

# Can the Development of CQ be Transformative?

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## Abstract

*Globalization requires students and employees to adapt to an ever-increasing range of diverse cultures and responsibilities, yet methods of training may fall short. To truly shift to a global mindset, transformative learning may be required. This paper uses autoethnography to analyze how the development of cultural intelligence (CQ) may have prompted transformative learning as a student and career professional. Exploring this connection has implications for theory, research, and practice.*

*Keywords:* studying abroad, working abroad, cultural intelligence, transformative learning

## Introduction

In an increasingly interconnected, globally interdependent world, the ability to work seamlessly across borders takes on greater importance. As communities and workplaces grow more diverse, today's students and employees are more likely to encounter a wide range of situations, groups, and responsibilities that require intercultural capabilities (Peng, Van Dyne, & Oh, 2015).

Institutions of higher education and organizations recognize that students and employees need new skills and competencies to thrive, yet traditional methods of preparation such as intercultural training based on cultural knowledge acquisition (Rosenblatt, Worthley, & MacNab, 2013), and study abroad programs may fall short (Peng et al., 2015; Strange & Gibson, 2017). Research on the effectiveness of cultural adaptation after intercultural training shows that shifting to a global mindset requires more than knowledge acquisition or exposure to intercultural experiences, it requires experiential (Ng, Van Dyne, & Ang, 2009), perhaps transformative, learning (Taylor & Cranton, 2012).

The purpose of this paper is to explore how the development of one's cultural intelligence quotient (CQ), a measure of intercultural competence (Livermore, 2011), may trigger transformative learning. Autoethnography (Ellis, Adams, & Bochner, 2011) provides a means to reflect on my lived experience (van Manen, 1990) of studying, working, and living abroad over more than four decades. Overlaying this personal narrative with analysis using the four-factor model of CQ (Earley & Ang, 2003; Livermore, 2011) and transformative learning theory (Mezirow, 2009, Taylor & Cranton, 2012), I will explore how the development of CQ may have precipitated transformative learning as both a student and career professional. The paper concludes with implications for theory, research, and practice.

## Cultural Intelligence (CQ)

Livermore (2011) defines CQ as the "capability to function effectively across a variety of cultural contexts, such as ethnic, and generational and organizational cultures" (p. 5). Through his teaching and research of thousands of individuals around the globe, Livermore maintains that CQ is a set of values, skills, and behaviors that can be assessed, learned and improved over time. The question to explore in this paper is whether the development of high CQ simply adds to existing knowledge, skills, and competencies, or whether the process of CQ development is itself transformative (Taylor & Cranton, 2012).

CQ was developed by business researchers, Earley and Ang, in 2003, and is based on scholarly scales that measured different types of intelligence and behavior. A personal CQ assessment provides quantifiable measures for the four capabilities:

1. **CQ Drive (motivation)** is your *interest and confidence in functioning effectively in culturally diverse settings*.
2. **CQ Knowledge (cognition)** is your *knowledge about how cultures are similar and different*.
3. **CQ Strategy (meta-cognition)** is how you *make sense of culturally diverse experiences*.
4. **CQ Action (behavior)** is your *capability to adapt your behavior appropriately for different cultures*. (Livermore, 2011, pp. 6-7)

CQ is grounded in decades of work on intelligence research that has 1) focused on capabilities that can be learned (versus personality traits); 2) incorporated empirical studies from psychology and sociology research; 3) focused on profound learning that impacts one's view of self and others; and 4) aligned with insights from research on other types of intelligence (Livermore, 2011, p. 27). In its extension of intelligence streams of literature, CQ is based on four factors of intelligence: motivational, cognitive, meta-cognitive, and behavioral (Earley & Ang, 2003). In the CQ framework developed by Livermore (2011), these are known as the four CQ Capabilities, each of which has multiple sub-dimensions.

### **CQ Drive**

This capability consists of intrinsic and extrinsic motivation, and self-efficacy (Livermore, 2011, p. 46). Intrinsic motivation refers to the internal enjoyment derived from engaging in multicultural interaction in and of itself. This is distinguished from extrinsic motivation which is influenced by external factors such as career advancement or financial gain. Self-efficacy (Bandura, 2001) is the degree to which an individual is confident of his or her abilities to adapt and be effective in cross-cultural situations. All of these sub-dimensions together provide the foundation for an individual's desire to learn and succeed in new intercultural contexts.

### **CQ Knowledge**

CQ Knowledge incorporates the sub-dimensions of business (legal and economic systems), interpersonal, socio-linguistics, and leadership (Livermore, 2011, pp. 75-76). This capability is what people normally encounter in training programs where they learn about cultural systems of countries around the world, as well as the social norms and languages, both verbal and non-verbal, that influence behavior. The leadership sub-dimension measures how well one understands how management practices vary from one culture to another.

### **CQ Strategy**

The third capability includes the sub-dimensions of awareness, planning, and checking (Livermore, 2011, p. 112). This capability is the nexus between the desire to engage interculturally, the knowledge about the culture(s) under consideration, and how this drive and knowledge will be applied in the real world. Awareness is the first step in strategizing, requiring one to pay attention to cultural cues to be able to respond appropriately. Planning refers to the intentional process of preparing for intercultural engagement, and checking is the ongoing process of comparing expectations and assumptions to reality.

### **CQ Action**

This is where the previous three capabilities are manifested in behavior and consists of the sub-dimensions of nonverbal, verbal, and speech acts (Livermore, 2011, p. 146). Nonverbal behavior measures how well one can adjust gestures, and facial expressions in a new cultural setting. Verbal behavior includes one's tone and pace when speaking with others, as well as accent and pronunciation when speaking a foreign language. Finally, speech acts captures the ways in which one alters methods of

communicating in various cultural contexts. While all four capabilities are inextricably interrelated, CQ Action is the behavioral component that determines how we show up and are judged in a new cultural context.

The CQ framework provides a holistic and consistent way to understand how these four factors can enable individuals to adapt seamlessly across multiple cultural contexts. Critical to the development of high CQ is the individual's ability to assess current state and develop learning strategies to improve. The CQ Center developed the Cultural Intelligence Scale (CQS) to provide a measure of competence in each of the four CQ capabilities (Cultural Intelligence Scale, 2005). I took the CQS (Cultural Intelligence Scale, 2005) in 2015 as part of a certification workshop to become a CQ Facilitator. In 2016, I took the 360-degree, multi-rater version of the assessment prior to an offsite where I provided training to our geographically-dispersed team.

In my assessment results (Cultural Intelligence Center, 2016), the 1-100 scale defines "Low" as scores that fall in the bottom 25% range of worldwide norms. "Moderate" scores represent the middle 50% of these global norms, and "High" are in the top 25% of scores from across the globe. Using this sliding scale rubric, CQ Drive scores from 1-64 would be "Low" because 25% of all assessments in 2016 fell within this range. Scores of 65-86 were in the "Medium" range and scores of 87-100 were "High." The following table provides these ranges for all of the CQ Capabilities as of the 2016 report.

Table 1

*Baseline Ranges for CQ Capabilities Scores of Low, Medium, and High*

Capability:	Low:	Medium:	High:
CQ Drive	1-64	65-86	87-100
CQ Knowledge	1-39	40-67	68-100
CQ Strategy	1-53	54-77	78-100
CQ Action	1-49	50-77	78-100

The question under investigation in this paper is how the development of CQ may have triggered transformative learning. One way to pull together the diverse strands of personal experience, cultural immersion, CQ development, and transformative learning is through autoethnography, where "auto" refers to self, "ethno" to cultural experience, and "graphy" to analysis (Ellis et al., 2011).

Autoethnography is a qualitative research method that combines elements of autobiography and ethnography (Ellis et al., 2011). Drawing on the ethnographic traditions of investigating a culture's relational practices, its values and beliefs, and shared experiences from the perspective of a participant observer, autoethnography employs personal narratives to "...understand a self or some aspect of a life as it intersects with a cultural context" (p. 279).

Accordingly, I provide five narratives covering a sampling of international experiences as a student and professional over four decades. Using the CQ 2016 assessment scores as a baseline, along with my experience as a CQ Facilitator, I retrospectively estimate my before and after CQ scores for the multi-cultural experiences described in the autoethnographic narratives (Ellis et al., 2011) below as a means of estimating my CQ development over time. I follow this description of CQ development with an analysis from the lens of transformative learning theory.

### **Autoethnographic Narratives**

#### **American Foreign Study League (AFSL)**

My first extended experience of being abroad was the summer I turned 16. I had learned about the American Foreign Study League from my English teacher, and when I discovered that I could get academic credit for touring Europe for a month, I was sold! It took longer to convince my parents who agreed to advance the \$2,000 program fee on the condition that I would pay it back, not a small matter for a teenager without a steady job. But we came to an agreement and I was on my way.

One of the requirements of the program was to keep a journal recording thoughts about our experiences. The first several entries were full of daily minutiae; what time I woke up, what we had to eat, what the weather was like, what “boring class” we had to attend, and, of course, what tourist attractions we got to see. Then, slowly but surely, I began to record my thoughts and feelings about the trip, including a memorable experience with a local in Tunisia. What can I say about how this first trip abroad impacted my level of CQ? In retrospect, I estimate my CQ scores before and after the month-long study trip in Table 2 below.

Table 2

*Before and After Comparison Scores for AFSL*

Before:	Score:	After:	Score:
CQ Drive	67 (Med)	CQ Drive	73 (Med)
CQ Knowledge	27 (Low)	CQ Knowledge	27 (Low)
CQ Strategy	40 (Low)	CQ Strategy	46 (Low)
CQ Action	10 (Low)	CQ Action	14 (Low)

To summarize, as indicated by my CQ Drive estimated scores, my motivation to engage in multi-cultural experiences increased slightly after the short study abroad trip, but my other CQ estimated scores didn’t change significantly. This could be explained by several factors: lack of immersion in local culture; travel with large group from home country; and very little preparation beforehand to increase cultural awareness and understanding. In short, this first foray outside my home county was educational, but not transformative. It did, however, set the stage for further exploration.

### **InterFuture Scholar – Germany**

As a college sophomore, I was selected to participate in the prestigious InterFuture (Intercultural Studies for the Future) program for undergraduates to design and execute a graduate-level research project across three different countries. The InterFuture program goals are to:

- firstly, to enhance students’ sensitivity to and understanding of the inner workings of other cultures;
- secondly, to teach them to appreciate and respect these cultures as they do their own;
- and thirdly, to lead them to self-reflection, and to re-evaluation of both the culture visited and their home culture. (InterFuture, n.d.)

Reflecting on my personal and career trajectory after the InterFuture experience, I see it as marking a phase transition. As noted in recounting the previous intercultural experience, I was already well motivated to learn about other cultures. In fact, my fascination with other languages and countries had begun at the age of 8, when I listened to my aunt speaking Spanish to my cousins and a whole new world opened up. I began studying Spanish at the first opportunity, middle school, and continued throughout high school. Pedagogical methods at the time focused mostly on the ability to read and write in the target language. After six years of studying Spanish, I graduated from high school without being able to actually carry on a conversation in that language.

Within a few months of starting college, a friend introduced me to German. I had had other friends in high school who studied German, but hearing this new friend, soon to be boyfriend, and later to be husband, rattle off sentences in German provided a completely new level of motivation. I was determined to speak it as well as him, and took first and second-level German concurrently the following year. Within six months, I was corresponding with him in German.

This dedication to learning a new language stood me in good stead when I was selected to be an InterFuture Scholar with cross-cultural research to be pursued in Germany, Jamaica, and the U.S.A. I

landed in Germany with about 18 months of language study completed, and stayed the first three weeks with a host family who had been instructed to only speak German with me. This was my first true immersion experience and I was so terrified to make a mistake that I hardly spoke the first week. Then I noticed that their younger son (8 years old) made frequent grammatical errors. I decided that if he could make mistakes as a native speaker then it was acceptable for me to make the occasional error as well.

Giving myself permission to ‘fail’ was the start of success. In short order, I had moved to a student dorm in Frankfurt where I began carrying out my three-month mixed methods research design, in which I surveyed participants on their reaction to different types of music, and interviewed Pastors and Music Directors. I recorded and transcribed all of the interviews and soon realized that I no longer had to think in English and translate to German; I was already dreaming and thinking in German after just six weeks.

Immersing myself in not only the culture, but also the language of a new environment was exhilarating and contributed hugely to my motivation and self-efficacy (Bandura, 2001) when encountering new intercultural situations (CQ Drive). I also grew tremendously in terms of my knowledge about the language, values, and norms of Germany (CQ Knowledge). The capabilities of CQ Strategy and CQ Action improved considerably as well as I had daily opportunities to practice and learn more in these areas. Estimating my scores in retrospect, one can see the huge difference before and after this three-month cross-cultural research study (see Table 3).

Table 3

*Before and After Comparison Scores for InterFuture – Germany*

Before:	Score:	After:	Score:
CQ Drive	73 (Med)	CQ Drive	87 (High)
CQ Knowledge	27 (Low)	CQ Knowledge	62 (Med)
CQ Strategy	46 (Low)	CQ Strategy	79 (High)
CQ Action	14 (Low)	CQ Action	78 (High)

What factors may have contributed to this increase in cultural intelligence? First, total immersion in both the culture and language broadened my perspective immensely as I began to understand and align myself with new cultural norms (CQ Strategy; CQ Knowledge). Being on my own also made a difference since I couldn’t fall back on usual patterns of speech and behavior with native English speakers. In fact, the only time I allowed myself to think or communicate in English was when reading or writing letters to friends and family.

Finally, the discipline of conducting research, transcribing interviews and writing up my findings in German took me far beyond the level of casual conversation to true fluency (CQ Action). This was brought home to me when attending a farewell luncheon at the end of my three-month stay. My in-country advisor invited me, the other InterFuture Scholar in the area, and a range of host advisors and support staff to his home. All of the German natives were fluent in English, but my American InterFuture colleague and I were both by that time also fully fluent in German. The conversation moved easily between the two languages and I realized later that I had not even noticed when we switched from one to the other. It was completely seamless. I had learned to think, converse and “be” in a new language and culture (all 4 CQ Capabilities).

### **InterFuture Scholar – Jamaica**

After a short break, I continued on to the second of the two study locales, Kingston, Jamaica. I hadn’t truly noticed while in Germany that one of the reasons I felt at home rather quickly was because, as a White female, it was easy to blend in. In preparation for the trip, I had researched Jamaican history, and knew that it was a former British colony with a predominantly Black population, but “knowing” was different from “experiencing.” While living in Jamaica for three months, I interacted with just one study participant who was White. The only other White people I encountered were tourists. Having heard about

racial differences and minority experiences in America while growing up, this was the first time that I experienced being “the only.”

I quickly acclimated to this new reality, helped immensely by the warm welcome of my host family with whom I lived for the entire three-month period. There were, however, quite a few aspects of Jamaican culture that came as a shock to me. First was Reggae music which was heavily influenced by rhythms and textures of heritage African music. Despite having listened to some recordings of Reggae in preparation for the trip, hearing it performed live was a whole new experience!

Other significant cultural differences are illustrated by the following anecdote. After a month or so of living on the island, I was sufficiently used to the traffic driving on the other side of the road to be handed the keys to the family’s van. My parents were arriving to celebrate my 21<sup>st</sup> birthday with me. For some reason, all of the passenger benches had been removed except the one at the very rear of the van. So, after greeting them at the airport, my parents sat in the back of the van with their luggage in front of them. They were a little nervous with their first experience of seeing the traffic drive on the “wrong side,” but more alarming were my frequent swerves. I had forgotten to warn them about what was now “normal” for me, i.e., the proliferation of potholes, goats, and chickens in the road that required me to avoid these obstacles on a regular basis. Sitting in the back without any visibility of the road, they had no frame of reference to understand my reactions. This was a memorable example of how something considered as “normal” in one cultural context could be experienced as life-threatening in another.

A less humorous memory also illustrates the vast differences between Jamaican culture and the homogenous WASP (White Anglo-Saxon Protestant) environment of my youth in Southern California. While living with the host family and traveling around town to my various appointments, I experienced three instances of assault. Nothing had prepared me for situations where I was not only the racial and gender minority, but where years of colonial history had primed Black men to perceive and respond to White women in ways that were completely foreign to me. Over time, I learned how to deflect or ignore unwanted attention, but I learned, for the first time, what it meant to feel unsafe.

Table 4

*Before and After Comparison Scores for InterFuture – Jamaica*

Before:	Score:	After:	Score:
CQ Drive	87 (High)	CQ Drive	86 (High)
CQ Knowledge	62 (Med)	CQ Knowledge	59 (Med)
CQ Strategy	79 (High)	CQ Strategy	80 (High)
CQ Action	78 (High)	CQ Action	68 (Med)

In this immersive experience, my CQ development was much more uneven. I estimated a slight decrease in CQ Drive, primarily due to challenges to my self-efficacy (Bandura, 2001) in this new and sometimes hostile environment. CQ Knowledge also decreased somewhat, as I realized that the history of Colonialism and Black subjugation was still an area where I had much to learn. CQ Strategy increased slightly as I learned to cope with new cultural norms. Interestingly, the biggest dip was in CQ Action. There was a huge disparity in my level of comfort with the family where I boarded and the research site, compared with multiple negative experiences in public places. This inability to fit in and convincingly exhibit local mannerisms may have contributed to my difficulty in deploying the CQ Drive, CQ Knowledge, and CQ Strategy capabilities for successful CQ Action (Livermore, 2011).

**Fulbright Scholar – Austria**

This post-graduate opportunity marked another turning point in my life. Not only had I graduated from student to professional, but for the first time I was living overseas with someone else, my husband. We had left for Europe two days after the wedding, settling in Austria for my Fulbright-sponsored job after a honeymoon spent researching pianos across Europe. This time, instead of being forbidden to speak English, I was an assistant to all of the English teachers at an Austrian Gymnasium (students aged 10-18).

For many of these students, I was the first and only American they had ever met. I found myself in the unexpected position of being an unofficial Ambassador, doing my best to explain American customs and rationale for action on the global stage.

This experience was also different from the preceding ones in that it was long-term. We lived in this small town in Upper Austria for two years, interacting with locals on a daily basis. We had anticipated that our German language abilities would be applicable but learned quickly that Austrians consider German to be a foreign language. In fact, the dialects differ so much from region to region that someone from Vienna might be unable to converse with a countryman from Tirol! Luckily, we had made friends with a couple where the husband was an English teacher and the wife was from America. They created a tip sheet for us, explaining how German was transformed into the Upper Austrian dialect. This became the key to unlocking meaningful engagement with locals as it allowed us to increase our comprehension and communication of the local language dramatically.

One anecdote illustrates the importance of language fluency as well as the differences in American and Austrian education environments. On my first day working with one English teacher in his 5<sup>th</sup> form class (10-year-old students), I was amazed when they all stood as we walked in the door and greeted us as a class before taking their seats. Showing respect in such a visible way was something I'd only heard about, but never seen personally. Once I had been introduced, they immediately put me to the test. Apparently, the students asked all of the Teaching Assistants to say one word in German that inevitably tripped up native English speakers with its difficult pronunciation: Eichhörnchen (squirrel). I passed the test and their delight was evident as we then dove into the lesson of the day. In retrospect I realized that this combination of respectful and fun engagement was typical of many of the students I worked with over the two-year assignment.

Table 5

*Before and After Comparison Scores for Fulbright Scholar – Austria*

Before:	Score:	After:	Score:
CQ Drive	86 (High)	CQ Drive	89 (High)
CQ Knowledge	59 (Med)	CQ Knowledge	66 (Med)
CQ Strategy	80 (High)	CQ Strategy	83 (High)
CQ Action	78 (High)	CQ Action	81 (High)

In the estimated before and after scores, the largest gains are in CQ Knowledge and Action. As noted previously, my CQ Drive had started out high and continued a slight rise due to ongoing increases in motivation and self-efficacy. CQ Knowledge is more specific to the immediate context and here I had learned quite a bit about the business norms and values of Upper Austria as expressed in their educational philosophies and styles. CQ Knowledge also includes socio-linguistic capabilities; becoming fluent in the local dialect contributed to the slight rise in score. CQ Strategy built on my previous experience in Germany and was adjusted for the adaptation to differences in cultural norms encountered in Austria. The biggest gain was in CQ Action (Livermore, 2011). Immersion in school and village life enabled me to adapt my language skills (from German to Austrian dialect), and bridge differences between US and Austrian teaching methods in my work environment.

### **Intercultural Responsibilities in Professional Roles**

After completing the two-year Fulbright Scholarship in Austria, my husband and I moved to Munich, Germany where we lived and worked at the US Army Base. We were eager to experience as much in local economy as possible, and were amazed when we met a number of Americans who had lived there for ten years or more and rarely ventured off-base. For us, this was an unparalleled opportunity to sample a wide range of cultural experiences in classical music, art, fine dining, and extended travel across Europe.

Within a short time, I had found a job with a US contractor where I began to act as a translator and relocation coach for incoming personnel. It was my first full-time job with a US-based company, and I was able to compare and contrast business norms and values between the expat Americans, and German local hires, as well as see first-hand how salaries, benefits, and social services differed between the USA and Germany. In fact, I obtained an MBA from the overseas program of Boston University while living in Germany, and completed several papers that delved more deeply into cross-cultural issues for expats as well as salary, taxes, and benefit differences between the two countries.

I finished the MBA about the same time as the drawdown for US troops across Germany began. The base where we lived in Munich was scheduled to shut-down, and I started looking for a job in the US. Shortly after a visit to Washington, DC, where I met with the president of the newly-established US headquarters for Deutsche Aerospace, I was offered a job as his executive assistant. This eventually morphed into a leadership role in the nascent field of knowledge management and competitive intelligence. It also marked the first time that I began working, on a regular basis, with colleagues at a distance. In today's environment of instant communication via a broad range of technologies, this doesn't seem remarkable. But in the days before email and internet access, it was much more difficult to stay connected to colleagues who were not co-located.

I discovered that my language skills were invaluable in forging connections and enhancing remote communication. It was also useful that I had already experienced being the "face of America" while in Austria. In my new job as the first American employee of this German-based company, I likewise had to be the translator and representative of American culture for my German colleagues. This role expanded when the company merged with other aerospace and defense companies in the United Kingdom, France, and Spain. As I started to travel back to the offices and factories in these countries, I was able to practice and improve my French and Spanish, realizing that I didn't have to be fluent to demonstrate goodwill and a desire to continue learning.

After 10 years in the US field office for this European company, I finally took a job in the international division of a US-based global company. For the first time, I was responsible to engage not only with colleagues across the entire US, but with non-US nationals based in dozens of countries around the globe. In short order, I was tasked to stand up a global knowledge management system, traveling to 14 countries to train personnel in this new web-based technology. This was a unique opportunity to put my CQ capabilities to the test, and develop further in the areas of CQ Knowledge, Strategy, and Action.

As shown below, my motivation to continue learning, and belief in my abilities (CQ Drive) has continued to rise over decades as a career professional. There has been a dramatic increase in my CQ Knowledge due to ongoing engagement and leadership on projects with colleagues across the globe. CQ Strategy has also increased, partly due to intercultural experience over the years, and partly attributable to an increased range of resources to plan for cross-cultural encounters. Finally, CQ Action has shown how all of these capabilities have combined to help me be a more effective employee and cross-cultural leader.

Table 6

*Before and After Comparison Scores for Intercultural Responsibilities in Professional Roles*

Before:	Score:	After:	Score:
CQ Drive	89 (High)	CQ Drive	91 (High)
CQ Knowledge	66 (Med)	CQ Knowledge	88 (High)
CQ Strategy	83 (High)	CQ Strategy	94 (High)
CQ Action	81 (High)	CQ Action	89 (High)

In the following section, I analyze these retrospective accounts and description of CQ development with transformative learning theory (Mezirow, 2009) to better understand how my perspective transformation might be linked to an increase in cultural intelligence over time.



## **Analysis of CQ Development from the Lens of Transformative Learning Theory**

In the experiences described in the preceding autoethnographic narratives, I elaborated on how my cultural intelligence developed from the perspective of my lived experience (van Manen, 1990). Was this development over time transformative? How can transformative learning theory provide insight into the perspective transformation (Cranton, 2006) I experienced over many years of living and working in countries around the globe?

### **Transformative Learning Theory**

Transformative learning theory emerged from Mezirow's 1975 research studying the experience of women who had returned to college after an extended absence (Mezirow, 1978). In his findings, he described the ten phases they experienced in their transformative learning process: "a disorienting dilemma; self-examination; a critical assessment of assumptions; recognition of a connection between one's discontent and the process of transformation; exploration of options for new roles, relationships, and actions; planning a course of action; acquiring knowledge and skills for implementing one's plans; provisionally trying of new roles; building competence and self-confidence in new roles and relationships; and a reintegration into one's life on the basis of conditions dictated by one's new perspective" (Mezirow, 2009, p. 19).

In the early years of transformative learning theory development, Mezirow emphasized the rational, cognitive approach to change, placing critical self-reflection at the forefront of this process (Mezirow, 1978, 1998). In subsequent decades, scholars have broadened the scope of transformative learning considerably to incorporate holistic elements such as extrarational, affective, somatic, spiritual, intuitive, or whole-person approaches to transformation (Dirkx & Smith, 2009; Hoggan, Simpson, & Stuckey, 2009; Taylor & Cranton, 2012; Yorks & Kasl, 2006). Central to all of these approaches is the agreement that the individual has had a perspective transformation that results in a change of the "very form by which we are making our meanings" (Kegan, 2000, p. 53).

In his review of the first two decades of transformative learning theory and research, Taylor provides three themes that summarize the 10 phases of transformative learning explicated by Mezirow (2009): "centrality of experience, critical reflection and rational discourse in the process of meaning structure transformation" (Taylor, 1998, p. 8). Experience is at the heart of transformative learning; it is the experience of a disorienting dilemma that triggers the process of critical reflection, discourse, and a transformed perspective.

The second theme of critical reflection stems from the work of Habermas on rationality and analysis (Mezirow, 1998; Taylor, 1998). Mezirow considered reflection to be a key characteristic of the adult learning process, distinguishing between content, process and premise reflection. It is premise reflection on assumptions and beliefs that is most likely to lead to a shift in perspective in how individuals see the world (Cranton, 2006). Finally, in the third theme of rational discourse, the learner engages with others to critically reflect and make sense of the experience. In this part of the process, learners may try on other perspectives, determine their validity, and ultimately, transform their meaning schemes (Cranton, 2006; Taylor, 1998).

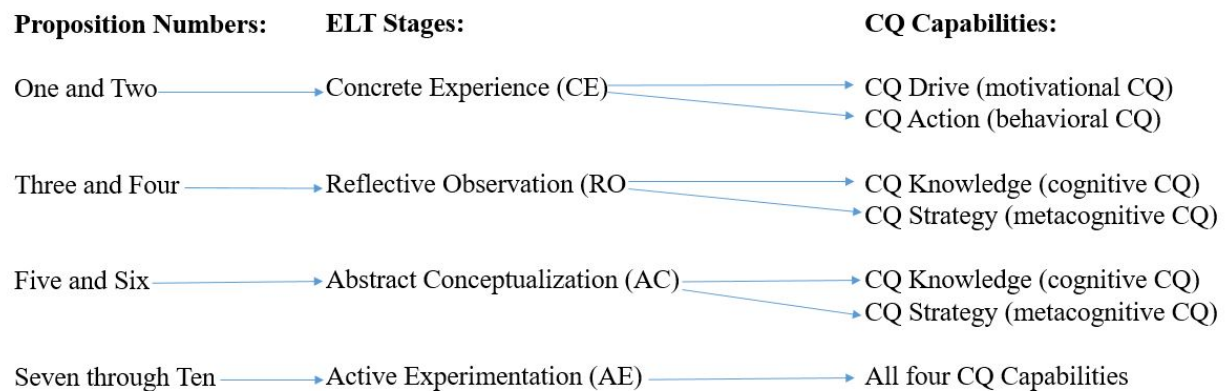
### **Experiential Learning Theory**

These three themes are congruent with one of the recommendations for fostering transformative learning in practice: experiential learning (Taylor, 1998; Hoggan et al., 2009). Experiential Learning Theory (ELT) (Kolb & Kolb, 2005) emphasizes the centrality of experience in learning, a theory propounded by 20<sup>th</sup> century scholars such as John Dewey, Kurt Lewin, Jean Piaget, and William James, among others. In his 1984 seminal work, Kolb outlines the six principles derived from these scholars which combine to form ELT: 1) learning should be considered an ongoing process rather than a specific outcome; 2) learning incorporates continuous relearning; 3) learners must constantly resolve dialectically

opposed modes of adaptation such as feeling and thinking, and reflecting and acting; 4) learning requires holistic engagement with the world; 5) learning is situated in specific contexts; and 6) learning creates knowledge both socially and personally (Strange & Gibson, 2017).

Experiential learning is a theory that outlines the holistic learning processes of feeling, perceiving, thinking and doing as Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC), and Active Experimentation (AE). These four components interdependently interact in an ongoing, nonlinear way such that learners are able to: 1) engage and function well in new, unstructured experiences through feeling and intuition more than rational thinking—CE; 2) reflect critically on these experiences from a variety of perspectives—RO; 3) distill these reflections into general theories to guide future action—AC; and 4) incorporate these theories into action, determining whether they fit reality (Hoggan et al., 2009; Kolb & Kolb, 2005).

In their model integrating research on experiential learning with cultural intelligence, Ng et al. (2009) adopt the ELT framework to outline the process by which global leaders develop through their international assignments. Their ten propositions link the four stages of ELT with the four CQ capabilities as shown in Figure 1:



*Figure 1.* Propositional Linkage of the Four Stages of ELT to the Four CQ Capabilities

Figure 1 depicts the relationship between the 10 propositions in Ng et al.'s model and how they are linked to the four stages of the ELT and the four CQ capabilities (pp. 515-518). Following their rationale to explain how engagement in all stages of the ELT and high levels of CQ impact the success of global leaders in their international assignments, I will examine my examples of CQ development and transformation against their propositions (Ng et al., 2009).

## **Examination of CQ and Personal Transformation**

### ***Concrete Experience.***

In their first two propositions, Ng et al. (2009) examine the ELT phase of Concrete Experience, proposing that an individual's level of CQ Drive (motivation) and CQ Action (behavior) will directly impact the quality and amount of concrete cross-cultural experiences they seek out. In my narratives, I describe how my CQ Drive was already at a medium level (67) in my first intercultural experience of a study month abroad. It moved from medium to high (89) during the immersion experiences in Germany, Jamaica, and Austria, stabilizing at a high of 91 over subsequent years of cross-cultural engagement in a professional capacity.

My CQ Action scores likewise rose at varying rates during the various cross-cultural experiences. The most dramatic increase was from a low of 10 prior to the month-long study trip to a high of 78 after the first InterFuture stay in Germany. The increase was likely the result of full immersion in the language

and cultural norms of the host country, providing the opportunity to put all of the CQ capabilities into action. Further increases to the current score of 89 reflect the many opportunities to be engaged multi-culturally over decades, both personally and professionally.

***Reflective Observation.***

In propositions three and four, Ng et al. (2009) describe the ELT stage of Reflective Observation, proposing that the capabilities of CQ Knowledge (cognition) and CQ Strategy (metacognition) will allow individuals to better understand cultural differences and similarities, be more aware of cultural cues, and be more likely to think through their observations in light of their assumptions, values, and beliefs.

This was borne out in my recounting of an increase in CQ Knowledge from a low of 27 after the first intercultural experience to a high of 88 over several immersion experiences and cross-cultural responsibilities in professional roles. CQ Strategy likewise increased from a low of 40 to the current high of 94. The development of CQ Knowledge was fairly steady in moving from low to medium while becoming fluent in German and learning about local norms and values. It then decreased slightly while in Jamaica as I realized how much I still had to learn about the experience of Colonialism and Black subjugation. The CQ Knowledge scores stabilized at medium during the two years in Austria then jumped from a medium score of 66 to a high score of 88 after exposure to dozens of other cultures through business travel and collaboration with global colleagues.

Throughout the multiple cross-cultural experiences of travel, study, and working abroad, I went through several iterations of reflecting on these experiences and examining them in terms of my assumptions and beliefs (CQ Strategy). During the three-month rotation in Germany, my perspective expanded due to exposure to new cultural norms and values. These were, however, not sufficiently different from my own norms and values to prompt a disorienting dilemma (Cranton, 2006). Jamaica, though, was completely different from any previous experience and several negative experiences caused difficulties in adapting. Reflection on these experiences once I arrived home did prompt a disorienting dilemma as illustrated by the poem I wrote after months of struggling to reconcile my preexisting values and beliefs with those that were emerging.

*I feel so alone  
A drifting, wayward star  
Without order, nothing makes sense  
Why am I struggling so hard to escape the structures? Without them – I am nothing  
Freedom is a beautiful and dangerous word  
It is an eagle hurtling to its own destruction . . .  
Without order – there is no freedom  
I must obey the inherent laws in order to be free  
But which comes first?  
In my struggle to be free, I am losing myself.                      It hurts.*

The feelings evoked in that poem are still real to me. The language already hints at the notion of chaos versus order, as well as the disorienting nature of the dilemma I was facing at the time. I now think of that time as the beginning of my transformative learning journey.

***Abstract Conceptualization.***

In propositions five and six, Ng et al. (2009) present the ELT stage of Abstract Conceptualization, proposing that individuals with high levels of CQ Knowledge (cognition) will more accurately and effectively see patterns that will enable them to develop interpretations of cultures they encounter. High levels of CQ Strategy (metacognition) facilitate the process of modifying generalizations when these individuals encounter cultural paradoxes to resolve.

In my cross-cultural experiences, immersion provided the best opportunities to consolidate new knowledge, observe, and adapt to new socio-linguistic and cultural norms on a daily basis. CQ

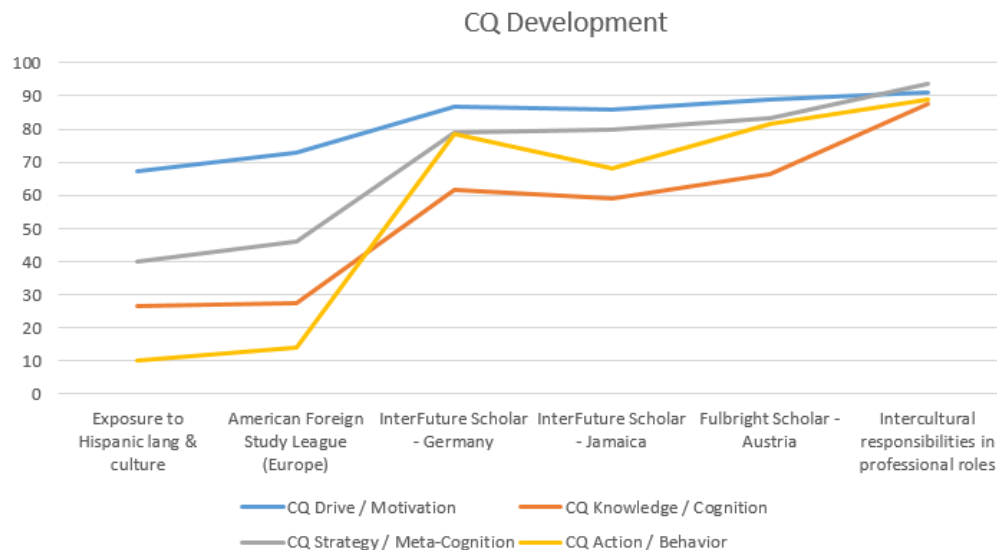
Knowledge increased from low to medium throughout the InterFuture and Fulbright immersion experiences then increased further from medium to high over many years of engagement with hundreds of colleagues from more than 35 countries.

CQ Strategy is the metacognitive process of thinking about thought processes. In the cross-cultural contexts I experienced, this was discernible in my ability to strategize prior to intercultural encounters and think through the engagements that occurred, checking them against existing assumptions, values, and beliefs. Increases in CQ Strategy from a low score of 40 prior to the month-long study trip, to a high score of 79 after the first InterFuture rotation illustrate the improved ability to make adjustments to my mental map and strategy for engagement as required. Repeated opportunities for learning in Jamaica, Austria, and dozens of countries as a professional have continued to improve my CQ Strategy to a current score of 94.

### ***Active Experimentation.***

In the final four propositions, seven to ten, Ng et al. (2009) discuss the fourth and last ELT stage of Active Experimentation, proposing that individuals with high levels of CQ in all four of the capabilities are more likely to implement what they have learned as they activate their CQ Drive, Knowledge, Strategy, and Action to successfully adapt and flex their styles to various cross-cultural engagements.

Over the course of 40+ years of studying, living, working, and traveling abroad, my CQ scores have increased from low or medium levels at the outset to the current high scores for all four CQ capabilities. The development over time is evident in the figure below that plots the scores for each of the CQ capabilities over the intercultural experiences described in the autoethnographic narratives (Ellis et al., 2011).



*Figure 2. CQ Development*

The perspective transformation (Cranton, 2006) that occurred over this period has likely been a combination of epochal (Kitchenham, 2008) after the InterFuture Scholar rotations to Germany and Jamaica, and continuous over the long-term immersion experiences in Austria and Germany. The final section concludes with implications for theory, research, and practice.

### **Implications for Theory, Research and Practice**

The purpose of this paper has been to understand the potential linkage between CQ development and personal transformation as experienced over several decades of studying, living, traveling and

working abroad. Demonstrating the plausibility of this connection may have implications for theory, research and practice.

From a theoretical perspective, the use of Peng et al.'s (2009) process model integrating cultural intelligence and experiential learning provided an overarching framework to analyze the autoethnographic narratives of my CQ development. Such a framework incorporating measures to assess development answers the criticism of traditional training approaches that lack a conceptual framework, and tend to use a smorgasbord approach to preparing students or professionals for intercultural encounters (Rosenblatt et al., 2013). In my analysis, each of Peng et al.'s 10 propositions were borne out in my experience. Overlaying this with transformative learning theory (Mezirow, 2009) provided a reasonable explanation of how my experiences abroad both supported an expanded perspective and, in some cases, prompted a disorienting dilemma that led to a further perspective transformation (Cranton, 2006).

As a research method, the autoethnographic process addresses issues of trustworthiness through triangulation of multiple sources of data (Duncan, 2004). These include participant observation as evidenced in the five examples, reflective writing sources such as letters, journals and narrative retrospection, and artifacts including photos and the thesis produced for the InterFuture study (Kennedy, 1982).

In the research and literature streams of study abroad (Strange & Gibson, 2017) and global leader development (Ng et al., 2009), empirical data demonstrates the importance of experiential learning (Kolb & Kolb, 2005). This style of learning was linked to perspective transformation in the investigation of students participating in programs abroad (Strange & Gibson, 2017), as well as to the development of intercultural competence for global leaders (Ng et al., 2009). In my analysis, I likewise found that the greatest increase in CQ was during the full immersion InterFuture experiences in Germany and Jamaica. Both of these three-month stays incorporated high levels of experiential learning through intensive engagement in the local communities. My disorienting dilemma and subsequent perspective transformation (Cranton, 2006) was captured in a poem written after the completion of the program.

For training programs preparing students or professionals for experiences abroad, and for researchers who wish to understand the effectiveness of these programs, the Cultural Intelligence Scale (CQS) (CQ Center, 2005) provides a validated assessment, dozens of empirical studies and a wealth of learning tools to support the development of cultural intelligence. Not all cultural training programs frame their course objectives in terms of transformative learning (Cranton, 2006). Understanding the relationship between the development of cultural intelligence and transformative learning may improve program goals and methodologies to achieve these goals.

Finally, if there is a plausible connection between the development of CQ capabilities and transformative learning, how might this inform a transformative education approach for students and career professionals (Peng, et al., 2015) in practice? Participating in study abroad, rotation programs, or expat assignments may not always be economically viable. While these kinds of programs are more likely to incorporate the type of experiential learning that prompts CQ development (Ng et al., 2009), and perhaps transformative learning (Strange & Gibson, 2017), intentional design of CQ education in their home locations can also achieve impressive results (Rosenblatt et al., 2013).

In addition to formal, structured cross-cultural training programs, many students and professionals have regular, informal cross-cultural encounters on their campuses or in the workplace. Providing resources and development programs to raise awareness may encourage the development of CQ during these emergent opportunities. Not only could the intentional development of CQ provide guidance and practical recommendations to positively impact productivity of global virtual teams, but exploring the transformative potential of CQ provides an opportunity for enabling well-rounded, productive, and successful global citizens.

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