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The disjuncture of learning and recognition: credential assessment from the standpoint of Chinese immigrant engineers in Canada

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Abstract

To better recognise foreign qualifications, many OECD countries have promoted liberal fairness epitomised by universal standards and institutional efficiency. This paper departs from such a managerial orientation towards recognition. Building on recognitive justice, it proposes an alternative anchoring point for recognition practices: the standpoint or everyday experiences of immigrants. This approach is illustrated with a qualitative study of the credential recognition practices of the engineering profession in Canada. From the standpoint of Chinese immigrants, the study identifies a disjuncture between credential recognition practices and immigrants' career stage post-migration. Taking this disjuncture as problematic, it further pinpoints recognition issues such as redundancy and arbitrariness, a narrow focus on undergraduate education, and a deficit view of training from other countries. While some of these issues may be addressed by improving administrative procedures, others demand a participatory space allowing immigrants to become partners of assessment, rather than merely its objects.

Keywords: recognitive justice; foreign credential recognition practices; standpoint; Chinese immigrant engineers

Introduction

To facilitate the mobility and integration of skilled immigrants, various governments and organisations in OECD countries have recently sought to improve foreign qualification recognition (FQR) policies and practices, often through introducing liberal fairness epitomised by ideals such as universal standards and institutional efficiency. In 1997, the Convention on the Recognition of Qualifications concerning Higher Education in the European Region was developed by the Council of Europe and UNESCO. The Convention stipulates that degrees and educational experiences must be recognised across national borders unless substantial difference is identified. This

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convention as of today has been signed by 54 countries, including the majority of EU member-states, and non-EU states, including Canada, and ratified by 52 (Council of Europe, n.d.). In Europe, FQR concerns immigrants from both within and outside Europe. For immigrants within Europe, a benchmark initiative is the Bologna process, which was instrumental in creating an overarching harmonising qualification framework that facilitates the articulation of educational qualifications across Europe. To a great extent, the Bologna process and the European Higher Education Area (EHAE) that was established as a result of the process, serve to promote a European-wide quality assurance system (Saarinen, 2005) and constitutes a neoliberal way of governing through standardisation (Fejes, 2008).

For immigrants from outside Europe, or, in the case of non-European settlement countries, international immigrants, FQR policies and practices vary from country to country. From March to June 2012, the Independent Network of Labour Migration and Integration Experts (LINET), run by the International Organisation for Migration, carried out a study on *Recognition of Qualifications and Competencies of Migrants* in six EU countries: Denmark, Germany, the Netherlands, Italy, Sweden and the United Kingdom, and two non-EU settlement countries: Australia and Canada (Schuster, Desiderio & Urso, 2013). The study provides an overview of the existing national policies and practices for assessing, validating, and recognising formal, non-formal and informal learning of immigrants in the participating countries. It also highlights the role of multilateral and bilateral recognition agreements such as NAFTA and the Washington Accord, which have set the framework of recognition within a particular region and field, or with regard to specific goods and services.

The LINET study pinpoints a number of challenges facing different countries. For example, the study shows that even within the same country, different methods might be used to recognise foreign qualifications. It also finds fragmentation of responsibility for assessment and recognition to be an issue in the majority of the countries studied. Additionally, it notes that a lack of statistical information on recognition outcomes and changing requirements of job competency in the labour market have also complicated recognition practices for immigrants. To improve existing FQR practices, the study recommended measures such as harmonising assessment practices, enhancing transparency of the assessment system, establishing a one-stop shop for recognition, and coordinating different authorities involved in assessment and recognition. To a great extent, these recommendations are about improving the institutional efficiency and the public accountability of recognition practices across countries.

In Canada, FQR has been recognised as an (economic) issue since the 1990s (e.g., Reitz, 2001; Watt & Bloom, 2001; Walker, 2007). However, it did not make it to the federal policy agenda until 2001, when it was named a priority in the Throne Speech. Canadian governments of different levels have since taken on a range of initiatives. For instance, the Forum of Labour Ministers was given the task of developing a Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications. In the province of Ontario, the Fair Access to Regulated Professions and Compulsory Trades Act was implemented in 2006 to hold licensure bodies responsible for making assessment processes transparent and fair. Similar bills have subsequently been passed in three other provinces. Additionally, governments and professional bodies have also negotiated mutual recognition agreements either with other governments or with their professional counterparts in other countries. For instance, in October 2008, the Province of Quebec and France signed the Mutual Recognition Agreement on Professional Qualifications. This is the first agreement of its kind between Europe and the Americas. It aims to expedite the process of acquiring a licence to practise a trade or profession

that is regulated in either place through the adoption of a common process for credential recognition. Professional organisations such as Engineers Canada have also reached mutual recognition agreements (MRA) with their counterparts in some countries. Unlike the EHAE framework which provides a qualification articulation framework for different countries, these agreements simply mean that members from MRA countries will have their credentials recognised by corresponding regulatory bodies in Canada.
While there have been significant changes in recognition practices, the measures introduced for change are often geared towards improving the efficiency, effectiveness, transparency, and accountability of recognition practices. What is being promoted is managerialism and the ideal of liberal fairness premised on assumptions of equality of opportunities, objective knowledge and universal truth. Given such an orientation, paradoxically, FQR has become an ever more legitimate social stratifier (Guo & Shan, 2013), as well as a more sophisticated technology of power that produces particular subjects and subjectivities out of immigrants. Increasingly, immigrants are positioned as flexible, autonomous, and entrepreneurial lifelong learners, who should learn to make up for their deficiencies, institutionally defined by assessment and recognition organisations (Andersson & Guo, 2009; Fejes, 2008). What gets reinforced in the changing context of recognition is the credential and certificate regime (Shan, 2009) where Western education is centred as "the" benchmark against which foreign credentials are assessed.

This paper departs from the managerial focus on institutional efficiency and liberal fairness. Building on the notion of recognitive justice (Guo, 2010, 2012), I propose that the standpoint of people undergoing assessment serves as an anchor point for the realignment of recognition practices. To illustrate my position, I draw on a qualitative study of foreign credential recognition practices in the engineering profession in Canada, which was conducted from the standpoint of some Chinese immigrant engineers. Specifically, in this paper, I explore two questions: 1) what are the engineers' experiences of writing confirmatory exams and getting licensed in Canada? and 2) how are their exam and licensure related experiences shaped by credential recognition practices? Following, I first introduce the notion of recognitive justice and illustrate how standpoint of people matters to it. I then introduce the context of research, followed by a presentation of the research methods and research participants. Thereafter, I focus on the research findings and conclude with a discussion of their implications.

Engaging the standpoint of people as a pathway to recognitive justice

Guo (2010, 2012) is the first scholar to promote recognitive justice for immigrant professionals. His work is primarily informed by Gale and Densmore, and Fraser. Fraser (1997, 2000) has engaged in a project that simultaneously tackles cultural domination and economic exploitation. Her work is concerned with two distinct assumptions underpinning social and intellectual movements today: one focuses on the cultural politics of recognition where status groups strive for the recognition of their perspectives and knowledges, and the other on egalitarian socioeconomic redistribution, which is interested mostly in political economic restructuring. She proposes a "perspectival dualist" analysis that takes up social and economic redistribution and cultural recognition as two mutually irreducible dimensions of justice. Gale and Densmore (2000) are interested, in particular, in what it means for a teacher to act justly in the classroom. They embrace a notion of recognitive justice that is concerned

specifically with cultural politics of social institutions and what it means to validate group differences. They argue that a recognitive approach involves three conditions for social justice: fostering respect for different social groups through their self-identification, opportunities for self-development and self-expression, and participation of groups in decision-making processes. Bringing the notion of recognitive justice to the fields of immigration and lifelong learning, Guo (2010, 2012) rejects a deficit understanding of immigrants' transnational lifelong learning experiences and an assimilative approach to integrate immigrants. Rather he points out that immigrants are attached to different traditions, values and cultural practices, which should be affirmed and treated as assets to ensure their equitable participation in host societies.

Side by side with cultural affirmation and entitlement to social participation, to achieve recognitive justice in the context of immigration, I argue that it is also crucial to explore the standpoint of immigrants to re-orient western-centric institutional practices. To this end, I turn to the feminist scholarship on standpoint. Standpoint theories were made popular by feminists in the 1970s and 1980s. Having a strong Marxist foundation, they acknowledge that the social position of a person shapes his or her knowledge; in other words, the socially oppressed class can access knowledge unavailable to the socially privileged (Haraway, 2004; Harding, 2004). Feminists especially endorse the standpoint of women because it reveals social realities that are often repressed, dismissed or inexpressible because of a lack of language in the dominant and often masculine discourses (DeVault, 1999; Smith, 1990). Women's standpoint is not about justifying the voices of women as being more accurate accounts of reality (Harding & Hintikka, 1983). Neither is the knowledge produced by taking women's standpoint only another discourse of knowledge, although women's discourse might contribute to 'a less repressive society' (Hekman, 1997, p. 25). What is more important is that women's standpoint provides an alternative ontology for us to challenge domination and marginalisation.

While also using the term of women's standpoint, Dorothy Smith, the founder of the feminist sociological approach of institutional ethnography, goes beyond asserting women's voices. Rather, she pinpoints that, often implicated in masculine institutions, women and by extension people have developed a bifurcated consciousness, constantly torn between our intimate, embodied and everyday knowing and a subjectivity regulated by objectifying social relations extending beyond the local; unfortunately the former is often relegated to the latter (Smith, 1990, 2005). With this insight, Smith tries to turn the status quo around and she proposes that women's and indeed people's standpoint, or their intimate everyday knowing provides an ontological alternative for social research. In other words, rather than treating theoretical constructs and ideological frameworks as the basis to construct reality for people, Smith believes that people's standpoint should be engaged as a valuable way to generate knowledge. According to Smith, people's standpoint provides us not only a language that is obscured by the dominant ideologies and practices, but also a political stance of action. In practice, engaging in the standpoint of people means that researchers departs from institutional discourses, and that they start from the empirical knowing of people in the local to unpack the objectifying social relations that work to the disadvantage of the minoritised and marginalised (Smith, 1990, 2005).

To achieve recognitive justice for immigrants, I believe that immigrants' standpoint, or their everyday knowledge derived from dealing with qualification recognition and assessment provides a critical anchoring point to examine existing recognition practices. In my study, it is based on the local knowledge of immigrants that I problematise the credential assessment practices in engineering. Throughout the

investigation process, as Smith (2005) has warned, I make a conscious departure from the dominant managerial and administrative perspective, and refrain from 'institutional capture' or reproducing institutional discourses of efficiency and effectiveness.

Research context

Historically, Canadian immigration policies consistently gave preference to white, male, European descents with sufficient means of support upon landing (Jakubowski, 1997). It was not until the 1960s that Canada ended the overt gendered and racialised practices. To achieve a competitive edge in the globalised knowledge economy, Canada started targeting skilled immigrants with desired educational and work experiences. In recent years, skilled immigrants account for more than 50 percent of all immigrants to Canada (CIC, 2007). An increasing percentage of these immigrants are from non-traditional immigrant source countries such as China and India. Recent immigrants are also most likely to be trained scientists and engineers (Couton, 2002). In 2001, of the 44 percent of skilled immigrants who identified an intended occupation at the time of immigration, 63 percent indicated engineering (Lemay, 2007). Asia, in particular China, has become the major provider of the most recent immigrant professionals in science and technology (Couton, 2002; Lemay, 2007). In 2000, 39 percent of immigrants intending to work as engineers (all specialties combined) were from China (Couton, 2002).

Despite the likelihood for immigrants to be trained in engineering, they are less likely than their Canadian-trained counterparts to be hired in engineering; when they are hired, they are often under-represented in engineering and managerial positions (Boyd, 1990; Boyd & Thomas, 2001; Wong & Wong, 2006). Credential recognition has been found to be a huge barrier preventing immigrant professionals, such as immigrant engineers, from succeeding in the Canadian labour market (The Conference Board of Canada, 2007). Against this context, Girard and Bauder (2007a, 2007b) have explored the historical rise of engineering licensure practices. Their work shows that in the province of Ontario, the engineering practitioners moved towards professional closure and made Canadian credentials the entrance criteria essentially to protect the economic interests of the Canadian trained engineers. Slade (2008) further explicates how the current engineering licensure process in Ontario is exclusive to immigrant applicants. At the root of the problem, as Guo (2009) points out, is the epistemological conflation between difference and deficiency and the positivistic tendency to endorse universal and "objective" measurement by licensure bodies.

In the past decade, the issue of recognition has attracted attention from different levels of governments in Canada. The federal government in particular has funded a number of initiatives for different stakeholders to move towards fair recognition practices. For instance, in January 2003, it funded the Canadian Council of Professional Engineers, now named Engineers Canada, to launch a project entitled *From Consideration to Integration*, which is to encourage occupational licensing and regulatory bodies to adopt best practices in foreign credential evaluation and to improve the integration of internationally-trained professionals into the Canadian workforce. Despite these endeavours, there is not yet any attempt to examine the recognition practices from the standpoint of immigrants undergoing assessment.

The research methods and research participants

This paper draws on a larger study that explored the social organisation of Chinese immigrant engineers' learning experiences in Canada. This paper focuses specifically on immigrants' experiences of going through the licensure process and writing confirmatory exams, and how their experiences are shaped by credential recognition policies and practices in the engineering profession. The field research took place in Edmonton, Alberta and Toronto, Ontario between 2006 and 2008; two cities with good concentration of immigrants and engineers.

For the field research, I started by conducting life history interviews (Plummer, 2001) with Chinese immigrant engineers. Altogether, I interviewed 14 Chinese immigrant engineers in traditional engineering fields: seven in Edmonton (two women) and seven in Toronto (three women). At the time of the interviews, ten of them were between 30 and 40, and three between 41 and 50. They had been in Canada for between 15 months and nine years. All except for one immigrant were married. Of those married, all except for one had at least one child. Before immigrating to Canada, one of them held a doctoral degree; seven had one or more master's degrees; the remaining six had bachelor's degrees. Interviews with immigrants typically took two hours, although the longest was 4 hours over a period of a few weeks. They covered the respondents' life and work experiences since they graduated in China, with a particular focus on their transitional moments and struggles, as well as their shifting perceptions and professional investment as they tried to manage their career life in Canada. For the purpose of this paper, I tried to follow up with the respondents in 2013 and was able to reconnect with four. Although follow-up interviews were not taped, notes were taken.

While conducting interviews with the immigrants, I also started mapping the organisation of the engineering profession through using a combination of key informant interviews, event observation and textual analysis. Altogether, I conducted 14 key informant interviews (3 other interviews were excluded due to reasons such as poor recording quality) with employers, project managers, senior engineers, HR recruiters, trainers, and staff from the licensure organisations: Association of Professional Engineers and Geoscientists of Alberta (APEGA) and Professional Engineer Ontario (PEO) (8 in Ontario and 6 in Alberta). Key informant interviews ranged from half an hour to an hour. The interviews were used to understand the work of the key informants in their different positions within the engineering profession. Additionally, I observed three immigrant training events and conferences and analysed a range of public and policy documents, including licensure guides. This paper draws only on interview data and textual analysis.

Interviews with immigrants were thematically analysed. Key informant interviews and texts are analysed to map out the organisation of the engineering profession, or the social happening across sites that coordinates immigrants' experiences. Trustworthiness of the study was ensured through triangulation (using mixed data collection methods), member checks (giving respondents an opportunity to review their interview transcripts, and review and provide feedback on the preliminary research findings), and maintaining an audit trail (keeping a journal of my reflective notes on the research process) (Lincoln & Guba, 2000). The following two sections report on the findings of the study related to immigrants' credential related learning experiences and credential assessment policies and practices in the engineering profession in Canada.

Getting credentials recognised: Immigrants' experiences with confirmatory exams

It took between one and 24 months for the immigrant respondents to land their first engineering jobs in Canada; before entering engineering, the majority of them did labour intensive work in restaurants, hotels, or manufacturing factories. The first engineering positions they obtained in Canada were often as drafters (or draftspersons), designers, and specialists, which are far from comparable with their last positions prior to immigration. To become engineers proper again, all 14 immigrant respondents except for one applied for Professional Engineer (P. Eng) licences in their respective provinces. At the time of the interviews, one already gave up on his application. Three were required to write professional practice exam only, which is required of all licence applicants; among them, two finished challenging the exam and acquired their licenses and one was in preparation for the exam. Three were in the middle of writing exams to confirm their prior credentials or to address "deficiency" in their academic backgrounds. Five were awaiting assessment results. One was to contest his assessment result through a meeting with an Experience Requirement Committee. In 2013, when I tried to follow up with the respondents, only four responded and all four had acquired their licences. This section is based on a thematic analysis of the interviews with all 13 immigrants who applied for licensure, with specific attention to the issues they faced with credential assessment and confirmatory exams.

Postgraduate learning discounted

Among the 13 people who applied for licences, two were told to write eight exams. Among the two, one gave up and returned to China. The other, Frank[1], said that in China, he enrolled in mechanical engineering for his undergraduate program but switched to civil engineering for his postgraduate program. Since he worked in civil engineering since graduation in both China and Canada, he applied for a P. Eng. licence in civil engineering in Ontario. Not recognising his training in civil engineering at the postgraduate level, PEO required him to make up for his education by writing eight exams. He said that some of the exams have exactly the same titles as the postgraduate courses he took. At the time of the study, Frank was to have an interview with an Experience Requirement Committee, hoping that his exam program would be cancelled through the meeting.

Non-recognition of postgraduate training as academic training was also a problem faced by Bing. Bing majored in mechanical engineering for her undergraduate program and studied for geotechnical engineering for her postgraduate degree in the US. In Canada, she found a job conducting structural analysis, and therefore decided to apply for a P. Eng. Licence in civil engineering. She said:

> I was asked to write four confirmatory exams… One of the compulsory exams is Geotechnical Materials and Analysis. I have chosen many courses, for my post-graduate program (in the US), in Geotechnical Material and Analysis. I have also done lots of research in that area. … so I wrote to them. After a while, I got an email from PEO. I was exempted from Geotechnical Materials and Analysis. But then, they assigned me to write another exam. What the heck! If I knew that, I would have remained quiet.

Bing was caught up by the rigidity of her exam program, as well as the systematic discount of postgraduate programs from outside of Canada in Ontario. What is interesting to know is that had she applied for a licence in Alberta, she later on found

out, she might not have to write any exams given that her postgraduate program was completed in the US (see next section).

Arcane curriculum and expanding training market

Not only did the immigrant respondents take issue with the limited recognition of their educational background, three were particularly critical of what Bing suspected to be the "purposeful" withdrawal of information that is directly relevant to the exams by licensure bodies. Bing for instance said that her load of work could have been reduced greatly had the list of recommended textbooks been relevant. She said:

> [Initially], I went to the library and borrowed a stack of books recommended by PEO. [Luckily,] [my husband and I] (knew) someone who just finished writing Municipal Engineering. He gave me the name of a book – he registered for a course and the instructor gave his class the title of the book. I then borrowed that book from the library too … I found out that many of the exam questions [from the past exams] were directly taken from that book. When PEO recommends books and materials to you, it does not recommend these kinds of books [which are directly relevant to the exams]. That book was easy to read, and was all relevant to the exam. But the books that were recommended … was nothing but mind boggling. I was furious! … For me I needed the book only to cope with the exam. … … actually if you take that course, the exam is not difficult at all. … I suspect that they did it on purpose. … as well, I bought their exam questions from previous years from PEO. But later, people told me that those questions are actually available on-line for free in Vancouver, British Columbia. How come they asked us to pay?

Two other respondents Gong and Jin also found that the textbooks recommended to them were of little relevance to their exams. As a result, Jin took a training program. Gong chose to study previous exams to prepare for his exams. When he had questions, he would pay a tutor whose name was recommended by the licensure body to provide solutions. Other exam writers dismissed the idea of paying a trainer or tutor for financial reasons. They mostly relied on the recommended list of textbooks to study for exams themselves.

It is not clear whether withdrawal of information is an intentional strategy on the part of the licensing bodies. It is however possible that an arcane list of textbooks may help fuel a training market that came about in response to the "needs" of immigrants to write confirmatory exams. What is clear is that when the curriculum structure and exam structure set up by the credentialing bodies are not in synch, it will result in excessive labour of learning for immigrants. The arcane curriculum, which hinders rather than helps exam writers, indicates a lack of what Fraser calls the redistributive (economic) and recognitive (cultural) justice (1997, 2000) in recognition practices. It also suggests that while these two dimensions of (in)justice are irreducible to each other, they certainly overlay and reinforce each other to the detriment of immigrants.

The labour of learning

While the respondents were reluctant to attend training programs for exams, five attended Master's or Doctoral programs in Canada (one dropped out in the middle of the degree program). Among them, Amy suggested that she took a Master's program because she always wanted a foreign degree. As well, by obtaining a Canadian degree, she should not be asked to write confirmatory exams when applying for a P. Eng. licence. While getting a Canadian degree would help immigrants bypass confirmatory exams (see next section), two respondents, Gong and Eric, were simultaneously writing

exams while attending a degree program. Gong, whose hair "turned grey" from writing exams on his own, and taking courses at the same time said: 'I need at least two years to write my confirmatory exams. To do a Master's program part-time, at least, I need four years. I could not let one wait for the other'. He then laughed at himself for having a "(western) degree complex".

If writing confirmatory exams itself is arduous, as all respondents reported, taking postgraduate courses in lieu of, or at the same time of, writing exams is gruelling. Eric described a period of his time when he was working full time in Calgary and attending a postgraduate course in Edmonton (a three-hour drive from Calgary) where his family was based:

> I was kind of busy a while ago when I was taking a course [at a university]. I went to work around 6:30 and 7:00 am and got off work at about 5:00 pm. Sometimes, I could work up to 7:30 pm because we were asked to work 50 hours a week for a project that we just finished. … at that time, I also had homework [from the course]. After getting off work, I would do homework. I would have to stay up until 1 or 2 am the next day. For quite a few times, I stayed up the whole night.

Eric was asked how he was taking care of himself during this period of time. He said that each week, he would drive from Calgary to his home in Edmonton, and bring back the next week's food prepared by his wife. Clearly, behind the labour of learning engaged by immigrants is also the labour of some family members, often the wives, and sometimes also the husbands, and even parents, who cook the meals, clean the house, take care of children, and generally keep things running at home while they study to earn a legitimate membership in their chosen profession.

Since the immigrant respondents spent a lot of time and energy on writing their exams, I asked them how useful their exam-related learning was. In response, some said that the confirmatory exams were not relevant to their work. Gong for instance said: 'I do structural analysis for mining projects. In one exam, I was asked to calculate the interval of a traffic light switch. What is that for? 'Eric said: 'Everything you learn is useful, in a way. … But the exams were not written for us. They were written for (the licensure bodies)'. I then asked the respondents what kind of learning would have been useful for them. They suggested some immediate needs and interests, such as Canadian codes and standards, theories related to their fields of practice, software commonly used at work, communication and so on.

The credential-related labour of learning is particular to immigrants whose backgrounds are not readily recognised in Canada. To get their prior and specifically undergraduate educational backgrounds recognised, the immigrant respondents had to take up heavy learning loads, which sometimes involves financial investment, and often demands huge commitments of time and energy from both immigrant applicants and their family members. What is more, their exam-related learning was often not relevant to their professional learning needs at the time when they were going through the licensure process. The study as such pinpoints a disjuncture between credential recognition practices and immigrants' stage of career development post-migration. This particular disjuncture prompts me to inquire into the ways in which confirmatory exams are meted out to immigrants in both Alberta and Ontario.

Academic assessment policies and practices: Institutional procedures problematized

Immigrants' experiences of writing confirmatory exams provided the standpoint for my examination of credential recognition practices in the engineering profession. In particular, the disconnectedness between the respondents' exam-related learning and their career needs post-migration led me to inquire into the institutional processes producing the learning labour and learning loads for immigrants. In this section, I specifically examine the academic assessment practices in the engineering profession in Canada, with particular attention paid to the ways in which, PEO and APEGA, two licensure bodies in Ontario and Alberta respectively, assign confirmatory exams for the foreign trained. Findings in this section are based on an institutional ethnographic analysis of interviews with key informants from the two licensure bodies and of the licensing and credential assessment information from both the two provincial regulatory bodies and from Engineers Canada.

The dual-system of credential assessment

There are 12 provincial and territorial engineering licensure bodies in Canada that conduct independent academic assessments and grant their own licences. This might be confusing for immigrants, especially because Engineers Canada, the national organisation of the provincial and territorial associations that regulate engineering practices in Canada, also provides education assessment for internationally trained engineers. On the official website of Engineers Canada, it says:

> While not part of the registration process to become a licensed professional engineer in Canada, the Engineering International-Education Assessment Program assesses the educational qualifications of individuals who were educated and trained outside of Canada by comparing their education to a Canadian engineering education. It is the only assessment service in Canada specialising *exclusively in the assessment of engineering education credentials* (Engineers Canada, 2008. Italicised original emphasis).

While on the same webpage, it claims that the assessment, which costs CA $175, helps immigrants to make an informed decision to immigrate to Canada and 'provides useful information for employers, universities and other officials' (Engineers Canada, 2008), it has no bearing whatsoever on how readily immigrants may pass their academic assessment by local provincial licensure bodies.

As part of the licensure process, internationally trained engineers who do not hold an undergraduate degree from a Canadian Engineering Accreditation Board (CEAB)-accredited program will need to go through an academic assessment process administered by provincial licensure bodies. Academic assessment committees may assign technical exams to 'ascertain whether an applicant's academic preparation is equivalent to that provided by an *undergraduate* engineering program accredited by CEAB, or to remedy identified deficiencies in an applicant's academic preparation compared to a CEAB-accredited program' (PEO, 2012a. Italicised author's emphasis).

Credential assessment process

In Ontario, if immigrants' qualifications are deemed to be "similar to" what is provided by Canadian programs, they may be assigned a confirmatory exam program that comprises three technical exams and one complementary exam. Applicants who are

assessed to meet the minimum academic requirement to apply for a P. Eng. licence, but do not hold a Bachelor of Engineering degree and have fewer than 10 years of engineering experience, are normally assigned a Phase 1 Exam Program, which comprises at least four exams in Basic studies. Applicants whose academic qualifications are judged to be lower than an engineering degree will be assigned a specific exam program, which may consist of up to 18 exams (PEO, 2012a; Slade, 2008). Once the qualifications of immigrants were determined against Canadian standards, the Academic Requirement Committee will typically assign exams in subjects that, according to some respondents, do not show up in applicants' undergraduate transcripts.

In Alberta, academic assessment follows a similar procedure as that in Ontario, but there are some differences too. In Alberta, academic assessment is conducted with reference to the foreign degree list (the list), which is a list of universities and undergraduate programs that APEGA recognises. Should applicants' degrees be on the list, APEGA will start with a standard confirmatory assessment with the Fundamentals of Engineering (FE) exam, an exam developed by the Accreditation Board for Engineering and Technology (ABET), a US-based accreditation board for post-secondary education programs in applied sciences, engineering and engineering technology, or with three technical exams plus Engineering Economics if the applicant has not taken the course before (APEGA, 2012). If the applicants' degrees are not on the list, they will be assigned either a FE or five technical exams. Course-by-course exams may also be assigned to cover deficiencies in the applicant's training and in such cases, university courses can be taken in lieu of exams. If the applicants do not have an undergraduate degree, they may be assigned up to 24 technical exams (APEGA, 2012).
In both provinces, confirmatory exams may be waivered under some circumstances. In Ontario, three cases may warrant exemption from confirmatory exams. First, if the applicants complete postgraduate studies at a Canadian university in the same engineering discipline as their undergraduate engineering degree. This partially explains why some immigrants decided to go back to school for postgraduate programs. Second, if applicants hold an undergraduate degree from an MRA country or area. MRA is an agreement that Engineers Canada negotiates on behalf of the engineering profession in Canada. It recognises the equivalency of the accreditation systems used in some countries, such as the US, Japan, Hong Kong, etc. with the Canadian system. Third, if the applicants have five years of engineering work experiences, they are given a face-to-face interview opportunity with the Experience Requirement Committee to see whether their experiential knowledge will be recognised in their discipline-specific engineering field (PEO, 2012a). Frank, for instance, had a face-to-face interview and through the interview, had his required number of exams reduced from eight to four. In Alberta, APEGA may also waiver technical exams if the applicants obtained post-graduate engineering degrees from an accredited Canadian, ABET, or MRA institutions. As well, for those whose degrees are on the list, should they provide evidence of at least 10 years of acceptable engineering experience, they might be exempted from confirmatory exams (APEGA, 2012).

Gaps and fissures in credential assessment process

While reviewing the ways in which PEO and APEGA assess foreign credentials and assign exams, a few core issues emerged. First of all, separate academic assessment processes are carried out independently by Engineers Canada, and the local licensure bodies. Immigrants whose qualifications are assessed to be up to Canadian standards by

Engineers Canada, and who therefore decide to move to Canada may still need to prove their qualification equivalence to another assessment board at the provincial level by writing confirmatory exams. Secondly, the ways in which APEGA and PEO carry out their academic assessment work is somewhat ad hoc. As a result, the same immigrant may be assigned a different number of exams in different provinces. Once the number of exams is assigned, it is often fixed unless exam writers demonstrate "good performance" by passing the first exams with fairly high scores (70 percent out of 100 and above in Ontario for instance) (PEO, 2012b). The conditions under which applicants may seek exemption from the exam programs are also different. For instance, applicants with five years' work experiences in Alberta will not get the same opportunity as those in Ontario to demonstrate their experiential learning in front of an Experience Requirement Committee (see APEGA, 2012). The discretion of academic assessors may differ as well. In Ontario, assessment of educational qualifications is conducted on an individualised and case by case basis (Slade, 2008). In Alberta, the list, which according to the key informant from APEGA, continues developing, serves as a reference point for academic assessors.

More importantly, both APEGA and PEO make Canadian credentials "the" standards immigrants from other countries have to meet. Foreign training by definition is either inferior or at best equivalent to engineering education in Canada (Guo, 2009; Slade, 2008). What is more, in the assessment process, immigrants are rendered the object of assessment, rather than subjects and participatory members with a voice on the value of their own experiences and learning needs (cf. Gale & Densmore, 2000). Such exclusion, I believe, prevents Canada from learning from the knowledge of the "others". Finally, confirmatory exams are to fulfill the administrative needs to assess immigrants' undergraduate backgrounds. Postgraduate training and other kinds of training immigrants receive later in their professional life is largely overlooked unless it is delivered in Canada, and in accredited ABET and MRA institutions in the case of Alberta. In other words, a significant part of immigrants' educational experiences may not be considered by academic assessors. For immigrants in the middle of their careers, this narrow focus on the remote past could easily result in a disjuncture between what is being evaluated and what is important for them to learn at their stage of career development post-migration.

Conclusion and implications

Since the latter half of the 1990s, national and international agreements have been negotiated and new polices and initiatives have been put into place in many OECD countries to improve FQR practices. While these changes have facilitated the mobility and recognition of some immigrants, they have also made western-centric standards "the" standards against which immigrants are gauged. Moreover, they have served to strengthen institutional management and control in line with the ideal of liberal fairness, an ideal that is premised on the assumptions of equal opportunities, homogeneous population and universal knowledge. They are a far cry from recognitive justice which is about giving voices to, and legitimising other knowledges, and more importantly extending a participatory space to the others, and thereby expanding local knowledge and practices.

Rooted in the ideal of recognitive justice, this paper ontologically introduces an alternative orientation towards recognition. Rather than making institutional efficiency and effectiveness the primary consideration, I propose that immigrants' standpoint and

everyday experiences serve an anchoring point for a realignment of recognition practices. This proposal may contradict the institutional interests of recognition bodies for institutional effectiveness. I do not presume that the tension between immigrants' individual needs and the mandate of professional licensure bodies for institutional assurance will ever disappear. Yet, by centering the standpoint of immigrants, licensure bodies and credential assessors are presented with an opportunity to start appreciating the experiences and knowledge of immigrants that are previously rendered invisible. More importantly, they will be better positioned to rectify existing institutional practices that severely undermine recognitive justice, which is tied to immigrants' economic outcomes as well as the economic prosperity of the host countries.

The research that I draw on to illustrate my proposal started by exploring the experiences of some Chinese immigrant engineers as they tried to obtain P. Eng. licences in Canada. Based on the immigrants' experiences of undergoing assessment and writing confirmatory exams, the study further identified a number of issues with foreign qualification assessment within the engineering profession. These are: redundancy, arbitrariness, Canadian-centrededness, and a focus on the past. The process is redundant as engineering organisations conduct their independent academic assessment at both national and provincial levels. The national assessment outcomes have little bearing on assessment results at the provincial level. It is arbitrary, as provincial licensure bodies set their own procedures, which may lead to different assessment results and hence differential learning loads for immigrants in different provinces. It is Canadian-centred for it precludes the possibility that other kinds of training and education can be complementary to Canadian education. Finally it focuses on the past, i.e. applicants' undergraduate training; postgraduate training undertaken outside of Canada (and MRA countries), which could be more relevant to immigrants' working life at the time when they apply for licences, is unfortunately discounted.

Some of the problems identified are administrative issues that might be addressed through streamlining the procedures adopted to assess foreign credentials. For instance, communication channels should be established between the academic assessment boards at the national and provincial levels. It is important that immigrants do not have to go through two separate processes to get recognised in Canada and that they have a consistent understanding of the value of their education in Canada. Further, credential assessment should look for ways to take into account immigrants' continuous learning after graduation especially postgraduate education obtained outside of Canada and MRA countries. As well, relevant and current resources should be directly communicated to exam writers, without the mediation of paid training programs; exam related materials should serve to facilitate exam-writing for immigrants rather than increase their learning loads. All recommendations aforementioned can still be criticised for using the master's tools to consolidate the master's house (cf. Lorde, 1983). While they may help address some obvious gaps and crevices in the academic assessment processes by engineering bodies, they may be reinforcing the positivistic trend of assessment and measurements (cf. Guo, 2009). To start addressing this epistemological issue, a participatory space should be created for immigrants to have a voice in the assessment process. In other words, in line with the ideal of recognitive justice (Gale et al., 2000), immigrants should be made collaborators in the assessment process, rather than merely its objects. That is, credential assessment for immigrants should not only serve the institutional desire for assurance, but also fit itself into the professional career development trajectory of immigrants. As collaborators of assessment, immigrants may also educate us on how other knowledges can add to the educational and professional practices in the host societies

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Note

[1] Both English and Chinese pseudonyms are used to reflect the name preferences of immigrant respondents.

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