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Re-contextualizing extra-national policy in the Thai construction industry within the new ASEAN economic community

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ABSTRACT

Construction stakeholders' perceptions of probable impacts of the implementation of an Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) on practice in the construction industry are analyzed using a policy analysis framework. Implemented in 2015, the AEC is attempting to integrate all economic activities including construction. The construction industry in the AEC countries has been using local laws, regulations, standards, and practices which are not aligned, creating a problem for international construction, engineering, and architecture companies. No new laws or regulations have been foreshadowed or enacted, and there is no consensus about what will be done to address the current anomalies. From interviews, personal stories of senior construction professionals, engaged in construction projects in ASEAN countries, show that the national construction discourse in place currently is what they perceive will remain within an AEC even in a longer timeframe. However, their perception is that change will take considerable time in construction because of a lack of commonality with design and practice standards and existing building codes and different standards in university courses. In the short term, the interviewees believed that there will be no change and the status quo will remain. In the longer term, their belief is that any change will be difficult and contested. The pluralistic nature of multi-state policy necessitates an alternative mode of analysis to understand the inherent complexities and enable theorization of the construction policy process in this type of context.

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Introduction

From the start of 2015, the Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) begins operations bringing with it promise of collaboration and economic integration across all areas of economic activity including construction and project management. Understanding how this happens is to become increasingly important in the South East Asian context because of the implementation of a free trade agreement in the AEC, with a changed discourse offering all members opportunities of investment and project control in any member state and ability to connect to the rest of the world. Through a lens of policy analysis, this paper reports an investigation of construction professionals, both foreign and Thai, in Thailand to ascertain the extent and impact of changes in professional practice and project management resulting from the establishment of the AEC during 2015. The research examines the different discourses of the realities of policy and the perceived realities of practice, through investigation with construction professionals in Thailand.

The ASEAN was established in 1967 with five member countries, Indonesia, Malaysia, Philippines, Singapore, and Thailand. Brunei Darussalam joined in 1984, Viet Nam in 1995, Lao PDR in 1997, Myanmar in 1997, and Cambodia in 1999. The goal of ASEAN was to integrate and strengthen the East Asia economies as a whole, to enable free flow of investment, of skilled labor services, knowledge, goods, and capital (Dee, 2011). An initiative for ASEAN in 2000 included frameworks encouraging the more developed ASEAN members to assist less-developed members in need and focus on enhancing competitiveness in economics, education, skills development, and work training (Plummer, 2006, p. 435). From 2015 ASEAN became the AEC developed on a positive perception about the economic advantages accrued to European nations in the EU. The blueprint for this change includes:

- no restrictions on service delivery;
- gradual expansion of the foreign (ASEAN) equity participation permitted in each sector; and
- progressive removal of other limitations on market access by 2015 (Dee, 2011, p. 19).

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With less restriction on service delivery and the ASEAN economic equity participation policy, this, it is expected, will create a major change in skilled labor movement amongst ASEAN countries. As a consequence, it is anticipated that, as a result of policy changes, knowledge will be shared and generate new ideas, and that expertise will be generated amongst members (Sudtasan, 2014) with accompanying improvement in the economic wealth of each member nation, again in the official view, replicating the perceived success of the EU. Whilst these macro policy announcements are made by governments with the best of intentions, usually driven by perceived possible economic gain and the associated accrued impacts of employment and consumption gains leading to sustained or improved economic growth, grounded realities are likely to differ from those expectations. This paper will address the discontinuities between macro rhetoric of a policy within a multiple state agreement in ASEAN/AEC and the grounded realities of practice manifest in the construction industry in Thailand. We are concerned to address this through asking what are the real impacts of ASEAN policy in construction on practice at the local level?

Extant research on the effects of policy implementation in construction across multiple contexts can show significant variation and the lack of a 'one-size-fits-all' effect. Jooste *et al.* (2011) showed in a study of PPP (Public Private Partnership) projects in British Columbia (BC) (Canada), Victoria (Australia), and South Africa, that whilst those projects are established within an agreed framework of understanding, there are significant variations in how that framework is implemented which is context-specific. Garvin and Bosso (2008) and Garvin (2007) argue that the intended benefits of using specific policy-based frameworks in construction are often not universally achieved. Other research shows that policy can be contested differentially across multiple regimes within a singular state context, even under a centralized system imbued with coercion, a situation that has occurred in construction projects in India (Mahalingam and Delhi, 2012). Their research argues that better alignment between 'incumbent and challenger groups' can lead to more successful policy implementation. Jacoby and Schneider (2001) had shown that across the various states of the USA, differential policy responses also varied and that alignment between the effects of contestation and coercion can lead to better outcomes. Mehta and Theodore (2006) argue that contested policy in construction in terms of workplace safety were not successful in a single state context in the USA because of the challenger group seeking work-arounds to thwart the policy. Other research highlights that centralized coercive policy on waste management in construction in Hong Kong is not completely effective as policy always is itself incomplete (Poon *et al.*, 2013). Beunen *et al.* (2013) show that policy intended as a tool to promote long-term planning can in effect undermine both existing practice and long-term planning. However, these analyses and comparisons represent comparisons within individual states, rather than an analysis of policy in a pluralistic context where the expectations across multiple national states are required to adopt singular rules, regulations, and standards but contextually within a pluralistic situation. Here, we examine the impact of a multi-state agreement within a singular nation state – Thailand.

However, such pluralistic policy goals at extra-national and national levels across ASEAN, when applied to the construction industry, will challenge locally institutionalized practices, and local laws, regulations, standards which are not aligned extra-nationally, potentially creating problems for international construction, engineering, and architecture companies. This paper seeks to understand how, at the micro policy level, construction professionals of multiple nationalities working in Thailand, perceive the extent and impact of the proposed changes. We can then ask: does the political policy perspective of an AEC make 'the grass greener' for all sectors of the ASEAN member economies, including construction, actualize at the level of professional practice? There is a need, as Jordan and Matt (2014) argue, for solutions that demonstrate what enhances and constrains the effective development and implementation of policy. Tsoutsos and Stamboulis (2005) suggest that effective policy is best implemented in niche contexts to enable diffusion and acceptance. However, we argue that by understanding the effects of plurality and context, we can contribute to our understanding of what affects successful construction policy development and implementation in newly emerging collaborations of nation states, with a perspective that could also enhance effectiveness of policy in multi-regime national states like the USA, India, Canada, and Australia.

Policy analysis

Policy is traditionally described as rational, staged, or more simply as linear decision-making (Rein, 1983). Portz (1996) argues that policy problems are affected by policy-maker's agendas, of which there can be many interpretations. This raises the issue of risk, incompletion, failure to change, generation of wasted resources, and creation of political conflict and an inevitable slowing down, in policy development and implementation which Zinn (2006) suggests affects the reasonableness

of actions taken in the policy process. However, from a policy sociological perspective, the policy process is complex and messy because of the 'discontinuities, omissions, compromises and exceptions' that exist in complex and pluralistic societies (Ball, 2003). Silver (1990) suggests that policy is about 'relationships of communication, power, exploitation, consensus, cooperation, competition and structures which are formed by those relationships and which impact upon them'. Policy is continuous and interactive (Rein, 1983), or dynamic and intertwined (Bobrow and Dryzek, 1987) or multi-staged (McLaughlin, 1987) or messy (Ball, 2003), chaotic (Geller and Johnston, 1990), iterative (Corbitt, 1997, 1999), or cyclical (Capano and Howlett, 2009) and infused with politics (Prunty, 1984) and ideology (Kogan and Bowden, 1975). Policy, Ball (2003) argues, is influenced by pluralistic inequality associated with sectional interests, power, and factions. (Corbitt, 1997, 1999) showed that the policy process is better perceived as an iterative process challenged by ideological struggle, contestations about praxis, the plurality of interpretations of the policy, the relative changeability of the power of the state, institutional practice and social acceptance, designed to motivate, reproduce or attempt to create change in social or economic behavior. The state is seen as an agency for transformation (Hay, 1996; Corbitt, 1997) through policy creating the mechanisms and motivation for change, albeit at a macro level. At the micro level, Ball (1993) argues that policy is reflected in the practices and values of those involved who can re-contextualize and reinterpret policy within their own practice.

Corbitt (1997, 1999) also showed that as implementation of policy emerges over time, that implementation becomes increasingly complex and becomes repeatedly subject to contest and ultimate breakdown in the social and economic relations between participants at all organizational, social, and political levels. Over time the contested forms of policy dogma, inconsistencies in policy texts and practice, debates about approach to policy formation and repeated contestation about policy texts, and about bureaucratic demands inherent in policy implementation are iterated as policy develops and changes, as it becomes more complex and as it becomes subject to institutionalization by the state. The scale of this research, we argue, needs a more discursive, or discursive-hermeneutic form of analysis (Reed, 2013), rather than hermeneutic alone and/or phenomenological levels of analysis, that would be offered by Institutional Theory (Meyer and Rowan, 1977; DiMaggio and Powell, 1991) where the focus is on the formal and legal aspects of government and its structures and policies; or the formal structuralist relationship analysis offered by Agency Theory (Jensen and Meckling, 1976; Eisenhardt, 1989) where contest over the use of resources between owner and agent and their misalignment in operationalization informs practice and becomes the focus of the analysis. Institutional Theory offers a bounded frame of analysis showing how human behavior becomes institutionalized by being conditional and transformed (Willmott, 2014). The frame of analysis is external with a focus on the objects of analysis rather than the power and politics inherent in the production of meaning. Institutional Theory fundamentally posits that power and politics do not create institutionalization, other than through the effects of coercive action. Willmott argues that Institutional Theory cannot be critical. We are more concerned here with understanding power relations and the fine-grained analysis difference between the politics and power operational at the macro and micro levels of policy development and implementation, that is, with the critical. A discursive analysis offers a means to expose and then account for inequities and imbalance in transformative processes in society or in social practices. Discursive analysis is intended to expose the power problem, and highlight domination, oppression, and resistance, all tenets which are not inherent in Institutional Theory (Clegg, 2010).

This discussion of the policy context offers the researcher the opportunity to evaluate the nature and context of policy as text, the agency side of policy dealing with the reading and writing of policy texts; and policy as discourse (Ball, 1993) where policy is read and interpreted within determined constraints which can be professional, political, or social. These actions occur simultaneously when applied to macro level policies which impact at the level of praxis or micro context. This research offers construction researchers the ability to convey the particulars of a situation in the context of the whole (Yanow, 2000). In this research, we use these conceptualizations of policy and its nature to make some assessment of the perceptions of practitioners in construction operating at that micro level, informed by the policy as text which frames the AEC determinations in the ASEAN countries, and the associated policy as discourse intending to impose new practice, new standards, new laws and new principles upon an already institutionalized set of practices in construction. Our intent here is to offer an explanation of what these practitioners at the micro policy level are doing when they re-interpret proposed changes and re-contextualize new policy in their own work, albeit that their reinvention is suppositional and based in their perceptions of what is, or is not, happening in the construction industry in the AEC. Bevir and Rhodes (2010) argue we need to understand how large social and political action

is mediated, sustained, challenged and changed by individuals. They argue that practice or agency is often eroded by the imposition of policy, as directives, as text. Meaning of that policy, they argue, becomes contested as it challenges meaning of agency or practice that are 'taken for granted'. Therefore we propose that policy in construction, examined from a context of the whole in this study, through an association of states, is also contested through agency and practice in the context of the particular. The power relations and politics internal to the analysis need to be understood to make sense of the messiness and incompleteness of the policy process.

Contextual setting

The concept of a group of countries in the same region forming an institutional and economic relationship to strengthen their region economic advantage has been in place in Europe since the 1960s (Rose, 2007) and the AEC intent was to gain the perceived positive economic outcomes of that union. However, there are some key differences between the structural, institutional and legalistic fundamentals of the EU and that of the AEC. The AEC has no political groups, and there is no counterpart in the AEC to the EU Court of Justice or the EU Parliament (Angresano, 2004, p. 919). There is no equivalent of the EU bureaucracy established in Brussels, planned for the AEC. There are no common sets of standards and professional mutual recognition policies like the European Federation of National Engineering Associations (EUR ING)[1] standard, planned in the AEC at this stage.

As one exemplar, in part of its policy work since 1993 the EU initiated The European Employment Strategy (EES) in 1997 which created a framework and strategies for a mode of governance for European employment policy (Wallace *et al.*, 2010). The purpose of the EES policy was and is to leverage the employment opportunities for all citizens of EU country members. EU members share a common belief, set in policy, that if a EU citizen can get more income through employment and trade in any EU location, it will improve overall EU economic growth. (Ariyasajjakorn *et al.*, 2009) argued that early discussions within the AEC concerned attention to establish a similar policy on employment. However, even six years later, the lack of a centralized policy formative structure process and a lack of legalistic framework across the AEC membership has meant that progress on this policy has been at most cursory.

Considering the lack of the formalized legal framework in the AEC, the impact of the formation of the AEC and its impact on construction is still one with multiple perceptions. This paper uses personal stories of two architects, eight engineering consultants, five business developers (clients), and three contractors engaged in Thai and other ASEAN construction projects for a variety of multinational engineering consulting companies implementing projects for externally situated owners in AEC countries. This paper shows how these construction professionals perceive what the impacts are of the introduction of the AEC in construction. The existing policy activity and action taken by governments across the AEC is shown in Table 1.

In Thailand, no new laws or regulations have yet been enacted and there is still no consensus about what will be done to address the anomalies that currently exist. The strength of the existing legal systems will be problematic in dealing with the existing context for project management and construction.

Research methodology

Within a policy sociology context, this study uses an interpretive analysis of interviews with practicing professionals in construction projects grounded in understanding and interpreting the stories of practicing engineers. The focus on gaining 'rich data' (Geertz, 1988) enables the researcher to interpret information content iteratively, assuming a close correspondence between the telling and the experience of the teller in their situated context. The analysis of the data tries to understand through adoption of hermeneutic forms of interpretation through telling, writing, reading, interpreting, re-reading, and adding cumulatively to a meaning creation within and from the story (Thanasankit, 2002).

The data were collected in semi-structured interviews following protocols ensuring that the respondents could be perceived as representative of the profile of similar possible participants. Tong *et al.* (2007, p. 351) stated that 'in-depth and semi-structured interviews explore the experiences of participants and the meanings they attribute to them. Researchers encourage participants to talk about issues pertinent to the research question by asking open-ended questions, usually in one-to-one interviews'. Their concern was to develop a checklist of criteria (COREQ (consolidated criteria for reporting qualitative research)) to support the consistency and representativeness of subjects chosen for interview and the acknowledgement that professionals interviewing each other can come from professional mutual practice. They argue that it is important to recognize mutual professional relationships, but accept that answering questions about professional practice is not subjective but bounded within accepted professional practices. In

Table 1. Construction industry current practice and reaction to AEC implementation.

Countries	Regulation and Reference standard	Adaptation to new AEC
Brunei Darussalam (Chong, 2013)	The Building Control Act and the Town and Country Planning Development Control Act adopt Brunei Standards, and various international standards In addition to local regulations, Brunei also follows international codes. All mandatory regulations are published in Malay language	All Standards listed are voluntary unless referred to in the contract specification for government procurement/ projects (Khan, 2012) Brunei sustainability in Building Construction – General Principles has adopted ISO 15392 as a reference standard
Cambodia (Sopha, 2008)	Construction Law and Regulations, Law on Construction, Sub-decree on controlling of Construction Materials, Regulation on construction management, Regulation on Construction Design and registration	Building Construction standard and codes still in a draft stage
Indonesia (Chong, 2013, p. 85)	Law 28 is Indonesia's mandatory building regulation. It pertains to building functions, building requirements, building processes, the role of the community, the role of government, and sanctions for noncompliance	No action taking but reviewing
Lao People's Democratic Republic (ASEAN, 2011)	Lao uses Construction Law-Dec 2009 Defines rules, regulations, inspection control, etc. which concerns building systems and quality of construction materials Regulation-Sep 1991 (Building Permit) Defines procedures of technical drawing, specifications, and surrounding areas before construction Urban Planning Law-April 1999 Defines the allocation of urban plans of infrastructure systems which includes building control systems, the Building Code for building inspection and safety	Currently reviewing
Malaysia (Chong, 2013, p. 109)	The federal government administers all building regulations and state and territorial governments enforce them in their building control departments Malaysia has Malaysian Standards which are derived from various sources such as British standards, ASTM, ASHRAE, and Australian and New Zealand Standards	Reviewing with some changes
Myanmar (Burma)	N/A	N/A
Philippines (Chong, 2013)	Philippines central government is now revising The National Building Code of the Philippines Philippines are similar to other AEC members where there are national standards used. However, many of these standards were derived from other international standard	Reviewing underway
Singapore (Chong, 2013, p. 153)	There are national regulations and building acts that are supported by codes of practice, design manuals, design guidelines, and handbooks. None are mandatory if designers and engineers prove that they are using equivalent standards. Building and Construction Authority	Begun examining common standards
Thailand (Chong, 2013)	Thailand does not use the code system. However, Thailand uses building control regulation as a regulatory system. Laws are made by the Central Government as Ministerial Regulations, and endorsed by Royal Decree before being converted into enforcement and regulatory documents by agencies	Reviewing-no action taken
Vietnam (Chong, 2013, p. 197)	In Vietnam the central government issues building and construction decrees and the Ministry of Construction convert them into building codes. The Ministry administers decrees, codes, and construction standards through its employees and through consultants	Reviewing-no action taken

choosing the participants for this research that same principle was applied. Marshall (1996) argues that studying whole populations is not possible in many contexts because it is so diverse, but there is a need to ensure some form of representation.

To do this, three possible techniques are available: convenience sampling using a sample of the most accessible subjects; judgment sampling, selecting the most probably productive subjects using specified criteria; and theoretical sampling using iterative modeling across a population and along a time frame. In this research, we have chosen a combination of convenience sampling through professional knowledge and mutual relationships and judgment sampling, deliberately targeting individuals who met certain criteria: were certified engineers or architects, were experienced (five years plus) in construction projects in ASEAN countries; and offered a range of nationalities. Robinson (2014) argues that being specific with criteria such as these in qualitative research makes the sample more homogeneous and therefore representative. Yardley (2000, p. 221) argues in a highly cited paper that: 'Rigour … depends partly on the adequacy of the sample – not in terms of size but in terms of its ability to supply all the information needed for comprehensive analysis'. This, she argues, is affected by understanding the context the research is being conducted in sensitivity) which in this study is validated by the researchers own experiences working in construction in the ASEAN context and in working in ASEAN countries. Validity is also enhanced by transparency in the research acknowledging their professional relationships (which is done in Table 2), and by coherence where the researchers show consistency in approach, use of the same questions and by accepting

that any generalizations are contextual and would not always be applicable in all other cases but offer the grounding for collections of studies to be used for theorization through meta studies.

All participants in this research are engineers, contactors, and architects who are working in Thai construction industry firms who have also done some construction projects in other AEC countries and also have done some projects with other stakeholders who came from other AEC countries. The participants were initially approached by one of the researchers based on his knowledge of their extensive practice in construction as engineers and architects. This deliberate recruitment would enable information and knowledge to be captured from relevant participants which fit this research context (Arcury and Quandt, 1999; Chan, 2011). The rationale used in this research is that the practices can be compared, within and outside Thailand. The participants included two architects, eight engineering consultants, five business developers (clients), and three contractors (as shown in Table 2). The questions and interview invitation had been sent out initially to 30 participants. A snowball method (Biernacki and Waldorf, 1981) was also used in this research to seek further participants. However, after conducting 17 interviews, the researcher had reached a data saturation point where the patterns in the answers started to be consistently repeated. Therefore, the researcher decided to stop data collection, accepting that such studies have no limits and the interpretations reached will be revised over time and as the research story continues.

Narratives of Thai construction stakeholders – perception of issues in construction

In the analysis of the interview data certain themes emerged about perceptions of both what the impact has been so far, and what is anticipated with the introduction of the AEC, on the construction industry across the AEC countries, particularly in Thailand, the second largest economy behind Singapore in the AEC.

Nationalism

With the implementation of the AEC approaching, there is still no establishment of regional regulations for the construction industry. The conduct of all construction businesses across the AEC still has to be implemented under local laws and regulations of each country. This makes transfer of regulatory knowledge and building processes as difficult as it always was, and makes the migration and transfer of the workforce still far from practical. The Foreign Business Act, Thailand (FBA, 1999) determines that a foreign company who wants to register a business in Thailand has to only have foreign shareholders of not more than 49% and therefore have Thai shareholders of at least 51%. This and similar acts in other AEC member countries have been established with the intention to protect local businesses. At a regulatory level, the impacts of these laws have also limited the decision-making process that is reserved to only locals. As a consequence, expatriate skilled architects and engineers who come to work in construction projects in Thailand, for example, often provide their expertise input into the designs, however, the right to authorize those designs has to be done by Engineers and Architects who are Thai citizens, irrespective of the registration and/or reputation of foreign engineers or architects. The discourse in play is a nationalistic and protectionist one limiting action about authorization only to those qualified in Thai universities, irrespective of the extent of their experience. Participant E2 added that:

> the Thai system currently favors Thai engineers. Outsiders need to learn Thai to be able to become a registered engineer and allow them to sign off on drawings. In a way this makes sense as the drawings to be submitted to authorities are in Thai (even though for other purposes drawings are in English) and if an engineer is signing off a design they need to know what they are signing. As we move forward I am sure we will see a time when submissions/signoff of documents will be in Thai and English allowing foreign engineers to sign off documents and drawings, but not yet.

All participants mentioned that every construction projects that they have done in other AEC countries has to be carried out through local companies as a joint venture partner. These local firms are a point of contacts for official and other local stakeholders.

The second discourse about ownership is also grounded in nationalistic control and exclusion of 'other' owners of capital. These existing discourses affects all levels of the construction industry and presents challenges to any proposed and 'agreed' new policies in the AEC to extend ownership more broadly or enable reciprocal professional recognition. Participant BD1 believed 'that there still are a number of limitations in the existing Foreign Business Act (1999) in Thailand. This also means foreign companies who wanted to invest in Thailand still require to have a local partner as a joint venture. This is similar to practices in other AEC countries. For example, in Myanmar any construction project has to be done through joint venture with either Myanmar business or with the national government. Participant E4 mentioned that 'in one of the construction projects in Myanmar that I have done, the scope of

Table 2. Participants detail.

Participants	Description/(nationality) *Known to researcher	International experience
Engineers	E1*: Plumbing engineer – international engineering firm in Thailand (Thai)	Myanmar and Vietnam
	E2*: Executive mechanical engineer – international engineering firm in Thailand (British)	Brunei Darussalam, Cambodia, Indonesia Malaysia, Myanmar, Singapore, and UK
	E3*: Executive mechanical engineer – international engineering firm in Thailand (British)	Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, and UK
	E4: Senior plumbing engineer – international engineering firm in Thailand (Thai)	Myanmar and Vietnam
	E5: Senior mechanical engineer – international engineering firm in Thailand (Thai)	Myanmar and Vietnam
	E6: Senior electrical engineer – Thai engineering firm in Thailand (Thai)	Lao PDR, Myanmar, Singapore, and Vietnam
	E7*: Executive structural engineer – international engineering firm in Thailand (Thai)	Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore
	E8: Senior electrical engineer – international business developer (Thai)	Indonesia, Myanmar, Philippines, and Vietnam
Architects	A1: Senior architects – international firm in Thailand (Thai)	Malaysia, Myanmar, Philippines, and Singapore
	A2: Director of an Architect firm in Thailand (Thai)	Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, and Singapore
Contractors	C1: Director of Thai construction firm in Thailand (Thai)	Malaysia, Myanmar, Philippines, Singapore, and Vietnam
	C2: Director of Thai construction firm in Thailand (Thai)	Malaysia, Myanmar, Philippines, Singapore, and Vietnam
	C3: Senior cite engineer – Thai construction company (Thai)	Malaysia and Singapore
Business Developers (owners)	BD1: Director of Thai construction company (British)	Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Singapore, and UK
	BD2*: Senior project manager – Thai properties development (Thai)	Cambodia, Malaysia, Myanmar, and Singapore
	BD3: Senior project manager – properties development (Thai)	Cambodia, Indonesia, Malaysia, Myanmar, Singapore, and Vietnam
	BD4: Senior project manager – properties development (Thai)	Cambodia, Indonesia, Malaysia, Myanmar, Singapore, and Vietnam
	BD5: Senior project manager – Thai properties development (Thai)	Cambodia, Indonesia, Malaysia, Myanmar, Singapore, and Vietnam

responsibility ended when the design was finished and handed over to client, then what happen next we don't know'. The discourse of 'local control' pervasive across the AEC members is accepted practice but one all respondents acknowledged is inefficient in practice and negatively affects investment decisions by both foreign owners and foreign professional construction services companies.

However, the re-contextualization of those policies is already operationalized. There are parallel practices already existing in construction project submission for approval from authorities in Thailand, Myanmar and Vietnam. It is common in construction projects where the project team is a mixture of international and local stakeholders that most of the communications and documentation, including contracts, scope of works, design requirements, design calculations, and design drawings are most often carried out in English, contrary to existing policy in each country. This is the common business language. However, the project team members have to create another set of documents such as design calculations and design drawings in local languages just for submission for authorization. This is because the authorizations still have to be made by local officers. This situation is still in place as the AEC begins operations. There has, at August 2015, been no communication by any authority representing the AEC or any of its individual members within the construction industry about any proposed changes to these conditions in construction projects. Participants C2 and C3 mentioned that in one of the construction projects that had been done in Malaysia, there was an issue about communication with local officials. Participants C2 and C3 work for a Thai Construction Company who carried out projects in Malaysia via an international company (based in Malaysia) as their business partner. The authorization submission had been troublesome for a long period of time and they could not get the project authorized and project commencement on site underway. When they changed the local partner from an international to a Malaysian company, the authorization process was completed within a minimal amount of time. Participant C3 added that 'all of the submitted documentation remained the same, we just changed the local partner'. That same discourse of 'nationalistic' control was and still is accepted practice. Again, the respondents noted that there has been no discussion and therefore no action about addressing this issue across the AEC or within the jurisdictions of any of its individual members.

There was discussion to expand this proportion of the business ownership of foreign shareholder to a ceiling at 70% in some professional service sector such as accounting, law, architecture and engineering (Pricewaterhouse-Coopers, 2012). Up until recently (March, 2015), ASEAN countries used Mutual Recognition Arrangements (MRAs) to assess the progress of eight

professional services regulatory changes. These eight professional services include engineers, nurses, architects, surveyors, accountants, medical practitioners, dental practitioners and tourism professional services. There is still no large-scale movement of these eight professional services in a practical level. Achieving common practice requires (1) home country legislation, (2) ASEAN legislation, and (3) host country legislation changes. The process requires all members to move forward together which is still not happening as some ASEAN members are ready but some are not (Fukunaka, 2015).

Professional xenophobia

One clear discourse identified by all of the respondents in this research is the existing policies of professional associations and governments across the AEC about professional recognition. The professions affected in construction include engineers, architects, quantity surveyors, and contractors. The policies in most AEC members, Singapore and Malaysia, excepted, only allow the 'voice of the local' to be heard exclusively. It represents, according to the respondents, a lack of trust in qualifications gained in any jurisdiction outside of specific country. It appears to represent an inward looking, xenophobic perspective. For example Thailand only allows Thai engineers, and architects to sign off building designs. This means that construction projects require local (Thai) partnerships or alternatively foreign businesses have to hire Thai architects and engineering consultants to process the building designs for them.

Thailand also currently lacks certification of some construction professions such as electricians, plumbers, and masons. Participant C1 mentioned that

> there is no law required for those professionals in Thailand. This means that it will be difficult for Thai skilled labor to find a job in countries like Singapore and Malaysia where they have systematic professional certification in place. This lack of certification puts skilled Thai labor in a disadvantageous position, as they have high levels of skills but they cannot get a job in the countries where there is a possibility of better pay. At the same time, there are large amounts of cheap labor from neighboring countries such as Laos, Myanmar and Cambodia flooding into Thailand both legally and illegally because there is not enough qualified Thai construction labor.

Again, the issue is paradoxical, chaotic, and messy with a policy that is fundamentally parochial. Yet again in the existing situation, the Thai companies have re-contextualized the policy with the use of illegal immigrants filling positions where there are shortages with authorities doing little about it as 'know' there is a shortage and construction needs to be completed for economic growth. In the AEC context, such chaos and messiness is perceived by the professional interviewed here to add complexity and would add additional barriers with new policies operating extra-nationally. Their perception was that the 'current situation works'. With the proposed AEC the transfer of labor is perceived to take on additional chaos with the movement of the skilled trades out of the poorer countries seeking 'better conditions and pay' in the richer nations, in ways already described as consequential in the EU (Moroşanu, 2015).

Most of the participants believe that regional certification is essential and that the AEC offers a solution at least to the certification issue. Participant E2 mentioned that in the future regional certification similar to the European Euro Engineer (EurIng) would need to be introduced.

> Engineering is like a scheduled profession in Thailand with only Thais being allowed to practice as engineers (hence, foreigners using the title Executive Engineering Co-ordinator while Thai's use the title Executive Engineer. As economies in AEC become more integrated there will be pressure to allow free movement of professionals throughout the region. In the future I believe a regional certification similar to the European Euro Engineer (EurIng) will need to be introduced.

At this stage, there has been no move politically or professionally to begin that process so differential professional accreditation processes are the reality, despite the rhetoric of a common economic community. This is complicated by the actions of the Singapore Government over the past two decades in controlling the recognition of Engineers being restricted to only certain universities across the world. This has been part of a larger scale of discourse on manpower planning in Singapore, maintaining control of numbers of professionals to avoid excess supply problems. In all of the discussions about the AEC the issue of excess supply of professionals and skilled labor has been an issue (Flores *et al.*, 2015).

It should be noted that all of the participants mentioned that they were not aware of the ASEAN common engineering and architectural licensing scheme and professional legislation changes (Fukunaka, 2015). This change is an outcome of the MRAs exercise by Economic Research Institute for ASEAN and East Asia. The study reported that the ASEAN MRA on architectural service was signed in 2007. The changes included

> a professional architect registered and certified in his home country shall be eligible for regional registration as an ASEAN architect. An ASEAN architect shall be eligible to apply in the host country as a Registered Foreign Architect (RFA). A major difference from the

> engineering MRA is that an RFA may be allowed to work either in independent practice or in collaboration with a local licensed architect. (Fukunaka, 2015, p. 5)

However, up-to-date reports mentioned that this change for both architectural and engineering service is still being formulated in Thailand and some other ASEAN countries (Fukunaka, 2015). There could be a deliberative tardiness to accept these forms of mutual collaboration in the Thai context because they contest the 'power' inherent in the existing professional practices in Thailand, reported previously. The maintenance of power through discourse is a common feature of all policy (Ball, 2003) at either state or macro level of at the micro level of practice (Corbitt, 1997). Deliberative inaction such as this can be ascribed some meaning in terms of unwillingness to change the discourse and lose control. This matter is complicated in another way as well. Participant E6 mentioned that he was aware of Asia-Pacific Economic Cooperation (APEC) engineering licensing policies but not in detail. However, APEC is a different entity to ASEAN. Myanmar, Cambodia, and Indonesia who are members of ASEAN are not APEC members. However, there are outstanding issues within APEC region connectivity that need to be resolved. These include social infrastructure and administrative, investment, and trade issues (Muir, 2015). This extra-national differentiation between ASEAN and APEC adds more messiness and chaos to the situation that challenges the formulations of the AEC.

Design standards

There was clear concern amongst the interviewees about the immaturity of construction design standards in ASEAN countries and the problems this will present operationally in the AEC. Each country has their construction laws and regulations. Many of them have been derived, or have been taken, from more mature (longer established) design standards from Western countries such as the various British, French, Dutch, and American standards. Every ASEAN country has adopted Western design standards and has made some amendments to them to suit their local context. They have already re-contextualized these 'policies as text' documents (Ball, 1987). National practices and differential business practices are grounded in cultural practices (Corbitt, 1997, 1999; Thanasankit, 2002; Jirachiefpattana, 1996). These are not new policies but ones embedded in years of professional and business practice in the respective construction industries across the AEC membership. Adding new or modified versions of these standards was seen by the respondents as adding significant confusion and again chaos. Their belief is that 'perhaps they will subtly change those new policies to suit what they already do'.

There is also a mixture of multiple standards used across the AEC membership. The reality is that there are design standards but they are all different. Participant E2 said:

> in Thailand (and the Philippines) sprinkler and firefighting design is based on the US NFPA regulations whilst in Brunei, Singapore and Malaysia the British Standard is the code which designers adhere to. In Vietnam they have well established firefighting/sprinkler regulations which are different again.

Participant E3 said that 'Singapore construction codes are the most complete and stringent. This is because they have inherited "good systems and practices from the UK". However, there are some adjustments that they have made themselves to suit a densely populated island.' Whilst some Thai codes are based on those in the USA such as the American National Standards Institute and National Electrical Code, there are some codes derived from other international standards such as the International Electrotechnical Commission. The Malaysian and Indonesian codes are both based on UK practice, but it is not as well developed as Singapore's construction codes'.

There are some ASEAN countries where there is limited expertise and development for example in Cambodia, Myanmar, and Vietnam (Long *et al.*, 2004; Sukdanont *et al.*, 2011). There are very limited construction projects in Myanmar. Participant BD2 mentioned that 'Myanmar construction regulations often refer to international standards such as the National Fire Protection Association (NFPA), NEC, and the Chartered Institution of Building Services Engineers (CIBSE)'. As a consequence, the construction laws, regulations, and standards are still being developed. Participant E3 also noted that Cambodia has limited and incomplete and less than comprehensive construction codes.

One example of significant difference between Singapore and the other AEC members is the requirement in Singapore for all construction project design approvals to be submitted using building information modeling (BIM) (Evelyn *et al.*, 2014; Rogers *et al.*, 2015). This is definitely not the case in the other AEC member countries. The research participants noted that BIM is rarely used in Thailand or any of the other countries they undertake projects in, except Singapore. E3 noted that moving all construction projects in all of the AEC countries to compulsory use of BIM would involve retraining at all levels involved from training in the universities, through all companies involved, creating

considerable cost. Since 2009 the use of BIM has become institutionalized within the Singaporean construction industry creating its own control and discourse and, through its software structures, deterministic of the discourse that construction companies in Singapore must work with.

The lack of uniformity in standards, laws, and building codes is the reality as the AEC begins. The origins of the standards and codes are British, American, French, and Dutch, often reinterpreted for the local context, imbued with 'local culture' and well practiced. Across the AEC, these standards and codes collectively are very chaotic and their application specifically limited to precise jurisdictions. No intergovernmental committees in the AEC member nations have been established and there have been no changes mooted in any country to establish common standards. This is made even more difficult with the political instability in Thailand (Ingram *et al*., 2013) and Myanmar (Khandelwal and Roitman, 2013), the history of distrust between countries like Malaysia and Singapore (Moorthy and Benny, 2013), and the significant differential levels of economic development, and by the divergent standards, levels of education standards, and reputation, differential recognition of professionals and stringent localized practices embedded in existing practices and language across the AEC. With no legislative or administrative authority like that which exists in the EU planned, developing any commonality will probably be fraught and according to the respondents, almost impossible.

Drivers and barriers for the Thai construction industry

Using Thailand as one exemplar in the AEC implementation process for the construction industry, it is clear in the data from the respondents that there are many positive perceptions and many problems identified which will impact the Thai construction industry as the AEC implementation becomes more real. Participant E3 said, 'The AEC implementation should bring a lot of opportunities to the Thai construction industry. These include access to overseas construction projects in other AEC countries, and recruiting experienced staff from other countries.' Participant BD1 also added that

> this implementation will promote knowledge and expertise transfer between more developed countries to the lesser one, like Singapore and Hong Kong, both of which have a lot of foreign expertise which came to work in their countries in the past and their expertise is very strong now in Asia. Similar knowledge transfers will happen within ASEAN countries. However it will take significant time.

The AEC implementation will also bring export opportunities for construction suppliers. As with less restriction in law and taxation, Thai suppliers will gain business opportunity from export construction material, goods and equipment to other AEC members. Participant E3 added:

> However, the risk is well established with expertise from countries like Singapore and Malaysia can also move into Thailand as labor cost is a lot cheaper here. However, in reality I don't think anything will change, because I doubt that Thailand will implement AEC in 2015 or soon after.

Participant C1 added:

> I see this as a driver for the Thai construction industry. In the past Singapore used to be the hub of ASEAN because of the knowledge and expertise located there but now I can see that Thailand can possibly be that hub now. This is because the location and connected boundaries which allow business to gain access to a number of ASEAN members. In addition Thailand also has natural resources and well developed infrastructure such as roads and communications which businesses can use and thus place Thailand as their region hub. However, the only problem is our political instability and military rule which foreign investors believe will create economic downturn.

Whilst other participants also see the AEC implement as a driver, the Thai construction industry has, in their view, to be alert and improve and strengthen its knowledge, expertise, technologies, and quality in construction design and processes to be able to compete with more advanced AEC members like Singapore and Malaysia. One project manager Participant BD4 added:

> This AEC will raise the issue about quality of service in the construction sector, as the competition will get more intense. Businesses (engineers, architect and contractors) who are unqualified or have low level of service will no longer be able to compete in the ASEAN market.

This was considered to be a major barrier to the Thai construction industry surviving any real change as a result of the AEC implementation. The participants also agreed that the Thai construction industry in general has to improve its English language ability for both general communication and business contracting if it wants to remain competitive in a broader AEC driven construction industry. These barriers involve significant change within the Thai construction industry, change that will challenge accepted practice, change that will challenge existing standards and codes, change that will challenge the xenophobic regulatory environment in Thai construction, and change that will challenge to control of the dominant discourse about who controls wealth in the Thai construction industry.

The majority of participants perceived that the practices, xenophobic exclusion of professionals and territorial boundaries will not change for the construction industry in the near future even when the AEC implementation is fully started. They believe that the across border construction practices are still going to remain the same. Participant E3 said

> in theory, this AEC implementation should bring some changes to the Thai construction industry, but I think nobody in Thailand is really expecting any change at the moment. I heard that Cambodia have only just set up a government committee to look into AEC early this year.

Participant A1 mentioned that 'change of practice is not going to come at any time soon. This seems to be only the introduction of the community concept to us. We are still far behind the EU community'. Participant C1 mentioned that

> this movement will take a longtime to see tangible outcomes. I see this AEC implementation is more like advertising to stimulate across border trading rather than deriving common practice like what the EU did. The changes needed and common regulations will not be seen anytime soon. However, I have started to see a diversity of construction procurement methods being implemented.

This view is similar to Participant BD3 who also sees that Thailand, Bangkok in particular, has advantages on many aspects to become an ASEAN hub. These include the infrastructure, lower living costs (compared to Singapore), and cultural diversity. However, the AEC intention is to establish commonality in professional standards and building codes, common professional recognition, and common accreditation of skilled tradespeople. This conceptualization is expected to be undertaken with no centralized legislative or judicial structure and with no common currency. The multinational respondents used in this research have low expectations about whatever is being done being effective. Their view is that in each jurisdiction, any policy changes will be re-interpreted within their cultural context. We argue that this re-contextualization will contest any implementation of uniform real solutions at the micro level; only substantial documentation and agreements at a macro level will eventuate. The AEC policies will become disassociated with practice at the micro level.

Discussion and conclusion

Policy we argued is both complex and messy because of the 'discontinuities, omissions, compromises and exceptions' that exist in complex and pluralistic societies (Ball, 1987) and an iterative process challenged by ideological struggle, contestations about praxis, the plurality of interpretations of the policy, the relative changeability of the power of the state, institutional practice, and social acceptance (Corbitt, 1997). In this analysis of construction professionals working both in Thailand and across the countries of the Asian Economic Community, there is substantial evidence of the chaotic and messy nature of the imposition of the AEC for the construction industry. There are already existing discontinuities over standards and codes of practice and any 'common' AEC policy will compromise 'local' practice and be re-contextualized in practices to enable and allow exceptions, a situation already in practice, albeit it informally and in places illegally. There is already a plurality of interpretations about standards in building and construction. There is differential application of power systems and connectivity. Such practices are already accepted as institutionalized practice. Changes will involve significant cost challenging profitability and the pursuit of wealth. Ideological challenges with differentiated governments, capitalist, communist, authoritarian, dictatorship type governments will also force reinterpretation and then re-contextualization of any new policies across the AEC, rendering any commonality as 'somewhat difficult'. Hatcher and Troyna (1994) argued that the power of the state in policy is paramount and significantly influential. There is nothing to challenge that conclusion from this research. However, there is still significant evidence in existing practice that the power of the state is already challenged in many of the AEC member nations and that any policy changes in construction, will too be subject to re-contextualization in practice.

In multi-state alliances where policy is created and then imposed, such as for the construction industry in the AEC, then stakeholders, owners, professionals, etc., can expect the specifics of the policy to be contested, and to be recontextualized or reconfigured to approximate existing practices. These 'deviations' or 'modifications' of the proposed specific regulations and standards in a new policy, will inevitably challenge the approval process as bureaucrats attempt to match reality with intentions. This may increase costs, slow project approvals, and delay project completions. Unlike a single state policy where regulatory supervision has been shown to be containable (e.g. Jooste *et al.*, 2011; Mahalingam and Delhi, 2012; Poon *et al.*, 2013), in a multi-state attempt at policy and regulation, culture variations, and the extant practices already institutionalized in that context, will offer 'excuses' not to change. Such multi-state regulatory frameworks have to be established in ways that they can be accountable and managed.

Without universal agreement and a singularity of purpose, such changes will be difficult. The AEC has already shown that any sense of complete uniform purpose has not been achieved in any sphere, let alone in construction.

The stories show that what is in place as practice both formally and informally now is what is perceived will happen with the AEC, until at least some time in the future when any regulatory changes happen more formally and agreed to by all member nations. The perception is that this will take considerable time in the construction industry to change because of complexities with standards and existing building codes, different standards in university courses, and in the difficulties in translating existing codes and standards across the AEC member countries into a common language and then dealing with the inconsistencies between them to reach an 'agreed' set of building codes, regulations, and architectural and engineering design and practice standards. However, to derive ASEAN harmonizing and mutual practice, there are a number of keys connectivity issues that still require changes. These include: (1) physical connectivity which involve transportation, Information and Communications Technology and energy; (2) institutional connectivity which involve trade liberalization and facilitation, investment and services liberalization and facilitation, mutual recognition agreements/arrangements, regional transport agreements, cross-border procedures, and capacity building programs including construction; and (3) people-to-people connectivity which involves educational and culture and tourism (Secretariat, 2011). However, these recommendations about ASEAN connectivity are only being discussed at the policy maker/state level. The message has not been carried across to the company or practitioner levels. This research shows clearly that participants from large construction companies in this study were not aware of these mutual standards or any action being taken at any level.

The stories show that whilst regulatory boundaries are explicit and their practice established as a state functioning discourse, their operation in practice enables the non-locals to have influence within the project at all stages, and without challenging the established discourse, they maintain control because of their ownership of resources. These resources, mostly capital, extend the power of the owner and/or their representatives, and challenge the prevailing discourse through less regulated patterns of influence and control, paying subservience to process and regulations where necessary to maintain control. These boundaries have been shown to be 'fuzzy' and lack the rigidity intended in the policy framework. The politics and extant power relations at the industry level in ASEAN countries has had the effect of blurring the boundaries of intended control. There is a real identification of the 'other' in the Thai context but there is in no way a sense that this other is inferior. The regulatory environment is simply one of control of any, rather than control and dominance of the other. The oppression supposedly pre-existing in this typical economic context is not evident. Collaborative project manager and construction design and practice are key factors in the success of internationally and cofounder construction projects in Thailand. The questions that should be raised here is that even if the ASEAN mutual practice in terms of professional recognition is established, other restriction such as the Thailand FBA still reserve power discourse to the local majority business shareholder. This mutual professional recognition will mean nothing until those acts are changed.

In the short term, the interviewees believed that there will be no change and the status quo will remain. In the longer term, their belief is that change will be difficult and probably eventuate, if at all, as compromise. What is uncertain in all of this is what real impact any changes will have on construction in the long term and how will any attempts at regulations be re-contextualized by existing national practices. What is certain from the respondents was that attempts at the extra-national level to realize the perceived benefits of an economic union in ASEAN like that in the EU, will be very challenging as the AEC is without regulatory infrastructure, discourse of practice, standards and code uniformity, and planning that will provide the certainty for adoption and then change across the ASEAN construction industry.

In the broad spectrum of this policy, the actors involved operationalize their relationships to that policy both as agents within the great policy context, but also as actors being spoken to at a larger policy scale. In Construction Management research, there has been an obvious focus on the level of agency and institutional analysis (Oliver, 1997; Mehta and Theodore, 2006; Lounsbury, 2008). In this research, we were seeking to understand policy process from a more broad perspective by looking not at the institution that create the coercion, normative, and framework, but rather identifying the gaps between the broad scale policy and its imposition through the edicts of those institutions to the operational levels of agency. Whilst the messy nature of the events shown in this paper might be not unexpected, they do suggest another level of theorizing about policy and construction. Messiness we argue, is the explicit outcome of a multiplicity of agencies, interacting with the multiple perspectives of institutional form evident at the formal level of the state, and in this case additionally, at the less formal and less coherent level of an association of states. Such

messiness and what it represents suggests that discursive analysis offers the researcher the opportunity to explain that inevitability of policy implementation associated with power struggles, misinterpretation, the relevant use of coercion, the adaptation to normative practices, and simple messiness, inevitably leading to a disconnect between the policy level which set out to do (impose/force) change in the practice. However, at the practice (agency) level in this study the policy was re-conceptualized (reinterpreted), what Ball (1987) argues is recontextualized, and there is no mechanism in the policy process to re-check whether that re-contextualization of practice is correct or whether it is producing the outcomes that the policy had intended.

The more hermeneutic interpretation of Institution Theory and the formal rationality of Agency Theory also offer means to enable theorizing of policy process, albeit at the level of the state and institution. Here we have offered an expanded theorization, which we argue, enables an expanded perspective of contestation, of institutionalization and of the way that agency is eroded by discourse and power. In a multiple state agreement, normative practice or agency is challenged by the multiple perspectives of the states involved, challenging multinational companies operating across those multiple states. The analysis showed that there has been little consultation with the construction industry owners or professionals, leading one to ask are practitioners and other stakeholders in this multi-state context really wanted those policies or the changes inherent in them in the first place. We theorize that in the ASEAN context all multinational construction companies will face 'messiness' in agency and practice as the norms in one state are challenged by a compromise of normative, sometimes new, practices and agencies, which are not institutionalized in local practice, and where practices and interpretation are 'taken for granted'.

We argue then that policy analysis in construction in the ASEAN context proffers a means, through discursive analysis of policy from a multi-state association, and an analysis of the reactions at the level of agency on the ground, to hypothesize about the role of power in construction projects, the impact of messiness created through multiple agency on design, and both construction project management and practice. In other multi-state or multinational contexts there is still a need to gain alignment between the incumbent and challenger groups (Mahalingam and Delhi, 2012), but this research shows that there is a plurality of incumbent and challenger groups, some at the national state context, some at the level of local authorities, some at the level of professional practice and some set across the complexity of multi-state political agreements. This plurality and both its associated complexity and messiness means that the search for the desired alignment must be addressed in a planned and deliberative way if policy initiatives are to be effective, even in the long term.

Note

1. EUR ING is a qualification certification body which is designed to guarantee and maintain professional engineers' competencies, in order to facilitate practicing engineer's movement, and community knowledge sharing, between EU countries (The European Federation of National Engineering Associations, 2013).

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