under criticisms from Green Party\(^12\). Then, in November of the same year, the framework agreement was reached between DB, Federal Government, Federal State and Stuttgart city\(^13\). In November 1997, the competition of new station design was won by the architect Christoph Ingenhoven, whose design became the blueprint to be realized\(^14\). In the following years of 1998-1999, the project

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slowed down owing to financial problem and framework revising\textsuperscript{15}. Notwithstanding the obstacles, governments on different levels and DB were still devoting to keep the project alive\textsuperscript{16}. In February 2005, Eisenbahn-Bundesamt (Federal Railway Authority) granted the permission of reconstruction of train station\textsuperscript{17}, followed by the policy resolution of Baden-Württemberg government’s approving Stuttgart 21 in October, 2006\textsuperscript{18}. Later, on 19th July 2007, Memorandum of Understanding was achieved between Federal Government, Baden-Württemberg government, Stuttgart City and DB\textsuperscript{19}. Subsequently, on 2\textsuperscript{nd} April 2009, the financing agreement was conducted between Federal Government, Baden-Württemberg government, and DB\textsuperscript{20}.

According to proponents and urban planners, in addition to strengthening the capacity of transportation, many other benefits are going to emerge. On transportation side, time for traveling and transferring between cities will be shortened. On environmental parts, this


improving capacity will attract passengers to take train and thus reduce the emission of greenhouse gas from cars while the underground railway will bring about a quiet circumstance for local citizens. From economic aspect, Stuttgart-Ulm rail project can create jobs and opportunities, which will bring more taxes and potential growth in the future. From the angle of Stuttgart city, a new land within inner city will emerged due to the removal of tracks and therefore it will create the chances of new urban development whose underpinned principles will be environmentally friendly\textsuperscript{21}. Moreover, Stuttgart-Ulm rail project will serve as the antidote to the bottleneck of corridor that connects Paris, Strasbourg, Stuttgart, Vienna, and Bratislava and thus achieve “the Memorandum of Understanding signed by the Ministers of Transport of France, German, Austria and Slovakia on 9 June 2006.”\textsuperscript{22} In other words, Stuttgart-Ulm rail project is also vital to Europe.

The opponents of this project, however, have very different views of point. As some of the local people point out, this project is too expensive, not to mention that there are many different figures referring to actual cost\textsuperscript{23} which point to transparency issue\textsuperscript{24}. In addition, the refurbishment will also lead to the loss of trees\textsuperscript{25} in Schlossgarten (the park next to train


station) as well as historical/social meanings of this old train station. In other words, Stuttgart 21 will cause damages environmentally and culturally. On the other hand, the mechanisms for the public to take part in are also severely criticized as Stuttgart 21 is depicted as embodying the “failure of deliberative democracy”.

The mistrust and dissatisfaction among opponents were incarnated as series of demonstrations. On 30th September 2010, the protection was treated with pepper spray and water cannon by police, which caused 400 people injured and at least one man blind forever. This controversial action, dubbed “Black Thursday”, triggered huge anger and resistance among society and consequently led to several results. Firstly, then minister of Baden-Württemberg Stefan Mappus proposed the idea of Schlichtung (arbitration in English), which aimed to settle down the conflict between pros and cons with Heiner Geißler recommended as would-be competent arbitrator. Secondly, thanks to Schlichtung, the stress test based on computer calculation was required to show if Stuttgart 21 would really improve

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the capacity as it has always claimed. Thirdly, Black Thursday – with Fukushima also partially playing an important role – pushed Green Party to the peak of German politics after the election on March 27th 2011: it boosted the vote sharing to 24.2% and thus able to form a coalition government with Social Democrats (SPD) to govern Baden-Württemberg. Fourthly, this coalition eventually made the referendum come realized which aimed to ask eligible citizens whether they wanted government to continue the financial aid regards with Stuttgart 21. Then, on 27th November 2011, the referendum was taken place and the outcome was that 58% of the voters wanted it to be continued. However, this direct democracy was not able to put off the flares in opponents’ angry minds. Therefore, the demonstration is still going and the information center “Mahnwache” is still standing in front of the north wing of main station as it has been always doing since July 2010 even though the project is proceeding immensely.

3. Theoretical Framework

3.1 Environmental Subject and Governmentality

The concept of environmental subject is derived from Agrawal’s (2005a) study of forest management in India. In his case, the then colonial government had tremendous difficulty enforcing centralized rules over forestry conservation which was seen by citizens as detrimental to local lives. After involving villagers in the field of governance, the attitude of local people changed gradually. Eventually, the people who shared responsibility of management would have higher interest in protecting forest than the non-involved people did. In other words, this new form of governance created a new linkage between villagers and practice in forested areas, and consequently formed a new subject whose actions could be governed (2005b, 178). Under this situation, villagers, or the environmental subjects, who had to shape and position themselves in this new relationship with forest as well as government, were not only “subjected” but also “subordinated” (2005b, 162) as Agrawal put it:

“There are ‘technologies of power, which determine the conduct of individuals and submit them to certain ends or domination, [leading to] an objectivizing of the subject; and technologies of the self, which permit individuals to effect . . . a certain number of operations on their own bodies and souls, thoughts, conduct, and ways of being, so as to transform themselves...’” (Foucault 1988, 18; Agrawal 2005b, 165).

What has been described above points to Foucault’s concept of governmentality.36 The concept of governmentality is reflected upon the conception of government as

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36 In his work, Agrawal fused “governmentality” with “environment” into the new term “environmentality”, which refers to the relations between the forming of environmental subject and the technology of government (2005a, 8).
“conduct of conduct” (Waage and Benediktsson 2010, 4), which, according to Dean (1999, 17-19), refers to the attempt that tends to shape the behaviors and actions of the governed on the basis of norms and rules. Under this premise, people as conducts are able to be “regulated, controlled, shaped, and turned to specific ends” based on diverse rationalities and moralities (ibid, 19). This also echoes the so called self-government where the governed problematize their own behaviors and thus steer themselves to the specific ends (ibid, 19). In other words, conduct of conduct presupposes two-folded freedoms that can be utilized: on one hand the governed have the will to think, choose, and act, and on the other the governors have the same capacities (ibid, 24). Moreover, in order to make sure that individual or collective actions will be conducted, governmentality involves “a concern with institutions, apparatuses and knowledge, which constitute, regulate and survey the political domain” (Ashenden 1999, 52; Counsell and Haughton 2006, 923). Therefore, how to shape actions and behaviors is related to the construction of knowledge and principles as Gephart et al. (2009, 147) point out that “governmentality uses technologies, expert knowledge, and disciplinary power” to control the governed population.

The research conducted by Masuda et al. (2008) resonates with the discussion above as well. It shows how the four techniques – selective inclusion (who should and could be in the process), staging (when should citizens be included), information provision (what news or information is going to be provided as the standpoint of communication), and framing (in what way were citizens’ concerns and perspectives integrated in the decision making) – used by government to create the fields of action or non-action in the name of public participation and thus grant specific knowledge/rationale a top position among others (ibid, 374-376). Meanwhile, citizens respond to these techniques either by
fulfilling the “good citizenship” (ibid, 375) or by organizing their own public participation beyond the formal mechanisms (ibid, 377). Birkenholtz (2009) also outlines how government managed to problematize the utilization of natural resource and thus educated, regulated and modified users’ beliefs and behaviors with legislation and campaign. These enforcements subsequently triggered support as well as opposition in a variety of ways from affected citizens, whose diverse social attributes had something to do with their actions and sense making (ibid, 218). In other words, the interaction between the forming of subjects and governors is indeed dynamic.

Birkenholtz, on the other hand, indicates that shaping environmental subjects must be examined in the context of “specific economic moments for particular interests” (Robbins 2006; Birkenholtz 2009, 212). In his case, the neoliberal-style subjects making can be seen as the strategy concerning the interest of government and of upper castle. Under this situation, government should be seen as one of the environmental subjects as well since it acts and responses to the context or environment where it is located and interacts with other actors. By seeing government / governor as environmental subjects, we have the chance to think beyond the cliche which intends to depict government as mere governor owning technique, information and power, and thus open the door for deeply exploring dynamic and diverse interactions among these actors. Furthermore, by doing this we can avoid the situation where the government looks as though it positioned itself outside the environment and overlooked other subjects. On the other hand, by viewing governor as environmental subject we can examine issues on different geographical scale and therefore enrich / enlarge the sphere of discussion.

In this sense, Stuttgart 21 serves as interesting case to explore the relation between
governmentality and environmental subject since this project involves how Stuttgart city is to be managed, how government and DB make it progress, and subsequently how citizens accordingly react to the decision making process in different ways. Moreover, the concerns about finance, geology, groundwater, endangered species, and so on, explicitly denotes to Beck’s (1992) theory of risk society, where the “traditional management, which views organizations as rational and neutral systems of production and is mainly concerned with financial risk, is unable to respond to the societal demand of a risk free and safe environment” (Shrivastava 1995; Topal 2009, 279). Under this situation, risk management, coupled with sustainable development in the city, embodies “governmentality” by shaping government’s as well as DB’s actions to gain its authority and legitimacy. In the following content, therefore, I am going to talk about risk society and accompanying changes in decision making process. The latter can be viewed as government’s response to the former and as the measure to shape citizens behaviors as well. Meanwhile, the changing decision making process can serve as the basis for requiring further modification or alternative resolutions / definitions of issue if government’s decision making is sensed as illegitimate or deficient by participants. In other words, public participation is the field of competition and interactions between environmental subjects, who not only govern themselves but also shape and (re)act according to each other.

3.2 Being in the World of Uncertainty

Khan’s (2004) study mentioned above sketches one of the scenarios we can anticipate in a society where risk and uncertainty pluck the string of citizen’s mind. Namely, the
interpretations and competitions between environmental subjects over the benefits and risks brought about by modern development and over the process of decision making. These intertwined relations parallel Beck’s (1992, 20) pointing out that the “social positions and conflicts of a ‘wealth-distributing’ society begin to be joined by those of a ‘risk-distributing’ society.” This shifting in society indicates what Stoffle et al. argue that a risk society exists when it is “structurally and culturally changing in response to a series of factors that are qualitatively different than anything previously confronted by human society” (2004, 128). In addition, the uncertainty and insurability of contemporary risk calls into question previous science and legal institutions where calculation, management and controlling are done (Beck 1992, 20). In other words, the ambiguous and fallible causality make state / institution challengeable and questionable. Consequently, the crisis of traditional ways of dealing with risks propels society to ruminate on itself and thus modifies the behaviors aimed at coping with risks well (Benn et al. 2009, 1655-1656). For example, expansion of expertise, which refers to integrating diverse actors that beyond conventional elite expert style into decision making, has become one of the responses to the crisis of rationality, technology, and expertise in science (Rask 2008, 21). The calling for more democratic mechanisms in decision making aimed at reaching risk mitigation and sustainability marks another reaction among others (Hajer and Kesselring 1999, 1); it also reflects Topal’s (2009, 279) pointing out that citizens want to have a bottom-up model where they can have a say and influence on the outcome of decision.

However, while all these trends may serve as good approaches in achieving better decision making process, it doesn’t necessarily guarantee the empowerment of citizens since government as an environmental subject also takes actions in response to actions and competitions. Different environmental subjects with different interests, intentions, values,
preferable discourse, and so on, also make it difficult to define a better decision making. In other words, it is about the knowledge built on scientific definition as well as social and political dimensions, and thus it’s also about the battle between scientific and social rationality (Beck 1992, 24-25). Moreover, the relation between scientific and social rationality can be depicted as symbiosis since the former deals with risk based on social expectations while the latter delivers concerns and questions with scientific claims and statements as well (ibid, 30). Therefore, it not only has to do with what the knowledge is but also is relate to who has the knowledge, whose knowledge gets more attention, and how knowledge is to be used.

With this premise, participatory mechanism can be seen as the manifestation of power relationships among environmental subjects’ utilization, interpretation, manipulation, and interactions in regards to diverse knowledge. Subsequently, these actions indicate to the dynamic nature where governmentality and the forming of environmental subjects can be seen. In other words, the field of participation, where actors formally / informally / actively / passively join and come across can serve as good start point of exploring the dynamic nature in the process of decision making.

3.3 The Dynamic Nature of Decision Making Process

The traditional way of decision making is done on the basis of scientific knowledge, which refers to rationality and objectivity (Hommes et al. 2009, 147). Since risk society got onto stage, varieties of advocacy for citizens’ involvements have made it clear that the performance of decision making should be joined by diverse actors who have different pieces of knowledge with diverse ontology and epistemology. This seems to parallel what King et al
(1998, 321) propose that an authentic participation shifts administrators’ style from “a reliance on technical and expertise models of administration and toward meaningful participatory process.” However, the collapse of scientific knowledge doesn’t mean civic empowerment is right on the track. Instead, the society becomes more and more dependent on expert knowledge, which serves as the basis of legitimacy that government and corporation have been dying for (Topal 2009, 279). When experts and laymen meet and work together on communication / discussion, the contradictory between Socratic adopted by the former and Athenian model of dialogue used by the latter\(^{37}\), both of which harbor different discourses of ontology, will emerge and consequently lead to the unsuccessfulness of deliberative mechanism (Merkelsen 2011). Boholm’s (2008, 131) research on tunnel project in Southwestern Sweden\(^{38}\) indicates to similar circumstances; in the public meeting, the authorities – such as government and railway company representatives – reiterated how legitimate the project was by broad terms and by avoiding to give the hit-the-mark answers to the questions raised by residents, whose fears were related to the potential demise local life style lasting for generations (Kahn 2004). The study by Stoffle et al. (2004), on the other hand, presents how ethnical landscape was defined as useful or needed by authorities in their own ways even though their definitions and interpretations may pose contradiction against those of local tribes.

However, risk society has led to the dependence on expert knowledge and therefore we can see that scientific and social rationalities are independent of each other. In addition, Sillitoe’s argument as following shows denotes to the complexity of knowledge issue:

\(^{37}\) According to Merkelsen (2011, 636-637), the Socratic model presupposes that the truth is over there already, and therefore there will be nothing new created from the dialogue between actors. On the other hand, Athenian model is not in pursuit of truth. Instead, it seeks some new commitments that will be established in the process of dialogue. With this premise, Socratic model claims that the knowledge production is based on the asymmetrical relations whilst Athenian model sees symmetrical relations as crucial in legitimating governance.

\(^{38}\) The is the same case studied by Kahn (2004) which I also discussed in my research.
“The variability in local knowledge is something that we have to accommodate...Different interest groups within a community might have different understandings of issues, with different perspectives and agendas, which they will seek to manipulate, those in more powerful positions usually doing so more successfully, imposing their views on others. Differences will exist along gender, age, class, occupational and other lines...The interpretation they put on shared knowledge will differ, depending on how it affects their interests...”

(Sillitoe 2007, 11)

Therefore, the boundary between expert and laymen knowledge is blurred and thus permeable. With this premise, what makes the nature of decision making more dynamic is not only the knowledge itself but also how knowledge is used and interpreted by environmental subjects with diverse intentions, interests, and expectations. Public hearing in Topal’s (2009) research can serve as strong instance here. In his case study of oil well in Alberta, municipal government and the company showed in public hearing respectively how important the city growth and income important were and how strictly the regulations were fulfilled based on scientific criteria. Meanwhile, the Alberta Energy and Utilities Board, whose mission was to evaluate the whole decision, also made sense of this project as catering to public good. However, what local citizens wanted was not the regulation but their safety concerns based on risk perceptions to be taken into account. As a result of the disappointment, the consultation process was seen as illegitimate by residents instead.

The dynamic nature of knowledge issue can be more complicated. For instance, Abram’s (2004) study not only shows how the smell of spices factories was conventionally wrapped with technical issue and job opportunity but also presents how smell interpretation was differentiated in line with the sense of place, which subsequently rendered actions of
environmental subjects accordingly. Khan (2004, 57) on the other hand, points to the dilemma faced by environmental organizations regards whose spirit of sustainability was shaken by the concerns from local communities and subsequently hesitated to promote the facility regards with renewable energy such as wild power plant. Consequently, all these pieces of dynamics built upon environmental subjects serve as the basis of the landscape of gap.

3.4 The Landscape of Gap

As can be seen above, the discordance is everywhere in the nature of decision making. In addition, the fractures among environmental subjects with their own knowledge, intentions and interests can be so formidable that it’s highly difficult to see the common ground to come. For instance, in the case of mercury mine in Sweden outlined by Uggla (2004, 50-53), the self-definition, definition of others, and definitions of the issue itself were tremendously influenced by the institution where environmental subjects were within. Thus, the fault was always there serving as the line separating strata since each subject had his or her own uncompromised principle to be defended. This formidability seems to echo Frewer’s (1999, 570) pointing out that people with strong attitude were still unlikely to transform their views even neutral or positive information was offered; instead, they would turn to question the source of information. These paradoxes among environmental subjects become more vivid when the legitimacy issue comes to be the competition as can be seen in Häikiö’s (2007) research which depicts a bright picture of how environmental subjects claimed their legitimacy and denounced that of others in Finnish urban governance.

On the other hand, as mentioned above, participatory mechanism comes to be the sphere
where government gains its legitimacy and where it manages to shape the behaviors of participants, which can subsequently potentially enhance the legitimacy. However, public participation can manifest governmentality by managing to shape governor’s behaviors as well since average folks have their own interpretations of what participation is supposed to be progressed. Furthermore, public participation can be defined as non-existing by participants even though government defines the process of decision as open and transparent as Khan (2004, 69) depicts in his study. In other words, whilst some citizens’ behaviors are to become the prototypes that match with governor’s desire, some are carrying out their actions to coin alternative interpretations, to pursue different ways of self being governed, and to arrive at the legitimate ground for gaining more leverage over others.

Therefore, the landscape of gap here in my research is unfolded upon the actions, reactions, and interactions from diverse environmental subjects involving in Stuttgart 21. The focal point of these behaviors rests on how legitimate they are and how illegitimate each other is. Here, I would define the concept of legitimacy as referring to “the recognition, acceptance and support of a political system by those who are governed” (Stewart et al. 2004; Häikiö 2007, 2149). Landscape, on the other hand, is the text which points out how people make sense the world (Mitchell 2000, 99); it is a “way of seeing” (Berger 1972; Mitchell 2000, 99). In other words, the landscape of gap can be seen as the competition court for the governed – including government and DB – to win recognitions of how the environment of Stuttgart city should be governed given that Stuttgart 21 has been so controversy. When two or more environmental subjects who hold uncompromised principles confront with each other, the gap will be always there if there is no mechanism for compromise and negotiation to come.
4. Method and Data

German language barrier and unfamiliarity with both political and social contexts locally, regionally, and nationally, are the first two obstacles emerging when managing to collect data. These two obstructions both tremendously influenced on how I have managed to get the materials.

Firstly, I used online news / articles / footages to outline the history of decision making process as well as investigating how legitimacy was claimed by both sides. However, even though some English news could be found, the majority of these materials were in German. Given that translation software does not always work, this research mainly depended on two websites where English materials were available. One was the English website “Stuttgart – a city in conflict” which referred to the perspectives of the cons while the other was the official website of Stuttgart-Ulm rail project which represented the views of the pros. Secondly, I appealed to two Facebook pages to collect data: one is KEIN Stuttgart 21 as opponent while FÜR Stuttgart 21 as the proponent. On these forums, I got the latest news, press reports, and activities regards with Stuttgart 21 issue. In addition, I also post questions there and thus potentially opened discussions with page readers. Thirdly, a number of interviews were conducted during the field work spanning from January 26th to February 28th, 2012. The informants comprising professor (n = 2), politicians from Green Party (n = 2), tour guide for Stuttgart 21 project (n = 1), and folks living in or originally form Stuttgart (n = 18). There were 35 interviews comprised 23 initial and 12 follow-up ones. Furthermore, among these

39 Please see https://www.facebook.com/profile.php?id=100000140484669&ref=tck#/keinstuttgart21

40 Please see https://www.facebook.com/profile.php?id=100000140484669&ref=tck#/fuer.s21?sk=wall

41 The “n” here refers to the amount of interviewee.
interviews, semistructured, face-to-face talking make up the relative majority (n = 23) and email interactions (n = 12) make up the rest.

As for sampling issue, the informants were mainly recruited by purposive sampling (n = 21), which refers to the situation where informants can fulfill researcher’s purpose (Bernard 2002, 189). For instance, the website of K21 42 listed the names of opponents with diverse background and therefore it served as the platform where I could possibly get contact with those experts. Mahnwache, which presented how opponents interpreted themselves and the others, played the same role. The website of Couchsurfing 43 played similar role in my field work. It served as the platform where I could find accommodation as well as the searching tool for me to find potential informants 44. The discussions I opened on Facebook can be also seen as serving paralleled purpose in this sense. In addition to purposive sampling, snowball sampling, which refers to targeting informants with the help from key informants and documents (ibid, 193), was also adopted (n = 3). The website of K21, Mahnwache, and Facebook pages both played the roles of platform where I could find potential informants with snowball sampling. All the informants, including those from Facebook, will be kept anonymous throughout this research.

In the following texts, I am going to present the findings based on pieces of qualitative data that were collected with the methods above. Owing to the lack of recording device when carrying out field work, the quotations from informants presented below are derived from my

42 K21, which has been quoted in running text previously, is the alternative project aimed to replace Stuttgart 21. I will talk about it in the following text.
43 Please see http://www.couchsurfing.org/
44 I utilized its searching tool to find the hosts who are from Stuttgart city or Baden-Württemberg. Under this situation, they might have some opinions about Stuttgart 21 and therefore they could be my informants if they would love to be.
field notes, which were written down as soon as the interviews were done. Under this situation, the 12 follow-up interviews were made not only to clarify perplexities and answer further questions but also to assist the limited room of human brain. Statements extracted from emails and online forums, are true to what informants have written down, including capital or bold fonts they made, since those can roughly manifest the emotion and interpretation of the informants.

On the other hand, due to Green Party’s non-subtle stand that refers to resistance against Stuttgart 21, I separate it from the term “government” whom I speak of in finding part. In addition, although the term “government” may be too general, it to some extent points to the supports from different levels of administration. This situation can be seen in the followings as some informants did not elaborate what they meant when speaking of government. Given the research obstacles mentioned previously, I will not necessarily describe the level of government in details but will keep the text smooth and clear in the meantime as possible as I can.

5. Findings

The website of Taiwan Environmental Information Center post an article on December 19\textsuperscript{th} 2010, talking about the case of Stuttgart 21\textsuperscript{45}. At the time, Taiwan was facing series of controversial development projects that may lead to potential environmental degradations as well as impacting on citizens. Located in this context, this article exemplified Stuttgart 21 as a classical case whom Taiwanese society could learn from; the Schlichtung, in particular, was

\textsuperscript{45} Please see http://e-info.org.tw/node/61752.
considered as the embodiment of deliberative democracy where citizens directly participate in. Namely, democracy triumphed in the end. This wonderful “ending” triggered my interest in understanding more about it and subsequently became the predecessor of this research, which aimed to explore the deliberative mechanisms of the project. However, the story of decision making process was not told completely by the author after I dived into the context of Stuttgart 21.

5.1 Positive Development Based on Sustainability and Risk Management

“In 1987, the Brundtlandt Commission gave the United Nations a definition of sustainability which is now regarded as standard: ‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’ As construction projects frequently necessitate intervening in nature and the landscape, environmentally compatible construction is increasingly important. Environmental protection consequently plays a central role in the Stuttgart-Ulm rail project.”

(Derived from the official website of Stuttgart-Ulm Rail Project46)

The previous lines apparently reflect that sustainability shapes and rules how Stuttgart 21 will be progressed and look like in the future. Environmental sustainability as a main principle can be explicitly seen in DB’s promises. For instance, Stuttgart 21 will render rail as a more attractive and convenient way of traveling / commuting, and therefore it will reshape the traffic landscape by shifting passengers from road to rail47. This shift will subsequently reduce

47 “21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,
the amount of carbon dioxide emission by 70,000 tonnes per year. In addition, due to the tunnelization, the noise pollution will sink underground creating a quiet place for living and working. The clout of sustainable guideline can also be achieved in the developmental planning upon the new-born land with around 100 hectares in consequence of the tunnelization. Firstly, the history of urban expansion in expense of green land will not be repeated. Secondly, the around 20 hectares among the enlarging land – with 4,200 of new plants to be planted – will be integrated into the present park, which means the green lung of Stuttgart city will become larger. Thirdly, future’s building upon the new land will be built based on ecological standard referring to sustainable material and non-fossil fuel.

On the basis of this environmentally friendly land, more possibilities are going to be uncovered. In addition to the expansion of park areas, there will be 50 hectares of housing and working areas and 10 hectares for green spaces, public areas and streets. The working chances point to approximate 4,000 jobs being created in building industry while after the construction is done, 20,000 will emerge. The housing area, on the other hand, indicates to


“21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,

“21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,

“21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,

“21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,

“21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,

“21 good reasons: for Stuttgart 21,” Stuttgart-Ulm rail project,

“Architecture & Urban Development: a historical opportunity for Stuttgart,” Stuttgart-Ulm rail project,
the 11,000 apartments that will be built\textsuperscript{55}. Consequently, all these advantages will make contributions to economic growth for Stuttgart city as an estimated 800 billion Euro Dollar will be boomed during the construction period, which is much bigger than 4.8 billion Euro dollars that costs the Stuttgart 21\textsuperscript{56}. Meanwhile, more economic, cultural, and political profits may emerge with the enhanced transportation connectivity and capacity\textsuperscript{57}. In other words, not only Stuttgart city but also the state of Baden-Württemberg and Germany – even the European Union – will benefit from Stuttgart 21 in the long run. And all these conveniences and growths are boosted upon the so called “sustainability”.

All these charming potentials are sold very well among some citizens who support the project as followings show:

“...on the long term, a lot of new apartments and a lot of new buildings for offices, stores, restaurants and clubs will be build, situated in the heart of the city. Today, the tracks of the old station and the big rail yard occupy a lot of area in the middle of the city. This area will be released for new parks and new buildings. And as the city center of Stuttgart is situated in a narrow valley, space is very valuable in Stuttgart. A lot of companies had moved there headquarters out of the city centre in the past because there was no space to build new offices. And a lot of residents also left because there have been much to less new flats. This situation will change completely when the new station is completed” (Marat, informant on Facebook page FÜR Stuttgart 21).


“German companies will profit during the construction and tax money will come back.... long term there will be new ...and the city and region will prosper from this project” (Andy, informant on Facebook page FÜR Stuttgart 21).

On the other hand, it’s not surprising to see that there are some potential risks emerging alongside the bright facets. How these negative ramifications are to be tackled refers to how risk society shapes the progress of Stuttgart 21 and thus embodies the power of governmentality. For instance, Stuttgart is the second biggest city after Budapest with mineral water springs. Under this situation, the control and management of groundwater becomes an important mission for Stuttgart 21. In order to safeguard the resource, a monitoring process is needed, which is based on experts, on data sets collected for years (such as the comprehensive programme of surveys 1992), and on political institution (such as the Environmental Department of the City of Stuttgart that make up the strategies aimed at long-term monitoring)\(^58\). In addition, soil and geological conditions are also highly critical in this project. Therefore, systematic analysis of the foundation soil will be employed and thus ensuring the safety of the buildings above and the optimal conditions for construction to be progressed\(^59\).

All the discourses presented above echo the illustration by Topal’s (2009) case. Namely, Stuttgart 21 positions itself on scientific and economic rationalities; the former refers to the expertise that will maximize the capacity and connectivity of transportation and minimize the


risk by calculation and management whilst the later points to the prosperous lives in this capital world. Moreover, both of these two discourses are built upon sustainability in different senses. Therefore, the whole project is easily connected to public good, and hence the legitimacy can be reached. However, all these bright sides can be interpreted in different ways by others, and therefore the legitimacies are challenged by diverse subjects.

5.2 What If Promises are Simply Fantastic Bubbles?

As can be seen above, the enhanced capacity will render an attractive way of traveling / commuting and thus reduce the amount of cars running on the road, which potentially guarantees the cut of carbon dioxide emission. However, what if the promise of Stuttgart 21 doesn’t work in the end?

Stuttgart 21 is going to adopt the concept of eight tracks with four 420-meter-long platforms. Although it is only half of the number compared with today’s 16 tracks in present station, higher number of trains will be managed\(^\text{60}\), which indicates to the 49 trains during the peak hour and to the unprecedented 6.1 trains per track/hour\(^\text{61}\). The long track will be able to accommodate two trains at the same time, with one in the front ready to go while the other in the back ready to stop\(^\text{62}\). However, the truth behind this high capacity is that the time for trains


\(^{62}\) This information was offered by the informant Sabine.
to stop will be shortened and therefore passengers have to move themselves faster in order to match Stuttgart 21 as Feliciano pointed out:

“*The transferring time will be shorter. This is not good for old people.*” (Feliciano, the informant)

In addition, the idea of higher number to be managed is criticized as well. According to opponents, the calculation of 49 trains during peak hour is based on the 30% increase compared with present station’s capacity. However, in reality the present station can manage more than 50 trains. In other words, the calculation is on the basis of wrong information. Moreover, the difference between 49 and more than 50 trains indicates to a weird situation: the present station is indeed more efficient then Stuttgart 21. On the other hand, the figure of 6.1 trains per track/hour raises tremendous doubt as well since the experiences of Hamburg and Cologne, where 4.2 and 4.4 trains are managed per hour respectively, points to the positive correlation between the number of train (being managed) and the time of delay. With these premises, the reputation of Stuttgart as one of the most efficient stations in Germany will be turned upside down. This dubious and vague efficiency promised by Stuttgart 21 is worsened by DB’s negative reputation as informant pointed out:

“The privatization of DB\(^{68}\) has bad reputation of its delay. Therefore, people don’t believe that a new station will actually improve the capacity and efficiency” (Boris, the informant).

The opportunity of being the new heart of Europe is also being questioned\(^{69}\). According to the statistical figure quoted by opponents, 80% of the travelers get off the train at Stuttgart and do not go any further\(^{70}\). In other words, the claims that Stuttgart will connect with cities such as Bratislava is highly at odds with reality. This echoes Feliciano’s statement:

“*They said that the project will connect Stuttgart with Bratislava, but the problem is who wants to travel from Stuttgart to Bratislava?*” (Feliciano, the informant)

Under this situation, the prosperity may not be reached, and subsequently the fulfillment of environmental sustainability is probably at stake.

The concern about the environment gains more bargaining power when coming to the controversies over risk and physical circumstance management; mineral water, geology, and groundwater can exemplify the former while the latter refers to the trees felling in Schlossgarten. Both of them – from opponents’ angles – undermine the legitimacy claimed by

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\(^{68}\) In fact, German government still owns DB. The privatization here may refer to that DB “is not directly run by government”. Please see “financial resources and costs,” Stuttgart – a city in conflict, http://www.stop-stuttgart21.info/html/costs.html (accessed April 14, 2012). Due to language cultural barrier, this aspect is not tackled in this research.


supporters. And, of course, the pro’s side would also react to the criticisms. With these actions / reactions / interactions, the basis of landscape of gap becomes more explicit and concrete.

5.3 Is Sustainability going to Collapse?

The mineral water springs is one of the important treasures owned by Stuttgart city. Therefore, whether this natural resource will be influenced become critical in the discourse of cons side. According to opponents, the station construction will impact the layers that keep the deposit of mineral water, and thus creating a risk of leaking and drying up. This fear can be sensed in informants’ remarks.

“i [sic] guess nobody in your emerging societies would ever have the totally freaked out idea to realize a project that is so massively outdated while destroying UNIQUE CITY ASSETS...endangering the 2nd largest mineral water source you can find in a european(sic) city” (Milos, the informant on Facebook page FÜR Stuttgart 21. The capital words were made by informant himself).

In addition to mineral water, there are other problems in respect with geology. For instance, beneath Stuttgart city lies the porous layer of anhydrite; when being contact with water, it becomes gypsum while simultaneously swelling. The expanding and swelling layer indicates to the possibility of damage to the station, tunnel, and everything else above. This

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situation had occurred similarly in other parts of Germany such as Cologne and Staufen. Given the situation where the risk can be avoided by technical fixing, it will continuously add cost to the project, and this scene has been showed by Aichelberg tunnel in the Stuttgart area. Moreover, the construction of the train station will lower the water table of groundwater, and this will result in not only the collapsing of station but also the withering the fauna and flora living in park area.

The backhoe also put species in the park in danger. Here we come to the conflict over Schlossgarten. Owing to Stuttgart 21, nearly 300 trees have to be felled, and this means the species – protected Juchtenkäfer (hermit beetle in English) among them – which rely on these plants are to be fallen as well. The action of planting 4,200 new trees is not going to save Juchtenkäfer since only elder and bigger ones can serve as the niche for this insect. Moreover, the new land is going to be riddled with buildings and grassy areas and thus leaves no room for the claimed 4,200 population. And, those will-be-absent trees will subsequently make the air condition notorious since an estimated 65,000 trees are needed for absorbing CO2. As an informant put it:

“S21 will destroy the trees, many of which are elder than 300 years, and the result will be that the fresh air is going to be gone. These trees are so important. During war time, these trees were saved even though the weather was cold. However, today, these trees are going to be cut just because the money stuff” (Caroline, the informant met in the park).

The park also plays important role in offering recreation areas and memorial events in citizens’ lives. Namely, Schlossgarten functions beyond ecological matters that are related to environmental sustainability; it even aggregates the social relations occurred / occurring in Stuttgart city.

“They are going to cut the trees. It is the destruction of the nature. The park is very important to the people who live in Stuttgart. And I have many memories of playing in the park with my grandpa. And therefore this park plays important role in my grandpa’s memory as well. Now the project has begun to destroy the threes there, and thus I do not want to go there to see the bad stuffs there. I would rather to stay in other places” (Feliciano, the informant).

On the other hand, the risk of the present station collapsing due to lowering groundwater also reflects that the claims of sustainability could be unreal, and therefore so could the legitimacy claimed by DB and government. Besides, cultural sustainability is also endangered since Stuttgart 21 involves the demolishing of south and north wing of train station, which is one of the landmarks of Paul Bonatz, the architect who designed present station as mentioned above, and which embodies the historical context where Stuttgart school was located78. With all these crises of sustainability in terms of physical and cultural environments, the cons side

has come up with an alternative project called “K21” aimed to replace Stuttgart 21. Due to the limitation of text length, main axis of this research, and language barrier, I am not going to elaborate on the details of K21. Generally, this alternative way is cheaper, passenger-friendly, environmentally friendly, capacity-enhancing, and will not tear down the cultural heritage\(^79\).

Confronted with the critiques and alternative way drafted by opponents, the supporters, of course, have reacted to and interpreted the actions of the cons side. One of the reactions was to refer to the advantages that will be brought about by Stuttgart 21 and the solutions to impacts. For instance, when opponents accused the felling action of non-environmentally-friendly and view the planting 4,200 trees as unfulfilling, the pros side indicated to the trees that will be planted:

“I understand the opponents that they want to protect the old trees but on the other hand with this project 5000 new trees will be planted and the par will be enlarged by 20 hektar.” (sic) (Marat, informant on Facebook page FÜR Stuttgart 21)

Challenging and questioning the claims of opponents was another reaction. In respect to the tunnel issue, supporters pointed out that “Stuttgart 21 is not the first project which has to handle tunnels in the underground” (Berdych, the informant on Facebook page FÜR Stuttgart 21). Moreover, “even the alternative project K21 has tunnels to be built as well, not to mention that Stuttgart 21 is going to produce new land while K21 is not” (Sabine, the informant)\(^80\). With regard to the present station, some reiterated that HBF\(^81\) “will not be torn down. Just parts of the old station” whilst some did not

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\(^79\) Please see the website “Ja zum Kopfbahnhof: Kopfbahnhof 21” (http://www.kopfbahnhof-21.de/).

\(^80\) Sabine is the informant who has been working for DB for a couple of year.

\(^81\) HBF refers to the German word Hauptbahnhof, which means main train station in English.
understand the social meaning of the main station and expressed in a sarcastic way: “What memory could they have in train station? Do they live there?” (Isner, the informant).

Undoubtedly, these reactions from supporters provoked reactions from the cons side as well, and this back and forth circle could last for quite a long time. This back and forth seemed to resonate with what I referred to the symbiosis between scientific and social rationality. Moreover, Stuttgart 21 versus K21 concisely suggested the blurred line between boundary between expert and laymen knowledge in risk society. On the other hand, the discordance between pros and cons became more intense when these pieces of knowledge and interpretations entered the process of decision making, the process where the governed – or what I refer to environmental subjects – competed for the recognition and dominance of the legitimacy they claimed. Under this condition, the landscape of gap has become clearer and more concrete.

5.4 The Information Flowing within the Process of Decision Making

On 15th September 2009, German Federal Chancellor Angela Merkel talked about Stuttgart 21 in Bundestag. In her speech, Merkel referred Stuttgart 21 to further development which could make differences for Germany. In addition, there was no need to set up a referendum to ask citizens if they wanted Stuttgart 21 or not since the whole process of Stuttgart 21 was

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82 For instance, on the Facebook page FÜR Stuttgart 21, there was an informant called Serena stating that “Please dont ever try to understand the K21 lovers. Its a mixture of nostalgy, communism and ecoterrorism”. Confronting this comment, the informant Milos reacted by saying that “if the project-engineers who run this madness we have right now and who up to now had to confess several severe miss calculations will manage to start and also finish SUCKS21, the whole thing will be at least 45 years old when it opens its doors. so in fact the true nostalgy fans you find among the supporters of S21.”
legitimate and since the election which was to be taken place in March, 2011, could be seen as the “referendum”. This message can be echoed by the following statement by Monaco, the informant who has been involving in Green Party for a while:

“In the early years of the project (1990s) the responsible entities of the project (German Railway Company, Mayor of Stuttgart, State Government, Federal Government) argued, that a democratic majority in the representations of the city and the state had decided to implement this project, and that therefore it is democratically legitimate.” (Monaco, the informant)

Representative democracy as well as participatory mechanism has been there for people to participate in as Sabine pointed out that “in 1995, associations like architects, urban planners etc. presented their ideas for the urban development to the public. Also the University of Stuttgart (Dep. Urban Development) was part in this process. In 1997, the public was asked to discuss the so called ”Rahmenplan“ ... This Rahmenplan was discussed in public and people could present their ideas of as ideal city quarter. The ongoing process of today’s urban development is based on the Rahmenplan from 1997 which is based on the ideas from 1995”. From her massage, we can say that the democratic mechanism has been fused with the expertise of architect and planner, and therefore the legitimacy of Stuttgart has been enhanced more. Sabine also mentioned that “the exhibition of Stuttgart 21 has been in the tower of main station since 1998. On the other hand, DB also has the truck running to all over the whole state to inform people of what’s going on”. Moreover, “in 2010, DB and government invited the experts from Hamburg and Utrecht to talk about their experiences with citizens. More detail will be discussed in 2014, and

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83 Please see http://www.youtube.com/watch?v=4tjFTzP7jdQ. Judith Kahle contributed to the translation of this footage.
84 This statement was derived from follow-up interview by email. Therefore, I quoted what she has written down.
there will be a competition of designing again". Namely, citizens have had many chances to be accessible to participation as well as the information and will have been continuingly involving in similar process of the future.

However, from the angle of opponents, the legitimacy of a participatory mechanism was not solid. For instance, “all the discussions were not allowed to change the project. Instead, local people were only allowed to add the details” (Murray, the informant). In addition, a few open forums such as the public hearing in March 1997, where the mayor of Stuttgart Wolfgang Schuster was present, were established, which could be seen as the reactions to the demonstration during 1990s. Ironically, these forums were not friendly to opponents since, on one hand, the alternative projects were not allowed to be on the table, and on the other, the questions being coped with were based on “‘how’, and not "if", S-21 would be built”. In other words, what information / knowledge could be displayed and then discussed in what kind of participatory mechanism was decided by the forum designs. Opponents were also quite dubious about DB’s and government’s sincerity of communication in terms of information transparency. For example, Pete and Seffi said that “in the beginning DB did not mention that the tress would be cut and the train station would be demolished”. In addition, Murray utilized ping pong as an analogy to describe the situation when average folk would like to gain the information:

“It's very difficult for people to play “ping pong” with DB; namely, usually you did not receive the answer that you were expecting from DB. Furthermore, DB did not talk about how they are going to deal with the chemical

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85 Here Sabine referred to the detail of urban plan worked upon the new land created by removal of the tracks.
substances left by the track. He did not feel like living in the area where those chemicals still remain” (Murray, the informant).  

The transparency issue has also been questioned when speaking of the cost of Stuttgart 21. The cost of Stuttgart 21 is 4.1 billion Euros and 4.5 billion is the maximum set up by DB. DB has kept assuring the public that the cost is under control. However, the opponents have found many figures calculated by others and those numbers were not accordant with what DB has claimed. Opponents also claimed that what DB has come up with was based on the idea situation where risks were excluded, not to mention that what was behind the figure was DB’s document which was not reported to public. The information opaqueness kept its own way in Schlichtung as well. Schlichtung consisted of nine sections where specific stakeholders such as NGOs, experts and politicians from both sides could have a say. Given this circumstance, some of the opponents viewed Schlichtung as a chance to get complete information put on the table and thus made Stuttgart 21 and their K21 visible for the public who could subsequently make comparisons as well. However, to some opponents, the information related to finance, groundwater and geology was still not available and thus rendered the comparison unrealistic. Moreover, some opponents did not see that DB would follow the settlement reached in Schlichtung as Martina mentioned in her statement:

90 Nevertheless, average citizens could not take part in. Instead, citizens could only watch the meeting via the Internet and television. In addition, the whole process was recorded in the form of footages and word-by-word documents both of which were available on the Internet after Schlichtung was done.
91 Martina’s interviewing was conducted by means of email.
“I liked the ideas and a lot of facts came on the table. I even watched some parts of it on TV (it was broadcasted live on TV and online). Geisler always asked every speaker to express him/herself in a way, that ‘normal’ people can understand what they’re talking about... What I dislike most, is that it became quiet obvious that the project is not very well planned and that a lot of improvements are necessary. Geisler tried to express this in his ‘Schlichterspruch’ at the end, however, I feel DB doesn’t really care, because they know that these improvements would make the project even more expensive” (Martina, the informant).

Parkschuetzer (park protector in English), the non-governmental organization\textsuperscript{92} which was invited to attend Schlichtung, seemed to foresee the disappointment and thus chose not to participate. However, this action was interpreted as not proper as Sabine described: “The park protestors even did not show up in Schlichtung ... it’s not good because this was the chance for you to take part in and have a voice. This was not god for communication.” Haas also echoed Sabine by saying that “some of the opponents did not show up because they did think the talk would be meaningful only if S21 was terminated... it’s not good for democracy and their followers”.

On the other hand, stress test, one of the consensuses reached during Schlichtung, was also highly controversial; DB, Heiner Geißler, and SMA, the Swiss firm which was in charge of the test, confirmed that Stuttgart 21 passed the test and hence should be continued. In contrast, opponents perceived that the opposite of the outcome was true instead\textsuperscript{93} as can be resonated with Roger’s remarks:

“it[sic] looks like the stresstest [sic] software was manipulated...and without this “more-capacity” they would not have got the acceptance.” (Roger, the informant contacted via Facebook message)

\textsuperscript{92} More information can be seen on the website of Parkschuetzer (http://www.parkschuetzer.de/)
With all these controversies described above, it is not surprising to see the referendum haunted by the same ghost. Before the referendum, according to Monaco and Tsonga, who has been involving in Green Party as well, “the knowledge and information needed for citizens to vote were presented and discussed in mass media such as the Internet, newspaper, and television. There were many workshops as well inviting people to discuss. Moreover, the coalition government also made the brochures which carried the perspectives from both sides and then sent those to households in Baden-Württemberg”. The comments among opponents were diverse, with some evaluating it as quite good and some viewing it as insufficient. The former can be exemplified by McEnroe who thought “the information before referendum was quite good, with the advantages and disadvantages of S21 on the brochure all listed and therefore he did not think the brochure misled people that much” while the latter can be seen in Pete’s remarks pointing out that “the people did not have enough information about the Stuttgart 21, so many of them liked it”.

With the findings above, we could see that the landscape of gap has been carved out of how knowledge was produced, interpreted, and interpreted by each other. The pros side would see the participatory process where information / knowledge involved was open and transparent enough while the cons side perceived the whole democratic mechanism as illegitimate for the flawed basis of information influenced the effectiveness and credibility of decision making. Moreover, Parkschuetzer’s boycott of Schlichtung pointed to the governmentality which aimed to shape the desirable behaviors that the governor would like to see. Under this situation, the cons would take actions to make their voices or knowledge heard ad thus have impact on Stuttgart 21.

5.5 In Order to Render Voice and Knowledge Heard / Used
From the illustrations above, it seemed that the explanations harbored by the pros were relatively dominant in the process of decision making. Under this situation, one of the actions carried out by the cons side to gain influence and to hamper Stuttgart 21 was the utilization of legislation. According to Sabine, “in Germany exists [sic] several laws regulating who can start proceeding at which court. First of all, you need to be affected because you are either a neighbour or because of a so called “Beteiligungsrecht”. This “Beteiligungsrecht” means that unions...have the right to go to law.”

With this premise, the NGO called BUND\(^4\) has come to be one of the powerful proponents of the application of law as Gozalez\(^5\), pointed out that “they\(^6\) are lucky, having an organisation [sic] here, called the BUND, fighting to get already applicable law applied to this project. And that's not that easy.” An example of such can be seen in the case of groundwater management that hampered construction for a while last December\(^7\). Other opponents quoted legality to stop Stuttgart 21 as well. For instance, as Sabine pointed out, “Peter Dübbers, the grandson of the builder of the station Paul Bonatz, tried to stop the tearing of the side wings because of the monument protection.”

BUND, on the other hand, also plays important role “in Bündnis, which refers to an informal coalition where a group of organizations such as Green Party, Lawyers against S21, and Parkschützer, meet with each others once a week to find a way to follow common goals and rules, to do Public Relations together and

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\(^4\) BUND is the acronym of “Bund für Umwelt und Naturschutz Deutschland”, which means “Community for Environment and Nature Protection” in English.

\(^5\) The informant from the Facebook page KEIN Stuttgart 21.

\(^6\) The original text was “we” instead of “they.” Here I rewrote the subject in order to smooth the content of the paper.

organize demonstrations, and so on”\(^{98}\) (Monaco, the informant). In other words, the resistance powers were aggregated on the basis of expertise from diverse backgrounds. The implication of equipping with knowledge based on education was also seen in people who did not categorize themselves in particular under any organization. For example, Steffi referred Pete to the professional lawyer with many pieces of knowledge regarding Stuttgart 21 while after hearing of that comment Pete indicated that Steffi has been the secretary for a long time. With this premise, they were the people with job and expertise, not the irrational mob who did not know what to do in life.

The frustration evoked by representative democracy which was perceived as benefiting only a small group of the privileged\(^ {99}\) made opponents look for not only different candidates in election but also more direct way of participation. The former was embodied by Green Party’s victory in the election taken place in March 2011, while the latter was manifested by the call for referendum, which eventually came true on 27\(^{\text{th}}\) November 2011. In addition to voting, alternative approaches of participation driven by citizens have been established. Among them were the information center “Mahnwache”, where pieces of information in regards to demonstration, news, and related knowledge of Stuttgart 21 and of K21 are found. All these materials were produced in the form of flyer, badge, or even candy, as Steffi always told me: “we are creative.” She also pointed out as following shows:

“Mahnwache is a very important tool/mean for us - opening to public, we reach many people, explanation of our ideas of the K21, arguments against S21, assembling/meeting point for all "Obenbleiber", (stayers [sic] above), sometimes we even could convince supporters of S21 of our better idea - K21 etc.... and all this is only possible

\(^{98}\) These statements were derived from follow-up interview via email.

because we are situated near the station where they want to produce the desaster [sic] and because we are on public space (the Deutsche Bahn owns the ground where the Mahnwache is) and they accept our being there, but only for the moment” (Gabi, the informant).

Not only peaceful information stand but also relatively radical behaviors such as occupying trees and parks were deployed by Parkschuetzer. However, these actions are at risk of triggering conflict between the pros and cons. For instance, as Monaco pointed out, “the extreme behavior of is a double-sided sword. On one hand, they could raise the weariness and on the other, they could cause damage to the reputation of opponents.” Jankovic also mentioned in his statement: “For that one and a half year in my demonstration for this Projekt [sic] I saw a lot of ugly things from the People who been against Stuttgart 21! At least these ugly piece of sh... in our Park!! They called them self “Parkschuetzer” Park Protector! But all I see is a massive destroying of the Park! And this is just the Top!”

Namely, the pros side may interpret the occupying action as in fact harmful to the nature. Coming under this critique, the cons claimed that the wound would be bigger and uglier if Stuttgart 21 were to continuingly head straightforward. On the other hand, some people pointed to the problem of punks, who were accused of disguising their actual intentions with anti-Stuttgart atmosphere as Kuznetsova implied that “some punks pretended to be against S21 and thus they can occupy the park longer. Actually, they do not know what is exactly going on.” Haas’s arguing that “the punks in the park cause damage to the reputation of opponents; the punks just do not know or care about s21” also paralleled what Kuznetsova pointed out above. Given this chaos

\[100\] These statements were derived from the follow-up interview via email.

\[101\] These statements were derived from the discussions on Facebook page FÜR Stuttgart 21.


\[103\] Haas is not from Stuttgart but Eastern Germany. His attitude is quite positive regards with Stuttgart 21.
situation, even some of the opponents did not like what had been going on in the park:

“The people who lived in the park are environmentalists, and they were not from Stuttgart. For some opponents, they do not like the park protestors either” (Boris, the informant).

Series of demonstration were also the actions among others. These demonstrations did force government to adjust the way of decision making with Schlichtung as the example though its controversy mentioned above. The protests also raised awareness nationwide, which subsequently became the muse for people in other places. As Justine pointed out, “the protest of Stuttgart serves as an inspiration for other parts of Germany, like Frankfurt and Hamburg, and she is proud of it”. In addition, opponents asserted how peaceful the demonstration has always been. For instance, as Caroline pointed out, “the demonstration was peaceful and creative. In addition, their actions really inform people who do not know the situation of the fact they have. Their actions were not that tough compared with the case of Hamburg. However, some media described them as bad person. The government employed so many policemen to watch the demonstrators. It's horrible.” This peaceful nature featured demonstrations becomes one of the reasons used by opponents to condemn what policemen have done so far.

Take Black Thursday as instance. Some opponents accused police of using “water cannons, pepper spray, and clubs against peaceful demonstrators with many children and elderly are shocking.”104 In addition, police also limited ambulances’ accessibility to the scene of protest, which hadn’t occurred since according to German law the police oblige to

supply emergency medical teams even prior to the “peace maintaining”. This measure by police led to the situation where the elderly couldn’t have immediately medical help when their eyes were injured. In addition, Government and policemen were also accused of criminalizing demonstrators with false information. For instance, teachers and parents were blamed for letting children stay on the scene while some protestors who threw chestnuts (falling from trees owing to the water cannons) back to police were depicted as throwing stone and rock instead. Moreover, some officers were witnessed dressed as protestors to further agitate the emotional condition and thus sabotage the image of opponents, which meant that the violence was politically coined. Consequently, this politically fabricated chaos make the room for then minister of Baden-Württemberg Mappus to enhance the identity as the lawful one who was tackling the turmoil. Caroline’s message above also indicated that mass media were perceived by opponents as being in conspiracy with police and government to illustrate and spread bad reputation of the cons; for instance, describing an actual peaceful demonstration as vandalism valued 1.5 million Euros. Moreover, those biased reports, which subsequently influenced great population of audience and reader, were possible given the relationships between the owner of media and Stuttgart 21 as Murray pointed out, “the person who owns the media also involve in that relationships, which makes opponents more
inferior.” This message can resonate with what I have talked about the information issue previously.

However, the emotion of demonstrations seemed to be too overwhelming for some of the citizens as Insner said that “during the protection last year, the opponents could be very annoying because they made so many sounds and blocked the transportation. Even you were against s21 or neutral could still be offended by their behaviors”. Milos also pointed out that “...you have the opponents who try to stop this mad project from being realized. the [sic] protest had partially reached an intensity and presence that meanwhile we can see the effect that a lot of former project-neutral citizens or citizens who tended to not support this project now support it just in an attitude to protest against the protest of the opponent or to only get rid of the conflict!”

What was reflected by Insner and Milos above points out that while the fracture between pros and cons could become bigger and bigger owing to their interactions, behaviors shaped by governmentality can be so diverse in the midst of the same group and thus render the landscape profound beyond dichotomy based on pros and cons.

5.6 Backlash of Public Participation?

Referendum has been as the key to test whether citizens in Stuttgart really wanted it or not. In November, 2007, approximately 67,000 signatures were collected by opponents\(^1\) in order to gain the approval. However, the Stuttgart City Council rejected it with legal reference

\(^1\) These statements were derived from the discussions on Facebook page FÜR Stuttgart 21.

to the condition that the decision of Stuttgart 21 had been made irreversibly. Moreover, referendum on Stuttgart 21 wouldn’t be legally feasible given it as a railway project, not a developmental one¹¹³ though these problems of technique were perceived by some opponents that the mayor of Stuttgart Wolfgang Schuster did not actually want to conduct referendum¹¹⁴. Thanks to the coalition government between Green Party and SPD formed after the election in March 2011, the referendum was passed anyway and conducted on 27th November of the same year. The result of referendum showed that the majority of the voters wanted it to be continued. However, this outcome only worsened the gap among environmental subjects instead of coming to an end of conflict.

In addition to the quality of information mentioned previously, the wording of questions, which asked citizens if Baden-Württemberg should stop financing its share of the costs of Stuttgart 21, was questioned by numerous opponents. This wording was the only way the coalition government could come up with given limitedly legal ground. With this design, voters from both sides were possibly confused when polling, and hence the outcome of referendum was potentially questionable. Moreover, this wording simply and directly implied that, as Monaco argued about, “it was not a referendum about the project itself but about the question of a part of its funding. So many people claim that it doesn’t represent a real people’s vote for the project”. In addition, Feliciano expressed his unpleasantness by saying that “there are some problems with the rule of referendum. The project will influence the city very much. However, why the citizens of the other parts of the state can vote? Many people who live far far away do not care about what’s going on in Stuttgart. It’s not


¹¹⁴ As my informant Monaco pointed out, “…there was the discussion of whether the referendum should be take place only in Stuttgart city. But the mayor refused it with the excuse of technical problem. But the real intention behind this could be that he was the supporter of S21 and he did not want the referendum happen...”
Although there were controversies in respect to the nature of referendum, the Green Party still decided to obey democratic rule and thus not to take any actions aimed to stop Stuttgart 21. Instead, it would like to act as a picky supervisor in order to make the project perfect. This decision did raise critique from some opponents. For instance, Roger said he will not vote Green Party again even though he “also accept [sic] ‘democratic result’ and this is also one reason for me not to go to the demos this time”. Pete and Steffi, on the other hand, also mentioned that they will not vote Green either because “the Green Party is not strong enough.” They also expressed their frustration by saying that “before the election in March, there were relatively more talks between greens and opponents. After election, the talks became less; after referendum, there was no talk anymore.” In other words, some of the opponents perceived that their voices were not heard by either side. Given that Green Party has been unreliable, contrast to Roger, Pete and Steffi chose to stay with demonstration and Mahnwache.

The outcome of referendum made the continuing existence of demonstration / Mahnwache look highly and negatively emotional. To some opponents, the whole decision making process of Stuttgart 21 was not democratic at all. However, referendum seemed to make clear that democracy has been always there in Germany as Sabine pointed out: “some people thought that if their voices were not being heard, then there was no democracy. It’s a dangerous thinking. Because the referendum is there and it is democracy. If Germany has no democracy, then I doesn’t know what dictatorship is.” She also pointed out that “Some people are not on positive side...Now they decided to accept the outcome of referendum and thus ask Stuttgart 21 to be built perfectly. They wanted a break and end of 115

115 For instance, as the informant Elena pointed out, ” after seeing the process of S21, she did not think Germany is democratic”.
Some of the opponents also share similar thoughts. For instance, when asked if there was any chance for citizens to have a say, McEnroe referred referendum to the opportunity that people had. Novak, in addition, argued that “the opponent side said that the construction of s21 put democracy in danger. However, it was not Stuttgart 21 that made democracy in danger. Actually, the referendum was one part of the democracy and therefore it also symbolized the truth that democracy was not in danger... the opponents have to accept the outcome.” Moreover, though controversy and conflict made so many TV footages throughout the process, Stuttgart 21 issue was seen as the embodiment of people’s will and the government had to respect it as Haas said that “Stuttgart 21 is also very important to other parts of Germany because it is the symbol that the government can’t do whatever they want to”. It was also viewed as an example for future decision making processes in Germany where citizen involvement should occur as early as possible as Novak pointed out.

However, given the democratic values, the undesired risk followed by fear is still there and now the fear seems to incarnate itself in many different forms in opponents’ lives other than latent risk. For instance, Steffi said that “they have the fear of living in Stuttgart because they have to face the destruction and the supporters of S21. They feel that they do not belong to Stuttgart anymore.” In addition, this feeling of victim may potentially change some parts of their lives in the future as Steffi also said that “she is thinking that maybe she will not go to Stuttgart to do shopping anymore” and “go to countryside more often in the future to escape from the reality for a while”. Since no immediate compromise or consensus can be seen in recently coming days, the controversy and conflict may potentially last for ages and continuingly made the headlines of newspapers and footage of news coverage.
6. Discussions

Stuttgart 21 has been triggering tremendous conflicts and controversies within Stuttgart city where DB, government and other supporters have managed to progress this project whilst the opponents have tried their best to stop this mammoth construction intimidating them. All these actions of environmental subjects in this research were shaped by the governmentality which was manifested by sustainable development, risk society, and participatory mechanism in decision making process. Whilst governmentality shapes the actions, every environmental subject had his/her own view of what proper behavior and knowledge should be. In other words, governmentality can be seen as the reference / basis of legitimacy and thus give rise to diverse interpretations of self and those of others. When two or more different interpretations meet with each other, there comes the landscape of gap built upon environmental subjects.

6.1 Governmentality and Actions of Gaining Legitimacy

As can be seen above, how to reach sustainability in terms of physical environment and economy is no doubt the achievement that Stuttgart 21 would like to make, and this can be seen as the embodiment of how sustainable development played its role in shaping environmental subjects’ actions. With this premise, what we can see in the case of Stuttgart 21 was that DB and government managed to promote the advantages – for instance, upgrading capacity of transportation to the opportunity of urban development – as environmentally friendly and economically sustainable in the long run. The tie between enhanced railway capacity and decreasing carbon dioxide emission and the correlation between the importance of Stuttgart21 and the bottleneck of corridor both can be viewed as the examples of
legitimacy gaining in terms of ecologically and financially sustainability. They may also strengthen Stuttgart 21’s political status in relation to globally international community and European Union respectively, which potentially referred to the legitimacy at broadly geographical and political scales. On the other hand, many of those advantages such as job opportunities, housing supply, and tax revenues brought about by Stuttgart 21 were in the form of numbers and figures based on scientific calculation and prediction. Subsequently, dependence on expert knowledge to some extent granted the legitimacy to DB and government.

Indeed, dependence upon expertise can also be seen in dealing with risks such as groundwater and geology. This reliance was the action conducted by DB and government to gain legitimacy in risk society, which served as the second manifestation of governmentality. Given that science and institution in risk society can’t enjoy the same authority as the counterparts in the past did, DB and government had to make a position for citizen on the stage of decision making process. Hence, citizens were invited to public hearings, workshops, exhibition, and information automobiles to talk and gain information. By combing expert knowledge and citizens’ presence, which to some extent indicated to the expansion of expertise, the legitimacy would be more complete.

Both sustainable development and risk society, on the other hand, have left similar traces on opponents’ actions and behaviors. What we have seen from the findings was that the

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116 This argument can be seen as paralleling Counsell and Haughton’s (2006) study on how UK government manages the enforcement of sustainable development with sustainability appraisal as the new technique of governance, which pointed out that “…the participants in effect could be said to be reinforcing the legitimacy of the government’s approach to sustainable development as well as the technique itself, whilst simultaneously enhancing their own political status in relation to the state” (ibid, 929).
opponents depended on expert knowledge not only to claim the legitimacy but also to interpret the legitimacy claimed by pros as de-facto the opposite; the former can be seen when K21 serves as the alternative project aimed to replace Stuttgart 21 while the latter is exemplified by the statements such as the risky layer of anhydrite and capacity of railway based on the data from Hamburg and Cologne. In fact, many of the opponents are experts and politicians with diverse background – for instance the organization BUND and Green Party – and hence the legitimacy based on expert knowledge is scientifically sound as well. In addition, by pointing to the occupation they have been working on and to how creative / peaceful their actions have been, the legitimacy seemed to be more convincing since these discourses to some degree indicated the expertise and legality they have had. Furthermore, by appealing to legality, social rationality can decorated itself with legal institution and thus confirm the validness of their legitimacy claiming; under this condition, we can see how social / historical meaning of present station had impact on the progressing of Stuttgart 21. In other words, blurring the boundary between scientific/institutional and social rationalities was not only the shaped behaviors in the context of risk society but also the actions taken by the cons to render their legitimacy solid enough to resist against the pros.

DB and government, interestingly, also blurred the boundary to gain legitimacy as can be seen that citizens and experts with diverse background and intentions were included in public hearing and Schlichtung respectively. However, tons of complaints from opponents seemed to reflect that the blurred boundary outlined by the cons did not come to be the fatal weapon that could stopped Stuttgart 21 whilst the one (boundary) outlined by the pros still own decisive power over project’s progressing. Therefore, residents could attend the discussion of urban planning but had no right to change the final decision; in the meantime, expertise utilized by opponents challenged the assertions of supporters during Schlichtung but the voyage of
Stuttgart 21 would not be directed in different direction eventually. These events can indicate to what Counsell and Haughton quote Murdoch as saying that “particular planning techniques can also be seen as being about how to ensure that decisions are taken in line with prevailing rationalities. Debates over the choice of planning techniques can present an appearance of professional objectivity but they represent more than this since the techniques also help in ‘actually constituting the domains that are to be governed’” (Murdoch 2000, 513; Counsell and Haughton 2006, 924). What can be found under this situation was that while DB and government behaved accordingly – involving different actors – in the context of sustainable development and risk society, they also conjured up the fields where specific knowledge was used and desirable behaviors were conducted. Namely, the actions adopted by DB and government embodied the governmentality by conducting the supporters among citizens, who would enhance the legitimacy as well as the progressing of Stuttgart 21; DB and government in this occasion played the conventional roles in typical discussion of governmentality.

Perceiving those participatory mechanisms as incomplete and flawed, opponents took actions to create spheres where diverse voices and knowledge could be spread and heard; series of protests and occupying trees were the exemplifications. Mahnwache was also the approach among others. According to the informant depicted above, Mahnwache did change some residents’ preferences regards with Stuttgart 21. Hence, this “public talking” that occurred in Mahnwache can echo the concept of discursive participation which sees citizens’ talking and deliberating with each other as a way of participation. In addition, it can “enhance the opportunity for individuals to develop and express their views, learn the positions of others, identify shared concerns and preferences, come to understand and reach judgments about matters of public concern, and become integrated into networks of citizens” (Cook et al. 2007, 30).
This deliberation based on face-to-face conversations also constituted the basis of democratic values (McLeod et al 1999, 744). With these premises, opponents claimed their legitimacy in terms of expert knowledge and participatory approach, and these actions can be evaluated as not only the behaviors shaped by risk society but also their interpretation about what proper behaviors were supposed to be in this context, which subsequently pointed to the illegitimacy of Stuttgart 21. In other words, opponents can be the conduct of conduct aimed to shape the behaviors of the environmental subjects who had relatively more power. Paralleled situation can be seen in public participation in the form of voting such as the election in March, 2011 which made the zenith of Green Party in Germany and direct democracy like referendum in November of the same year, which embodied the endeavor by the Green Party and other rallies. By appealing to the polls, opponents’ wills would serve as the basis of legitimacy for potential cancelation of Stuttgart 21 in the future since under this situation DB and government will be obliged to abide by the democratic outcome. With all these premises, participatory mechanism also demonstrated the power of governmentality as both sustainable development and risk society have done.

Ironically, the outcome of referendum granted the legitimacy to the continuing construction of Stuttgart 21. Confronting this situation, Green Party and some of the opponents behaved according to the rule of democracy though they were still dubious about many aspects of Stuttgart 21. In the meantime, there were some people still trying to raise the awareness of unfairness and controversy in respect to the nature of referendum, which to some extent resonated with Boholm’s (2008, 136) pointing out that “the majority may want to make certain decisions even though the decisions may have negative side-effects for a minority, and without allowing the affected minority agency in relation to the matter decided
upon”. By complying with democratic rule, Green Party can maintain its authority as one part of the coalition government in charge of Baden-Württemberg whilst the opponents (who obeyed the outcome) can act as properly eligible citizens. On the contrary, opponents who kept questioning and being resistant may simply undermined their reputation and legitimacy.

6.2 The Landscape of Gap and Actions of Environmental Subjects

As mentioned above, the landscape of gap can be seen as the competition court for environmental subjects to win the recognition of how the environment of Stuttgart city should be governed. Therefore, as can be seen in previous subsection, both the pros and cons were shaped by the governmentality in terms of sustainable development, risk society, and participatory mechanism in decision making process; while people form the cons side were shaped and positioned themselves within the intertwined context based on governmentality depicted previously, they also interpreted how the counterparts which form the pros side should or should have shaped and positioned themselves. The cleavage triggered by Stuttgart 21 between environmental subjects can also resonate with Uggla’s (2004) illustrating how common ground was kept up in the air when no constructive mechanism was offered for different sides, which were shaped and influenced by the institutions they located, to reach compromise or common ground. With this premise, the actions of claiming legitimacy only led to broaden the gap between subjects with different interpretations and principles that can’t be abandoned.

On the other hand, the patterns based on the actions / reactions in Stuttgart 21 can be outlined by the concept of schismogenesis, which “refers to process of social differentiation
and opposition … where individuals’ reactions to the actions of other individuals influence and modify their actions” (Bateson 1935, 1958, 1973; Nuckolls 1995; Boholm 2008, 133); in addition, one can react to the other’s action by either (1) the same or (2) complementary behaviors (Boholm 2008, 134). The first sort of pattern – the same versus the same – can be seen in how both side managed to claim the legitimacy. For instance, while the pros used expert knowledge to assert the advantages and risk management, the cons also used expert knowledge to claim the antithesis of Stuttgart 21 as well as the better alternative K21. Similarly, while the cons pointed to the risk triggered by the project, the pros also indicated to the same risk that the cons would face as well in reality. When DB and government designed the field where desirable knowledge can be shared and heard, the cons simultaneously established the platform that enabled different perspectives and voices could be spread. Furthermore, whilst the cons voted for Green Party and forge the birth of referendum on the basis of democracy, the pros also asked some of the opponents to behave according to democratic rule after the referendum finished. In other words, both of them appealed to the legitimacy shaped in the context of sustainable development, risk society, and participatory mechanisms in decision making process to gain the legitimacy of self as well as the illegitimacy of the other. The second sort of pattern, reacting by complementary behaviors in the form of contrast pairs such as dominance versus submission (Boholm 2008, 134), can also be found in many occasions. For example, tress felling and demolishing train station, both of which were done legally, caused damages to the social meanings and memories treasured by citizens. The asymmetry relationships between the pros and cons referring to power, resource, media, and so on also manifested this pattern. Moreover, dominance versus submission was explicitly presented by the outcome of referendum which guaranteed the Stuttgart 21’s heading straightforward; as can be seen above, some of the opponents had the fear of living in Stuttgart 21 and thus would like to change their shopping and recreation spaces.
Nevertheless, the landscape of gap also existed among opponents as different reactions to the outcome of referendum. The two patterns based on schismogenesis could be seen as well. The first pattern became conspicuous when Green Party’s obeying democratic rule was followed by some opponent’s changing voting in the future as well as the continuing of demonstration. The second pattern was made salient by opponent’s feeling of being betrayed by Green Party, which was perceived as not paying enough attentions to their followers. These not only pointed out that the landscape of gap outlined by Stuttgart 21 was complicated beyond dichotomy based on the pros and cons but also presented that how to settle down controversy and bridge the gap were such delicately sophisticated given that multifold governmentality and accompanied diverse interpretation rendered the forming and actions of environmental subjects either controllable or uncontrollable. With this premise, Stuttgart 21, which is perceived as the exemplification for similar project in the future, only shows that there are still many lessons for us to learn from before a more constructive, more accountable, and more legitimate way of decision making comes.

7. Conclusion

This research investigates the controversy over the project Stuttgart 21, which is being progressed in Stuttgart, the capital of the state Baden-Württemberg, Germany. Stuttgart 21 is one part of the Stuttgart-Ulm rail project and its mission is to reconstruct and transformed present station, which is a terminal station on the ground, into an underground, through station. With Stuttgart 21, a win-win situation in terms of environmental and economic sustainability will be created for Stuttgart city and its residents. However, many people are not that
optimistic about Stuttgart 21 owing to many factors such as tress felling, risks in respect to groundwater and geology, financial cost, and the cultural value of present station. The gap between the pros and cons is so big and it seems that the healing of the cleaver is not to come in near future.

Therefore, my research aims to understand what actions both sides used in order to claim the legitimacy which would potentially influence on the progression of Stuttgart 21; it also explores the landscape of gap unfolded upon those actions. In order to analyze the findings, this research sees the DB and government – the typical governors were to be discussed in conventional literature – as environmental subjects, who shape and position themselves according to the new relationship with the environments they are located, since they are not outsiders overlooking the world but one part of the context and circumstance where they have to act and make response. In other words, the theory of governmentality, which reflects upon the concept of conduct of conduct that shapes and controls desirable, proper behaviors of the governed, is also crucial in analysis; in the case of Stuttgart 21, sustainable development, risk society, and the participatory mechanism in decision making serve as the three manifestations of governmentality that shape the conduct – actions, interpretations of self and the other, and so on – of the pros and cons.

With the material from online news / articles, Facebook forums, mail interactions with informants, and face-to-face interview with people in Stuttgart, the research found both sides tremendously depended on knowledge expertise to claim legitimacy and the illegitimacy of the other given the contexts of sustainable development and risk circumvention. A paralleled situation can be seen when DB and government saw the public participation as complete and thus legitimatize Stuttgart 21 in the context of risk society whilst the opponents evaluated it as
destitute and thus illegitimatize the project. Moreover, the controversy over information transparency reflected that DB and government were rendered as environmental subjects and in the meantime they also played the role of typical governors – the conduct of conduct – who controlled the creation of specific knowledge and the desirable behaviors of the environmental subjects that will subsequently enhance the legitimacy. Confronting this situation, opponents appealed to diverse ways of participatory mechanisms such as demonstration, Mahnwache, representative democracy, and referendum; with these approaches, they not only created the field where different values and knowledge can be shared and deliberated and thus gain support and legitimacy but also played the role of governor to force DB and government – as the environmental subjects – to act accordingly if the will of citizens said no to Stuttgart 21. Ironically, the referendum granted the legitimacy to Stuttgart 21; given this democratic result, some opponents act accordingly while some endured in resistance since the information for voters to make judgment was also called into question; under this condition, the continuing resistance can potentially undermined the reputation and legitimacy of the opponents.

All these actions of claiming legitimacy in the issue of Stuttgart 21 that shaped the landscape of gap can resonate with the concept of schismogenesis, which classifies two patterns of action / (re)action: the same behavior versus the same behavior and the behavior responded by complementary behavior. In this case of Stuttgart 21, the former can be seen in how both sides depended on expert knowledge and on what proper behaviors were supposed to be in specific context while the latter can be exemplified by the powerful DB and government versus opponents without power and resource. Nevertheless, the paradox within the cons side explicitly emerged after referendum was done as shown by different reactions to the democratic result. The paradox between opponents pointed to not only the destitutions of
communication within the cons side but also how complicated the landscape of gap was beyond typical dichotomy based on proponents and opponents.

Due to the barrier of German language, this research may only present one façade of the landscape. Nevertheless, this properly means that the landscape of gap needs more research and investigations in the future. This study also prompts the society to ruminate on how we can pay attention and respect diverse voices. This doesn’t mean that this research aims to lobby for extreme relativism. Instead, it reflects how crucial it is to further understand how we can make decision making relatively more accountable and legitimate given that the landscape of gap is tremendously complicated as partially outlined by the asymmetry power relationships between Green Party and its “previous” followers. By paying attention to the delicate power relationships, more constructive mechanisms of participation can be potentially fulfilled, and subsequently the landscape of gap can be weathered gradually by the contributions of diverse environmental subjects.

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