

Actor-Network and Community's Adaptation under Special Economic Zone Development ; Case Study of Notheastern Thailand

Phanyupha Thammawat
Thanapauge Chamaratana

DOI: <https://doi.org/10.37178/ca-c.23.1.057>

Phanyupha Thammawat, Department of Social Sciences, Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand

Email: phanyupha@gmail.com

Thanapauge Chamaratana, Associated Professor at Department of Social Sciences, Faculty of Humanities and Social Sciences Khon Kaen University, Thailand

Email: thanacha@kku.ac.th

Abstract

This article examined the patterns and interplay of an actor-network in Thailand's border special economic zone development and identified the factors affecting its capability in communities' livelihood restoration. An exploratory mixed method was applied. The documentary research, an in-depth interview with 35 key informants, and non-participant observation were conducted to trace power relations within a network. The survey of 375 residents, and multiple regression techniques were adopted to identify the influential factors in communities' adaptation. Results revealed that the network of SEZ establishment was overlaid with a preexisting network of locals' livelihoods, through a land right reform. The post-coup legislation was a key actor that dominated the relational flow within a network. Whereas the statistical analysis shows that local communities are not against the idea of SEZ, but more decentralization and constructive engagement of provincial authorities and community's participatory platform are required as supporting factors for communities under the transition.

Key words: Actors-network, Special economic zone, Livelihoods, Community, Adaptation

Introduction

Economic liberalization and foreign direct investment have been the centerpiece of a national policy for most of the developing countries in the globalization era. The establishment of special economic zones (SEZs) was the widely used model designed under the ideology of neoliberalism as a strategy to draw FDI into a specific area by a motivated tax rate and privilege conditions for trade and opportunities offered to investor. Due to numbers of Asian countries adopted the policy as their path of development, SEZ was called "the Asian Growth Model" (Agarwal, 2018). An influential factor behind the popularity of a SEZ as a strategic policy option was the robust of China's SEZ in Shen Zhen in the 1980s. Its magnificent contributions were not only in spurring domestic economic expansion by attracting FDI into one of the country's most underdeveloped regions, but it also casted an effect on increased GDP rate, poverty reduction, and a Chinese economic transformation. The success story

and the ideology exported by Chinese government to its trading partners had made the SEZ a masterplan for many developing countries [1].

As elsewhere in Asia, SEZs were introduced as Thailand's policy option in the 1980s and have been the mainstream of the national development plans up until now. It was categorized as a strategic policy innovation that aimed to promote macroeconomic growth and function as a microeconomic inducer [2]. The SEZs establishment in Thailand can be divided into 2 generations. The first wave started in the 1980s in a form of export processing zones and closed industrial estates, mostly located in metropolitan area [3]. A turning point in the national SEZs development plan started in 2014, after the coup d'état, which brought the national policy and legislative context concerning SEZs to a totally different socio-political context.

The National Council of Peace and Order (NCPO) announced a new direction for the national development strategy which focused on a different pattern of SEZ establishment. The government, as other counties in Mekong River basin, was expecting to reap benefits from the geographical proximity of the cross-border infrastructure in the GMS Economic Corridor program [4] and the emerging regional cooperation from the ASEAN economic integration [5]. Therefore, the SEZ site was shifted from the industrial estates in metropolitan areas to 10 border provinces within the range of a possible cross border connectivity development with the neighbor countries. The administration related to SEZ was transferred to the newly assigned institution, the National Committee of Special Economic Zones (NCSEZs) which exercised its authorities under the NCPO's special legislative frame which had escalated the current policy implementation to the drastically different political context [6].

Another reason why border area was a target for the current SEZ plan was because the NCPO aimed to capitalize on its transnational dynamism. The unique characteristic that border town possess was the physical and cultural contiguity that inherited in the daily life activities of the people from both sides of the borderline. Through decades of communication and interaction, the communities in the area had forged a strong socio-economic bond through formal and informal trading, marriage, and sharing norms. The flows of labor, commodities, and cultural exchanges among border communities are intertwined in their livelihood [7]. This is an important factor which fostering a transboundary economy and a pool of shared resources, which are a significant incentive for investors [8].

The SEZ establishments scheme was divided into 2 phases. The first phase started in 2015, covering 10 districts and 36 subdistricts of Tak, Mukdahan, Sakaeo, Trat, and Songkla. The second phase commenced in 2016 with total area of 12 districts and 55 subdistricts of Narathiwat, Chiang Rai, Nong Khai, Kanchanaburi, and Nakhon Phanom provinces. According to the "20-year National Strategy: 2018-2037" and the "12th National Economic and Social Development Plan: 2017-2021", the SEZ plan was categorized as an urgent agenda which the implementation process was allowed to proceed under the NCPO's fast track legislation. It was expected to be a resolution for poverty reduction and income disparities for peripheral regions. The government claimed that all 10 SEZs could be an incubator for both national and local economic growth, higher employment rates which would lead to better living standards of communities on site [9].

Since the beginning of the first phase, the government centralized plan has emphasized on the infrastructure establishment which currently leads to controversial issues such as land allocation, the uprising of local community during the process [10]. To expedite the infrastructure transformation, several decrees were announced to create the legal exemption concerning conflicted issues such as land acquisition [11], urban planning restrictions, environmental impacts assessment and dispute management. These new regulations were categorized as the "SEZs Facilitating Measurements" of the fast track. Though the decrees had successfully accelerated the

physical development process, it was criticized for serious social issues such as a high state-centricity administration and the absent of community's participation[12].

The reduction of public hearing and informative communication platform are the grave concerns of the communities within the SEZ site because it effects the capability of their livelihood restoration after losing significant household's assets under the SEZ transitional process [6]. The current infrastructure developmental programs did not only bring about physical changes to the landscape, but it also caused many socio-economic permutations in the communities' way of life which is underrated in the current SEZ plan. Most of governmental policy papers only highlighted the promising benefits after the SEZs are fully operated, leaving the daily real-life "transitions" of local communities at the margins of this national development goal.

This research examined how community residents restore their livelihoods during the transitional periods of SEZ establishment, where the right to participate in the process and the household assets, namely land and significant social capitals such as information and resource assessment, were strictly restrained under current post-coup legislation, through the Actors-Network (ANT) theoretical framework. The approach will allow us to shed a light on the material-semiotics intertwined network of this development. By following the practices of actors within the communities along the path of SEZ projects, this will reveal how the current state-centric infrastructure development regime have fabricated a local way of life, politics, and bureaucracy within which it operates[13].

Theoretical Framework

This research adopted the ANT of Bruno Latour as an analytical framework to explore how the local community adjust their livelihood to coup with the transition during Thailand's border SEZ establishment under the post-coup political and legal context which started from 2015 up to the present. In this paper, ANT was used to navigate a network of the SEZ establishment process which perceived by the NCPO as a "policy innovation" for enhancing a national economic growth and improving a living standard of the community where it was situated (Office of the National Economic and Social Development, 2017). As a new actor imposed on the community's livelihood network, SEZ and its implementation are considered as the nodes of changes within the trial-and-error national development strategy which this study aimed to explore.

Tracking Evolving Networks of Interaction: Actor-Network Theory (ANT)

ANT is one of the most influential approaches in various fields since the 1990s. It was originated in the school of sciences and technology study (STS) around 1980s and late on widely used in the field of sociology and anthropology[5]. This is due to its challenging ontology which expanded the field of an interesting subject of social study from human-to-human relations to a socio-materials interactions where non-human elements such as ideas or infrastructure are treated as equal agential "actors" within the relational network. It is a practical theory that looks at specific cases and develops its approach out of the empirical evidence found from actors' interaction tracing [10].

Instead of a solid analysis approach, ANT is more of a tool that opens the analytical process to all possibilities. It allows the researchers to observe and study the network from the empirical phenomena created by the actors 'interaction. By tracking the network, we will see which node may fail to redesign a pre-existing assemblage or a successfully associated and perform its task as an active actor of the new defragged network. Social analysis usually emphasis on a successful network and define that as a "society" but there is also a lot of actors that were shuffled into the network and fail to become functional parts of the social. Instead of, crossing out the failed case from the analysis like other theories, ANT suggests that the network investigations shall not be neglect the failure case. Such a failure is what happens when the actors are not

fully assemblage hence it cannot contribute to the useful interactions to the network. By noticing the failure, the result can be used as a policy suggestion; offering a way to reshuffle other actors involved or it can be developed into a framework for the network intervention for a resolution.

The fundamental ethics of ANT applied in this research are from the prominent works of Bruno Latour and John Law. They proposed ANT as a flat ontology which overridden the classical binaries analysis approaches namely the divided between social and science or human and materials. Furthermore, it opposed the idea of hierarchical order or any prejudice assumption when it came to social analysis [14]. The phenomena analytical method through network tracing for ANT does not start from defining what exactly does society comprises or what it should be. On the other hand, it seeks to develop an approach that looks at the empirical interaction and mutual influence that developed by certain elements and the ways it enters contact with human in real-life practices in a way that contributes to a particular kind of socio-materials network.

In this paper, SEZ development entered the context of the local community's livelihood. The bureaucracy, the infrastructure installations, the land expropriations, and many practices were formed as a web of "policy in-action" on daily life basis at the local level which is the assembling process this study targeted as a unit of analysis. ANT challenges the traditional idea of perceiving innovation and society as a puritan and stabilized element which would possess the exact same meaning and function as it was first created regardless of the changing context. On contrary, ANT considers all elements in society as the subjects under an ongoing process where their meaning and roles are continuously evolving through the interconnected relation with other components where they are situated. The theory attempted to capture how, where and to what extent a non-human element practically influence society, and vice versa [15]. The method of doing so is by observing the social interaction through each phenomenon while keeping in mind that human and non-human actors are not 2 different entities. Indeed, they are just 2 different nodes entangled within the same unit of analysis called Actor-Network.

On the ontological point of view, ANT offers a different path for researchers to approach society. Instead of establishing a theory of why the world is the way it is, ANT leads to the empirical story of "how things came together and created what we saw as an evolving reality [14, 16]. In ANT ethics, both human and non-human are equally referred to as "actants" since they are both acting with equal agential influence within the systems [17]. Latour strongly emphasis that social does not just exist between human being and does not hold a fixed composition. It is not a finished form and does not require any specific kind of material or human property. Rather it uses a type of connection among things that are not themselves as in a puritan state because something becomes social actor by entering a particular kind of connected network. It is not a property that any element can acquire by itself outside a kind of connection amongst other things.

Consequently, the social phenomena in ANT essence refers to this process of "reassociation" and "reassembling" elements [10, 16]. For example, the building of the GMS Economic Corridor does not involve just the establishment of physical infrastructure. It also required an assembling practice with other actors within the pre-existing conditions through its usage in pragmatic context to fully function as a part of regional economic inducer. The infrastructure without the association of bureaucracy, trading activities, and practices around it, all the infrastructures would not be able to perform its task as an economic corridor and vice versa without these materials the economic activities in the areas, the international corporations would have been different [18].

Many social sciences approaches take everything that has been innovated as an accepted product. Such perspective makes it more difficult to notice and understand the transformation process that is taking place between innovation and practices.

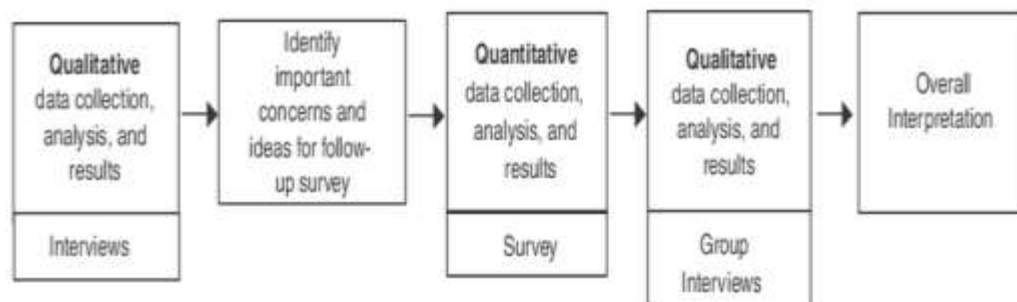
Contrarily, ANT positioned itself on the side of the innovator who is trying to develop a new way of connecting actors within the network. It also focuses on how new actors changed themselves as essentially this process of developing a new connection that catches on socially and becomes part of the new way of doing things or accepted practice in the network. From this perspective, ANT treats society as a complex web of relations where various institutions, elements and people continuously interact. Elements become part of society when they are taken into the process of association with others and form a particular connection and contribute to a certain social practice [10]. In this way, social entities, institutions, norms, policy etc. are not one-size-fits-all formula. On contrary, it is the specific results of the prior work of constructing connections and assembling relations that created through interactions of each actor.

Therefore, the role and effects of SEZ in each area should not be treated as a finish product from the government while the community should not be perceived as a passive structure of the developing process. The objective of this study is compatible with ANT ethics since it aims to explore SEZ policy in the practical context through a real life-experienced of residents who has been struggling to reassociate their livelihood practices with new actors which were imposed to the area and network of daily life. Under the transition, both the policy and the life of local community are interactively shaping each other meaning and roles within their interplaying network.

Methods

This research adopted a sequential exploratory mixed method which the data collection and analysis were divided into 3 phases (Figure 1)

Figure 1: [11, 19]. The Sequential Exploratory Mixed Method



First, a qualitative phase was designed to deduce actors in the SEZ establishment process involved in local livelihood adaptation and trace the pattern of their interaction within the network. The expected outputs from this phase were 1) the identified pattern of interaction and power-relations between actors within the process, focusing on the triangular assembling between the infrastructure construction, regulation, and local livelihood practices. 2) the identified influential actors in the network, which would be treated as the input for the questionnaire designed and developed in the next research procedure.

The documentary research was used as the first step of a data collection to understand an overview of the SEZ development, both at international and national arena, and to trace the actors involved. The reviewed documents were categorized into 2 groups according to the sources: 1) governmental sources, such as policy paper, budget plans, laws, and reports of the projects 2) non-governmental sources, such as academic research and international development organizations. At this point, a preliminary set of actors was identified according to their mandatory roles as appeared in the papers and transcript by using the ANT.

The ANT's network tracking methods are diversified depending on the field of studies and research design [20]. This paper applied the ethnographic methods which

emphasis on fieldworks techniques namely, in-depth interview, focus group, and non-participant observation. Through the methods, the researcher explored the material discursive practices of SEZ projects within the community's livelihood network that are at play. The focus is particularly on the everyday-life activities of villagers who directly affected by policy implementations such as land expropriation and those who make a living within the infrastructure developing areas. One of the objective of this step was to sensitized to the way the pre-existing network of the local livelihood associated themselves with the new actors from the SEZ development process to the way that specific elements are also participating and affecting to the community's livelihood practices.

The fieldwork data gathering was done by in-depth interviews and non-participatory observation. The objectives of this step were to cross-check the identified actors from the documents with a real-life operation in the targeted communities and to trace the interactive network between them. The unit of analysis here was an actor - network, which communities in the SEZ sites perceived as their tools to sustain a livelihood. 35 key informants for the interview were chosen by a purposive sampling technique [21, 22] under the following conditions: 1) local villagers who have live or work in the communities which were selected as the SEZ construction sites for more than 5 years since the SEZ projects had started 2) the landowners listed in the SEZ land rights reform process 3) government officials in charge and 4) influential private sector. Regarding the non-participatory observations, the research team spent 5 days per month during the 6 months, between June 2020 and December 2020, living with villagers' families to foster a trust-worthy bond for an in-depth data exchange and to conduct an observation of their daily livelihood adaptation.

The second phase of the research was done through a quantitative method using a questionnaire as a data-gathering tool and applied a multiple regression, statical technique, as a data processor. The data from the qualitative phase was deducted as variables then applied in a survey design to measure the level of their significance to other actors within the livelihood adaptive network. The objective of this phase was to identify the actors and a particular power relation which the community valued as significant factors in their adaptation during the transitional period of SEZ establishment. The survey was conducted with 375 volunteers who have lived or made a career in the communities where 3 major Mukdahan SEZ infrastructure development projects are progressing. The sampling size was calculated according to the Krejcie and Morgan table [23].

The last phase of the research was done by a focus group technique. The 3 rounds of monthly small meetings between targeted sectors were organized under the support from the Chamber of Commerce of Mukdahan province. The participants were representatives from the communities' residents, municipality officers, provincial administration, and an active private sector. Due to the COVID-19 public health restriction, each round of the focus groups consisted of 15 participants who were chosen from the key informants and volunteers from the first phase. During the meeting, the research team provided a communicative platform where all parties were presented with the research findings and asked to give feedback on the topic of what network interventions were needed for supporting local communities during the transition, from border towns to an SEZ. The data and feedback from the activity were used in the final phase as a policy suggestion.

Result

From the border town to the strategic SEZ

Mukdahan province was the 1st northeastern province underwent an implementation of the national SEZ strategic development plan since November 2014 [24]. According to the NCPO's announcement, the SEZ covered 3 districts situated along the Thai – Laos PDR's border with the total area of 578.50 square kilometers. The province was chosen due to its geographical proximity. It is located at the heart of

various regional development plans, most significantly, the Greater Mekong Subregion Economic Co-operation (GMS) and the Economic Corridor under the support of Asian Development Bank [3]. Moreover, the province has a high border trading value which was rapidly robust since the establishment of the 2nd Thai – Lao Friendship bridge in 2006. The favorable geographical location and well-established transportation route had put Mukdahan in a strategic position as the hub of cross-border logistic both in the perspective of the Thai government and regional development organization [25, 26]

The NCPO planned to take advantage of a strategic location to attract foreign investment into the newly established industrial estate, “Ni Kom Kham Ah Huan”, which was the first prioritized projects of the SEZ. To fulfill the estate establishment, the policy implementation was heavily based on infrastructure development especially those contributed to logistic connectivity with inland industrial zones and those required for the industrialization process. This aimed to enhance the competitiveness of the estate comparing to the pre-existing SEZ in neighbor counties [21, 27]. The results from the governmental policy paper reviewed and fieldwork showed that most of initiated projects and budget plans were focused on 4 infrastructure projects located in 1 district, Amphur Muang, covering 3 sub-districts respectively; Kham Ah Huan, Sri Bun Ruang, and Bang Sai Yai which accounted to more than 70 % of total Mukdahan SEZ area. Under the plan, local villages were given a new positioning, from the border communities to the site of new industrial ground and economic space.

The Actors and their interplay within the network of Mukdahan Industrial Estate Development

According to the Mukdahan SEZ’s annual progress report since 2014 - 2020, 4 infrastructure projects were prioritized as a “Flagship Program” which must be accomplished as the fundamental components of the SEZ by 2025. Therefore, most of the administration, budget and local’s adaptation of the development process were revolving around them [5]. In this essence, the projects were considered as the nodes of changes within the network of this study.

The purpose of the projects, as stated in the provincial implementation plan, were categorized into 2 groups. One is the industrial zone which consisted of the industrial estate establishment, the double-track railroad, and the “Economic Ring Road” construction. These 3 interconnected projects were designed to support the industrialization of the area. The construction and operations site were clustered in 3 villages of the Kam Ah Huan sub-district, located 15 kilometers from the border crossing bridge. Whereas another project was categorized in a different group due to its purpose was in creating a new economic and tourism space along the Mekong River border in Mukdahan downtown which has been the traditional hub of Thai – Lao PDR cross-border unofficial trading for local merchants and tourism activities [6, 28]

The first implemented project was an industrial zone, Ni Kom Kham Ah Huan. The planned area covered 1.736 square kilometers of public forest, pastureland, and communal land utilized on daily life basis by 7 villages in the sub-district for over decades. The project started in 2015 as soon as the NCPO announce the first phase of a new national SEZ strategic plan and has been carried out under a special post-coup legislation of land right reform which was the new legal framework tailored to accelerate the development process by cutting off procedures which the government perceived as a time-consuming or conflict triggering process [29]. The regulations were purposively allowing an exception of specific law enforcements and overridden significant pre-existing social checked-balance mechanisms such as the public hearing, community engagement platform and environmental impact assessment (EIA) [19].

Consequently, the bureaucracy around the border SEZ implementation was drastically different from the pre-coup context. It was proceeded in the a “fast track” policy manner [1] to accelerate the development process. In comparison to the prior

wave of national SEZs development, the current network did not only comprise of various new actors but also underwent the unusual political and legislative structure namely the state of “graduated sovereignty” [30] where power-relations between main actors like the state actors, resource materials, private sectors and communities were highly dominated by the government which had exercised its manipulative power through new legal actors such as NCPO’s special decree and “Section 44” of the interim constitution of [24]. In this essence, the SEZ is no longer progressing according to its original liberalism ideology but more of an unexpected neo-liberalism imaginary [31]

According to the implementation plan to enhance a capacity of the planned estate, 2 multi-module of transportations projects were launched in parallel with the estate establishment. The double track railroad project is a new rail line cutting across the northeastern region. The strategic significance of the route is to connect the industrial zone with the path of a regional logistic system, the East-West Economic Corridor, which Mukdahan would serve as an aligned gateway to Indochina market at the 2nd Thai – Lao PDR Friendship bridge [32]. The rail line cut through Kam ah Huan sub-district and one of the transit stations was planned to locate in the same area with the estate, Kam Ah Huan and Pran On villages. Therefore, the huge land disposition for the infrastructure establishment was imposed in 2015 and quietly finish in the 2017 with the absent of community engagement and local resistant [6, 24]

The land expropriation and EIA of the project was proceeded under fast-track policy to facilitate the process. No public hearing was required, and the project had started while the EIA procedure was still proceeded [33]. Following the project, the Economic Ring Road project was announced. It was the 14.50 kilometers route cut through a former local road of 7 villages in same district aimed to connect the industrial estate and the railway transit station with the pre-existing Asian Highway route heading toward the 2nd Thai-Lao PRD Friendship bridge which was the gateway to the custom unit and the Mukdahan import-export logistic business center [34].

The data both from the documentary reviewed and a fieldwork showed that the SEZ development process was heavily based on physical infrastructure development. The industrial estate establishment was the centerpiece of interactions within the network. The infrastructural projects had taken up most of the 5-years provincial budget planning whereas other emerging social and environmental agendas were treated only as ad-hoc issues by the local authorities. As a result, the communities were left to coup with risks and lost without a safety net. One of the reasons given to the absent of a solid measurement or planning regarding the matter was due to it was no longer required under a new SEZ ‘s fast track legislation. The check-and-balance mechanism such as social feasibility study and EIA were allowed to be done in parallel while the projects proceed and many were proved to be inadequately done [19]

According to the survey, the grave concern for the locals were the land rights reform and a expropriation framework under the new NCPO’s decree. It was vivid that “the land”, both in a form of households and the communal property, was the significant actor functioning as capital asset for the local ‘s livelihood. It was transforming its value and function through the interaction between the governmental agencies and the communities in network of SEZ development. Though only 25% of the volunteers had lost their land and over 56 % had other sources of income besides farming on their land but the reforming was still the center of their concern. This was due to following factors; 1) no sufficient communicative platform for communities which led to the inadequate information flow in the network regarding the concerning matter and 2) the unusual legal framework related to the compensation and land expropriation procedure.

The land accumulation under SEZ projects were proceeded under a post-coup decree, known as Section 44 of the 2014 interim constitution of the kingdom of Thailand which allowed a land reform process to be done with an absolute power of the mandatory governmental agencies. The communities were turned into a passive

actor due to their right to participate was legitimately ridden in the procedure. Through the endorsement of the legal actor, the state had altered the power relations within the network. As a result, the relational flow between actors was diffracted. The governmental actors were empowered to act manipulatively in the network while local community were treated as a passive object of development. Under the new power relations, the significant capital assets of a community's livelihood namely land and natural resources were redefined as a "governmental property" awaited to be redistribute to the investors. Moreover, the locals were made more vulnerable in a dispossession regime dues to the deactivated pre-existing social check-and-balance mechanism.

On a land expropriation issue, the government attempted to reduce the effect on the residents by avoiding the private land and choosing to locate the industrial estate on the degraded forest and underutilized commune land. By identifying the area as a state-owned property, the land accessibility was granted to the National Treasury Department administration by the NCPO announcement[35] Though this land right reform was legitimate, many locals argued they were severely affected by the sudden loss of the communal assets. The claimed was undeniable when tracing through their livelihood network since the area was the traditional commune pastureland utilized by 7 villages in the sub-district for decades. This indicated that the land held a different value and positioning in the perspective of the governmental actors and the local communities which resulted in diffraction within their network of actions[15]regarding the land management issues.

For local communities the site of the industrial estate was not just an underutilized state-owned property. Its long historical background was intertwined with the life of the local for many generations. In 1987, which was the period of the Indochina war the area was a cantonment occupied by the communist party and ended up as a conflicted red zone. After the battle settled, due to the national security policy, the government deforested the area and allowed the local and the remained patrol troop to establish permanent communities. The space, which is now the industrial estate site, was announced as a community forest which served as the common pastureland and a natural food and water source for local communities[36]. The ownership and the value of the land were developed through the utilization and went beyond the title deed. Therefore, the land was considered a common community capital asset which was a significant pillar of communities' resilience. This was the pre-existing network of local community's livelihood with the land as the centerpiece before the power- relation within the network was changed by the new set of actors from the overlapping network of SEZ establishment.

The diffraction of meaning and role of "land" in the network of local livelihood first started in 1992 by the intervention of governmental actors when the state transferred the land right and administration to the Bureau of Animal Nutrition Development and the National Crop Research Institute [36]. The land was shifted its value and role from local's commune asset to the government property. The organizations transform the areas into a researching crop plantation, but they tried to engage the local communities in the land usage by hiring the residents as a plantation intendant, general employee, and rent the underutilized area to the farmers. During the rainy season which was the most fertile period of the wild herbal and food, the organizations would grant the locals a temporary access to harvest the seasonal natural products in the area. By the policy, though the l right over the land had been taken from the communities' management they were still able to gain some income and access to the land. In this essence, the platform for the community engagement was still provided. This kept the relational flow between the new governmental actors and the locals in balance though the center of power-relation was adjusted.

The livelihood network of the community underwent another diffraction in 2014 when the NCPO announced the land acquisition act for SEZ development which was exercised under Section 44. This legislation allowed the land reform in the district to

proceed with an exemption of previous regulation regarding urban zoning, EIA, and public hearing procedur[35]. The addition of Section 44 to the network had dramatically changed the power-relations in the network. Its highly dominated authority had shut down the official communicative platforms between involving parties.

The in-depth interview with the affected villagers and community leaders revealed that most of the residents decided to stay silent even though they were not pleased with the current land reform and the estate establishment process due to the fearsome of the power exercise under Section 44 which given an absolute power to the mandatory authorities to manage the development process regardless of the pre-existing regulations. As stated in the decree.

“In the case where the Head of the NCPO is of opinion that it is necessary for the benefit of reform in any field and to strengthen public unity and harmony, or for the prevention, disruption or suppression of any act which undermines public peace and order or national security, the Monarchy, national economics or administration of State affairs, the Head of the National Council for Peace and Order shall have the powers to make any order to disrupt or suppress regardless of the legislative, executive or judicial force of that order. In this case, that order, act, or any performance under that order is deemed to be legal, constitutional, and conclusive, and it shall be reported to the National Legislative Assembly and the Prime Minister without delay.” [37]

Due to the legislation, villagers were insecure to speak up individually about their rights in the development process namely the rights to access information and the compensation for the land expropriation [6]

Therefore, instead of expressing a strong resistance movement, villagers rather took the more compromising way around. The adaptive act of the residents in 3 cases of SEZ developments site within the network had shifted from the classic land right reform resistant to a practical issue like how to relocate their livelihood with the currently available capitals asset or to reassemble their daily life with the new set of actors within the network of SEZ development. The current developing stage of 3 projects in the industrial estate area is still in an ongoing process. Only the land acquisition was completed as a result the land and the legislation regarding the practices in the process was the center of the current community’s adaptation as far as this study is concerned.

Actors and their interplay within the network of Mukdahan’s new economic and tourism space

The network pattern in the 4th case of SEZ development projects showed the significantly different set of actors and the interactions from the previous cases. The establishment of a tourism and new economic space along the Mekong River project had been reported with delayed physical infrastructure establishment. Although the project applied the same SEZ fast track legislation, but the social context in the area was more complex. When closely examined the interaction within the network of development the community’s adaptation in the area, many highly dynamic interactions between actors were found.

First, the postponement of infrastructural progress was largely due to the natural actor such as the Mekong River and the series of dams building in the sub-region which were beyond the NCPO power to take an absolute control. The construction of a cross-border tourism ferry station, a new site seeing spot, and the upgrading of a shopping hall along the riverbank, which was the highlight of the SEZ project in the Muang Mukdahan district, were affected by a sudden flood and highly fluctuating water level during the past 3 years since the Mekong dam-building series in Lao PDR and China alter the water discharge system [21]. Due to this condition, the river and its changing tide were the unexpected influential non-human actor of this SEZ development network found in this case.

The site of a construction project was well-known as a traditional marketplace for local communities along both sides of the Thai-Lao PDR border called, Indochina Market. It is comprised of dense SME business and residential communities of merchants, restaurants, hotels, old temples, and the Mekong River viewpoint which made the area a major tourist attraction and the robust marketplace for unofficial border trading since the 1980s. The area was chosen as a target for a new economic space development which focuses on; 1) enhancing the cross-border tourism zone 2) creating the modern economic space. There were more than 300 shops of local SME businesses and a large community of stalls of unofficial cross-border products located in the zone before the construction of the planned SEZ project started.

Aside from the governmental agencies, the role of 3 active private sector organizations and the collective acts of local merchants communities in the area were vividly represented in this network of development. The Chamber of Commerce, the Young Federation of Industries, and the Association of Vietnamese Thai in Mukdahan were the leading actors within the network which exercised its economically influential connection with the Office of Provincial Commercial Affairs and Provincial Labor Office to initiate many communicative platforms for the involving parties in the development process.

Their objective was to increase the private sector and local participation in the project's implementation. They created the communicative platform such as hosting a quarter meeting which the representative from interested private organizations, communities, the cooperative officers would be invited exchange updated information on the SEZ development in the district. This action served as an accessible source of reliable information for communities. The platform was helpful to maintain the network's informational flow and offer the channel for a compromising interaction between the actors from different sectors which was missing from the network of the previous cases of industrial estate development.

The local merchants in the Indochina Market were mostly pristine Vietnamese Thai families who had been operating their business for more than a decade and 75 % of them own the shop or the building on the venue. They had developed their loose relationship and kinship within the merchants into an official collective act as the Association of Vietnamese Thai. It functioned as the representative of the local merchants which hold the significant influent on the provincial government agencies and politician. [11, 22, 32]. This association between the private sector organizations and local authorities served as the buffer and a source of bargaining power within the network for local retailers and residents.

In 2017 merchants' community on rented zone and hundreds of local stalls had to move out from the old Indochina Market and the space around the mandatory site according to the provincial announcement. The tourist attraction spots such as the underground shopping hall, sightseeing trail along the Mekong riverbank were shut down. The mentioned physical infrastructure had always been the supportive factor of the robust tourism and business in the area. They had formed a significant meaning and role within the livelihood network of the Indochina Market communities. Their absent had altered the socio-economic conditions in the network.

Theoretically, once actors within the network were disassembled, the power relations and the interaction within the whole network were affected and adjusted to maintain the network's function [15]. From the interview, many of the residents felt that their livelihood was greatly affected from the changes and the delayed of the project. Some lost their stall space which was their major source of income, the hotel and the restaurant owners suffered from the decreasing rate of customers since many tourists' attraction spots were shut down during the construction.

Surprisingly the survey revealed that the communities in this case were not against the prospect of SEZ establishment and projects in the area. Some even speculated that the new infrastructural condition would contribute to greater opportunities for their business. Practically, they were against the current development process where the

platform for local participation and the adequate access to the information regarding the projects and planning were not adequately provided.

As appeared in the survey result, the information on SEZ development progress and knowledge on risks and challenges that might emerge in each stage of the transformation was perceived as a first ranking supportive factor for community's adaptation. Whereas from the residents past experiences pointed out that the involving provincial administration only provided the communities with limited information and was not in a timely manner. They were more of an ad-hoc measurement than a solid systematic informative platform. Indeed, to enhance the flexibility of communities' resilience, an information regarding the changes, risk and opportunities of each developmental state should be regularly provided in a proper timing so the communities had enough leap of time to prepare themselves with the suitable options management[34]. Therefore, the current SEZ development network is in an urgent need for informative and communicative interactions between communities and provincial governmental actors.

The solid collective movement of the non-governmental actors was found in this case. The group of affected merchants cooperated with the Vietnamese -Thai Association and the Chamber of Commerce had organized a peaceful protest movement through a media and sent a petition letter and to the involving provincial governmental agencies for multiple times to ask for the social engagement regarding the project's construction investigation and further development plan which more participation from private sectors and community would be considered[38]. Moreover, they continuously organized a regular meeting to ease the tension and find the cooperative-resolution to compensate their lost from the prolonged transitional period which the local merchants' communities in the area had to encounter.

Consequently, the multi-party's initiative, "Mukdahan Cultural Walking Street", was opened in 2018 under the authority of the Office of Provincial Commercial Affairs with a financial support from chamber of commerce and the association of Vietnamese-Thai. The objective of the project was to provide the affected Indochina market communities with a temporally economic space. The community members in the area and the former rental stallers of the Indochina Market were granted a special offer as the first prioritized group to reserve a space for their business with the lower fee.

The initiative had created a landmark to drawn attention from both local and tourists by building a "Na Ga Shrine" and a small community-managed public park which located next to the foot of 2nd Thai-Lao PDR Friendship Bridge. The initiative combined this scenic physical location advantages with the traditional religious belief of the Na Ga, the common sacred god in Mekong River basin countries[39]. The Shrine was the landmark for the marketplace which both served as the tourist attraction and given the meaning and religious bound between the space and the residents.

As the kinship toward the space developed, the merchants and the shops installation in the areas started to expand and become the famous spot in the wider spheres, to the transnational level. The residents had cooperated with the municipality authorities to form a committee where community leader, merchant's representative and private organizations had agreed upon the rules and management plans regarding this new economic space. As a results from the robust of the economic activities and the strong collective cooperation from the communities, the provincial administration officially promoted the area as "Mukdahan New Destination" and the national Tourism Authority had elevated the initiative from a temporary to the permanent tourist.

From this case, the role and meaning of infrastructure namely the Na Ga Shrine and the 2nd Thai-Lao PDR friendship Bridge within the network of the community's livelihood adaptation was beyond its physical quality or the materiality[24, 27]. The bridge was not function as an expected transport facility, but it was commoditized by the restaurants and merchants' community in the network. Its presence drew the attention from the tourists and the residents had used it as a valued added factor of the Walking Street. The shrine was also served as the commodity for the believers

which came from both local and from the neighboring Mekong countries tourists who shared the common belief in Na Ga god. The villagers had taken the opportunity to turn the Shrine into the symbolic holy souvenirs and other cultural products. This is the meaning and a social life of the infrastructure or the practical meaning of it within the network of the Walking Street communities. With the support from the private organizations and the active local authorities, the merchant communities in the area had adapted and restored their livelihood through the available capital assets within a network and successfully reduced the tension between governmental actors and the local merchants regarding the delayed infrastructure development in the former Indochina Market.

Supportive factors for the adaptive livelihood within the network of SEZ development

The result from the qualitative phase was in line with the statistical analysis. From 375 volunteering residents, 25% were directly affected by a land expropriation process, 15% were forced to move out from the former commercial rental area in the Indochina Market due to the establishment of the SEZ construction project. Over 71% perceived that although the expected industries have not been activated their investment in the SEZ as the state had planned, the current developing process had already affected to their daily life basis.

The first section of the survey asked the volunteering residents to rate the factors which they perceived as an influential factor in the livelihood adaptation during the transitional period of the SEZ establishment in their community. The analysis showed that there were 6 significant factors. Two negative factors are respectively listed: 1) having the main sources of income from working in the agricultural sector ($b=-2.217$, $\text{Sig.}=0.024$) 2) the number of lands engaging in the expropriation process ($b=-0.950$, $\text{Sig.}=0.041$). This can be conveyed that if the residents' income depends on the agricultural production sector and if they have a higher number of lands in their procession or the commune land in their community going under an expropriation, their livelihood will be more vulnerable under the current network of development.

On the other hand, the positive factors are as follow; 1) age ($b=0.393$, $\text{Sig.}=0.001$) the older is the wiser cliché can be applied in this case. The volunteers perceived that the older are more flexible when they encounter the changes in the current transition due to the factors like more working and life experiences, personal connection, respect from the others in the business field, the support from younger generations in the family and financial status. This mostly intangible factors are the social capital with the network of their livelihood. 2) the positive attitude toward the prospect of the future contribution from the infrastructure ($b=0.233$, $\text{Sig.}=0.005$) 3) The workplace located within the accessible distance from the infrastructure ($b=3.034$, $\text{Sig.}=0.006$). Both factors indicate that even though the residents were affected by the current project implementation, the positive attitude toward the fully furnished SEZ facilities in the future enhanced them in the adaptation. Especially if they live in an accessible distance from the infrastructures namely ferry station, ring road and the Indochina Market. They plan to utilize and engage the adapted lifestyle with the speculated opportunities raised from the projects or substitute the lost capital asset and turn the accessibility to the new facility into the livelihood recovery assistant.

The policy related factor is 4) the communicative and informative local governmental actors ($b=2.040$, $\text{Sig.}=0.031$). The accurate and efficient information from the involving governmental agencies is still lacking at the current process of development. Both the data from the interviewed and the statistic proved that the livelihood adaptation would be more flexible if the residents had sufficient information and time to prepare themselves beforehand. They can sort out the options and juggle their capital assets within their network to cope with the transition, especially on the land expropriation issue.

Conclusion

It can be concluded that the actor-network of a current development process is an overlapping of the new state-led infrastructure development regime, which endorsed by the post-coup legislation, and the pre-existing network of local community's livelihood. The land was the node of changes and a centerpiece of interactions caught juxtaposition between a reluctantly assembling state of actors within the merging networks.

The meaning and influent of the land as an actor within the network went beyond its physical materiality. They were diffracted through the practices and interactions between actors on the process of a land right reform, a post – coup SEZ legislation, and local daily life activities. The roles of land in the community's network had transformed from the raw natural resources to the community's capital assets both in the form of communal pastureland, a private residential and plantation or working space within the day-to-day life basis and then currently shifted to the strategical governmental property under the national SEZ development regime. The diffractions were caused by the unbalanced power relation between governmental agencies and the local communities under the manipulative influent of the post-coup legislation namely the NCPO's special decree which exercise under the Section 44 of Thailand interim constitution.

The interaction pattern within the SEZ development network was highly dominated by the state actors especially the post-coup legal framework which had drastically changed the socio-political landscape of the policy implementation. The former power relation in the national development process was rearranged because a pre-existing social check-and-balance mechanism were suppressed in by the endorsement of NCPO special decrees. This legal framework has legitimately allowed the community's engagement and the communicative platforms in the process to be absent in the name of "development facilitation policy" [19]. Hence, the relational flow between the governmental actors and the local communities, was mostly one-sided and showed a low level of the cooperative or compromising act.

The proceeding SEZ development process has drifted away from its root in the liberalism ideology to the path of neo-liberalization. Within the network, the state had repositioned itself from the embedded liberalism stand as the "development state", where non-competitive actors such as local community would be protected from the effect of a capitalism expansion by social welfare and subsidy mechanism during the transitional period, to the neo-liberalism stand where the reciprocal bond between the state and investors are prioritized. In this essence, the state's role had shifted to the "land broker and the capitalism facilitator" [36].

The new actors endorsed by the NCPO's SEZ legislation had transform 2 main power-relation within the network of the SEZ establishment. The first was between a local community and the land. This is on the path of the government to implant the industrialization and service economic as the center of the SEZ. By dispossession of land, both in the form of private and communal property, the community was not only forced to undergo a depeasantization[5]but also made vulnerable due to the loss of their livelihood's capital asset under the network where their rights in development was legitimately made absent. The second was the power relation between the state and the community. This is a deep diffracted in the essence of national governmentality. With lesser governmental safety net provided to the locals, the SEZ developing network is under the social Darwinism context. The state treated the community as a self- entrepreneurial neoliberal subject where no subsidy measurement from the government would be provided within this development network.

Consequently, as the capital assets of their livelihood were missing and their rights to engage through official platform was absent, the community had developed an adaptative approach through the actor-network by developing the interconnection with

reliable local private sector organizations and form an unofficial communicative platform with those who underwent the similar transition process. This collective act was aimed to increase their bargaining power with the dominant governmental actors.

With the community collective act and the cooperation of the influential local private sector organizations, the locals were able to gain the access to developmental information and resources which much needed for the livelihood adaptation. They exercised the social capital to unofficially form a communicative and compromising platform with local authorities and reassemble their way of life under the SEZ transitional period.

Though, they had adapted the self-reliance approach to survive the current transition yet in the further development process the community still requires the supportive role of the state. Their expectation had shifted from the great change in national policy level to the more promising prospect of “active and community-friendly local governance ” Therefore, they had suggested that an informative role of the municipality authorities, a constructive engagement of developmental stakeholders in area-based level, and solid collective cooperation within the affected communities are endorsed in the network of SEZ development to foster the supportive mechanism for the community’s adaptation within the process.

References

1. Zeng, D.Z., *China's special economic zones and industrial clusters: the engines for growth*. Journal of International Commerce, Economics and Policy, 2012. 3(03): p. 1250016. DOI: <https://doi.org/10.1142/S1793993312500160>.
2. Adepoju, A., *Operationalizing the ECOWAS protocol on free movement of persons: prospects for sub-regional trade and development*, in *The Palgrave handbook of international labour migration*. 2015, Springer. p. 441-462. DOI: https://doi.org/10.1057/9781137352217_18.
3. Bank, A., *Asian Development Outlook (ADO) 2018: How Technology Affects Jobs*. 2018.
4. Ishida, M., *Special economic zones and economic corridors*. ERIA Discussion Paper Series, 2009. 16: p. 2009.
5. Sharma, S.C. and S.Y. Chua, *ASEAN: economic integration and intra-regional trade*. Applied Economics Letters, 2000. 7(3): p. 165-169. DOI: <https://doi.org/10.1080/135048500351726>.
6. Phutthanathanapa, C., W. Narongchai, and R. Chumnanmak, *The Utilization of the Naga Sign in the Special Economic Zone of Mukdahan Province, Thailand*. Journal of Mekong Societies, 2020. 16(2): p. 116-142.
7. Cunningham, H., *Nations rebound?: Crossing borders in a gated globe*. Identities: Global Studies in Culture and Power, 2004. 11(3): p. 329-350.
8. Ingratubun, M.A., et al., *Dutch curse on Indonesia: Unemployment caused by Asian development bank (ADB) loan projects*. Gadjah Mada International Journal of Business, 2021. 23(2): p. 113-136. DOI: <https://doi.org/10.22146/gamaijb.63409>.
9. Gibson, C.L., *The consequences of movement office-holding for health policy implementation and social development in urban Brazil*. Social Forces, 2017. 96(2): p. 751-778. DOI: <https://doi.org/10.1093/sf/sox071>.
10. Latour, B., *The powers of association*. The Sociological Review, 1984. 32(1_suppl): p. 264-280. DOI: <https://doi.org/10.1111/j.1467-954X.1984.tb00115.x>.
11. Kozyris, P.J., *Interest Analysis Facing Its Critics--And, Incidentally, What Should Be Done About Chocie of Law for Products Liability*. Ohio St. LJ, 1985. 46: p. 569.
12. Stark, A. and M. Taylor, *Citizen participation, community resilience and crisis-management policy*. Australian Journal of Political Science, 2014. 49(2): p. 300-315. DOI: <https://doi.org/10.1080/10361146.2014.899966>.
13. Sarlak, M.A., Y. Salamzadeh, and F.S. Farzad, *Actor-Network Theory and Networked Organizations, Proposing a Conceptual Framework*, in *Contemporary Applications of Actor Network Theory*. 2020, Springer. p. 197-210. DOI: https://doi.org/10.1007/978-981-15-7066-7_11.
14. Latour, B. and C. Porter, *On the modern cult of the factish gods*, 082234825X. 2010: Duke University Press.
15. Law, J., *Actor network theory and material semiotics*. The new Blackwell companion to social theory, 2009. 3: p. 141-158. DOI: <https://doi.org/10.1002/9781444304992.ch7>.
16. Latour, B., *On Actor-Network Theory. A few clarifications, plus more than a few complications*. Philosophia, 1990. 25(3): p. 47-64.

17. Brown, D.V., *Self-structure Singularity: Considerations for Agential Realism in Critical Psychology*. Social and Personality Psychology Compass, 2020. **14**(12): p. 1-11.DOI: <https://doi.org/10.1111/spc3.12569>.
18. Dong, F., et al., *Efficient synthesis of polymeric gC 3 N 4 layered materials as novel efficient visible light driven photocatalysts*. Journal of Materials Chemistry, 2011. **21**(39): p. 15171-15174.DOI: <https://doi.org/10.1039/c1jm12844b>.
19. Phaninee, N., et al., *Satisfaction Levels of the Local People on the Second Thai-Lao Friendship Bridge: A Case of Mukdahan-Savannakhet*. Asian Social Science, 2015. **11**(5): p. 128.DOI: <https://doi.org/10.5539/ass.v11n5p128>.
20. Fox, N.J. and P. Alldred, *Applied research, diffractive methodology, and the research-assemblage: challenges and opportunities*. Sociological Research Online, 2021: p. 13607804211029978.DOI: <https://doi.org/10.1177/13607804211029978>.
21. Lu, X.X. and S.D.X. Chua, *River Discharge and Water Level Changes in the Mekong River: Droughts in an Era of Mega-Dams*. Hydrological Processes, 2021. **35**(7): p. e14265.DOI: <https://doi.org/10.1002/hyp.14265>.
22. rishna Thongkaew, S.S., *Powers and Politics of the Vietnamese Thai*. Surathani Rajabhat Journal , 33-56. . 2016.
23. Chuan, C.L. and J. Penyelidikan, *Sample size estimation using Krejcie and Morgan and Cohen statistical power analysis: A comparison*. Jurnal Penyelidikan IPBL, 2006. **7**(1): p. 78-86.
24. Prasirtsuk, K., *Thailand in 2014: another coup, a different coup?* Asian Survey, 2015. **55**(1): p. 200-206.DOI: <https://doi.org/10.1525/as.2015.55.1.200>.
25. Bank, A.D., *Role of Special Economic Zones in Improving Effectiveness of GMS Economic Corridors*, pp. 27-333. Mandaluyong : Philippines. 2016.
26. Bank, A.D., *The Role of Special Economic Zones in Improving Effectiveness of Greater Mekong Subregion Economic Corridor. The Greater Mekong Subregion Ministerial Meeting (pp. 27-38)*. Mandaluyong; Philippines. . 2018.
27. Nick J. Fox, P.A., *Applied Research, Diffractive Methodology, and the Research-Assemblage: Challenges and Opportunities*. Sociological Research Journal, 1-17. . 2021.
28. Paitoonpong, S., *Thailand's Cross-border Trade in the Greater Mekong Subregion: TDRI Quarterly Review, 11-19*. . 2016.
29. Road, e.o.R., *The Progress Report of the 2nd phase of rRoute oad construction Number MH 3019*. Rural Road Department. Bangkok. . 2018.
30. Ong, A., *Graduated Sovereignty in South-East Asia. Thory, Culture and Society, pp.81-104*. 2008.DOI: <https://doi.org/10.1002/9780470775875.ch3>.
31. Aggarwal, A., *SEZs and economic transformation: towards a developmental approach*. Transnational Corporations Journal, 2019. **26**(2).DOI: <https://doi.org/10.18356/d5636c42-en>.
32. Tubilewicz, C. and K. Jayasuriya, *Internationalisation of the Chinese subnational state and capital: The case of Yunnan and the Greater Mekong Subregion*. Australian Journal of International Affairs, 2015. **69**(2): p. 185-204.DOI: <https://doi.org/10.1080/10357718.2014.978739>.
33. Chan, P., *Child-Friendly Urban Development: Smile Village Community Development Initiative in Phnom Penh*. World, 2021. **2**(4): p. 505-520.DOI: <https://doi.org/10.3390/world2040031>.
34. Oloo, F., *Mapping rural road networks from global positioning system (GPS) trajectories of motorcycle taxis in sigomre area, Siaya county, Kenya*. ISPRS International Journal of Geo-Information, 2018. **7**(8): p. 309.DOI: <https://doi.org/10.3390/ijgi7080309>.
35. Chotiwan, P. *The foreseeable impact of SEZs Development: Perspectives from Local Actors in Trat Province, Thailand*.DOI: <https://doi.org/10.1080/10702890490493527>.
36. Manorom, K., *Isan Border Special Economic Zone under Neo-liberalism and State as "a land broker A case study of Mukdahan Special Economic Zone"*. Journal of Social Science and Humanities, 1, pp. 269-299. . 2019.
37. Ruggie, R.A., *The Principles of Embedded Liberalism: Social Legitimacy and Global Capitalism*. In R. A. Ruggie, *New Perspectives on Regulation (pp. 151-162)* , Cambridge. 2009.
38. Ratanapongtra, T., et al., *Value creation of local identity in Thailand: Marketing promotion for enhancing communitybased cultural tourism*. International Journal of Innovation, Creativity and Change, 2020. **13**(6): p. 475-488.
39. Pedersen, F., *Nature, religion and cultural identity*. Asian Perceptions of Nature: A critical approach, 1995. **18**: p. 258.