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Learning for Adaptation

An edusemiotic perspective on intercultural communication competence

Abstract: The conceptualization of intercultural communication competence (ICC) has been updated tentatively since it was formulated in the 1970s. A common recognition is that development of ICC can only be realized through an individual's adaptation, which results from the integration of the multiple forces within the individuals themselves. However, most of the existing research on ICC has focused on the conscious aspects of competence like abilities or skills that are distinguishable, that is, *what* to adapt, rather than the less conscious aspect, or its correlation with the unconscious part, that is, the *how* to adapt, or what the process of adaptation is. The absence of investigation into the adaptation process may have been a consequence of the educational context of studies on ICC, which depends much on, or is heavily affected by, the Cartesian dualistic viewpoints that emphasize the dichotomy of mind–body while ignoring the “middle” in between. Based on our previous semiotic analysis that explained the process of intercultural communication as a form of semiosis, this paper adopts more perspectives from edusemiotics to conceptualize *learning* following a triadic framework with emphasis on the process as the “middle,” which renders it possible to reflect on the process of individuals' adaptation in contexts of intercultural communication.

Keywords: communication; culture; education; semiosis; semiotics

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1 Educational purposes of studies on intercultural communication

The study of communication between different cultures as an academic discipline was not established until the 1950s, when Edward T. Hall (1914–2009), an American anthropologist, published his first book, *The silent language*, a milestone in the field of what is now regarded as intercultural communication studies. Hall's derived much from his personal life experience on the one hand, such as his work on Navajo and Hopi reservations (1933–1937) and his service in the Second World War in Europe and the Philippines (1942–1945), and his academic studies in anthropology on the other.¹ Meanwhile, Hall's motivation to develop intercultural communication studies grew out of his educational practice, as he studied, researched, and taught in educational institutions during much of his lifetime and most importantly, served as Director of the Point IV Training Program at the Foreign Service Institute in Washington, D.C., which was a role mainly responsible for training candidates for services in other countries. This motivation was apparent because Hall published “The anthropology of manners” in 1955 at the invitation of the editor of *Scientific American* to share what he was teaching at the Foreign Service Institute, while *The Silent Language* is largely an expansion of “The anthropology of manners” (Rogers et al. 2002).

Hall's educational motivation in establishing intercultural communication studies has remained influential in that almost all the follow-up studies in this field have been education-based or education-oriented. Some studies have focused on disciplinary teaching and learning (e.g. Byram 1997; Chen 2007; Dearnorff 2006), while others have been broadly contextualized for service training and corporate management (e.g. Beamer and Varner 2008; Spencer-Oatey 2008), in addition to a large number of integrated explorations throughout the past few decades (e.g. Chen 2010; Fantini 1995; Patricia and Marcia 2005; Samovar et al. 2017). Therefore, it can be safely contended that an educational purpose has always been at the core of studies on intercultural communication. For Hall, the purpose might have been to train government agents for foreign affairs, while for contemporary scholars, the aim is more generally to assist people like students or other learners to perform better in

¹ Hall earned both his BA and MA degrees in Anthropology from University of Denver and University of Arizona in 1936 and 1938, respectively. In 1942, he received his PhD from Columbia University.

intercultural contexts, which has been largely aligned to develop individuals' *intercultural communication competence* (ICC).

The conceptualization of ICC derived much from the concept of *competence* formulated by Hymes (1972) from a linguistic perspective as referring to how effectively communicators can convey and understand messages in specific contexts. Although scholars' opinions differ regarding the terms *intercultural competence* (IC) and *intercultural communication competence* (ICC), for instance as to whether they are simply alternatives (Gao 2014) or if the former should focus mainly on skills like literacy and the latter should emphasize communication skills, it has been a consensus that a key purpose of studies on intercultural communication is to improve an individual's performance in intercultural contexts or to develop an individual's intercultural communication competence.² Consequently, intercultural communication competence that embodies an educational purpose has been a dominant topic in a wide range of studies in this area (e.g. Byram 2011; Chen 1989, 2010; Deardorff 2006; Spitzberg and Changnon 2009; Ting-Toomey and Kurogi 1998).

A result of the incorporation of the educational purpose in studies on intercultural communication and ICC is that although researchers have made much effort to define and frame the concept of ICC from various perspectives (Muhammad Umar et al. 2018; Ward and Wilson 2014), they have been in the meantime largely influenced and affected by the dualistic and analytical philosophy that has explicitly and implicitly dominated educational studies in English-speaking countries (Semetsky 2014). However, Cartesian dualism, or the "body–mind" dualistic philosophy, tends to ignore the "middle" in between, that is, the process linking the body AND the mind. For education, the "middle" is the process of learning, the *Third*. Therefore, in the past two decades, edusemiotics, comprising a range of semiotic perspectives with a focus on the process of learning, has been promoted and advocated by several renowned semioticians (e.g. Danesi 2010; Deely and Semetsky 2017; Kull 2018; Olteanu 2014; Semetsky 2010; Semetsky and Stables 2014; Stables 2018) to problematize dualistic educational theories and practices.

Hence, considering the educational purpose of studies on intercultural communication, one can skeptically inquire whether the conceptualizations of intercultural communication competence can be problematized regarding the

² Some scholars, like Guo-ming Chen (1989) and Spitzberg (2009), refer to intercultural communication competence (ICC) and intercultural competence (IC) interchangeably as the same concept, while researchers like Byram (1997) make a distinction between the two terms. In this study, we follow the former viewpoint and will henceforth use ICC only.

absence of the “middle” as well. If so, what is the “middle” or the *Third* referring to? This paper aims to answer these questions through an analysis of existing conceptualizations of ICC using a framework derived from semiotics and especially edusemiotics. We will first review some key semiotic perspectives to elicit an edusemiotic framework. After this, the conceptualizations of intercultural communication competence, which consist of both a variety of approaches to the research of ICC and several key models of ICC, will be analyzed according to the edusemiotic framework, through which we will expose and conceptualize the absent “middle,” or the *adaptation*, as the core in an individual’s development of intercultural communication competence.

2 Edusemiotics: A framework

Edusemiotics with its contemporary conceptualization has been in use for only ten years since it was first coined by Marcel Danesi, the then Editor-in-Chief of the journal *Semiotica* as a subtitle of his Foreword in *Semiotics education experience* by Semetsky (2010). As Danesi noted,

[...] until recently, the idea of amalgamating signs with learning theory and education to establish a new branch, which can be called edusemiotics, has never really crystallized, even though the great Russian psychologist Lev S. Vygotsky had remarked [...] that the “very essence of human memory is that human beings actively remember with the help of signs” [...] In these words can be detected the *raison d’être* for establishing a connection between semiotics as the science of signs, *learning theory* or the science of how signs are learned, and *education*, that is, the practical art/science of teaching individuals how to interpret and understand signs” (Danesi 2010: x).

Since then, edusemiotics has developed rapidly in the past decade in terms of both theoretical exploration and practical analyses (e.g. Deely and Semetsky 2017; Semetsky 2014, 2015; Stables and Semetsky 2014). It is considered as an interdisciplinary research approach that focuses on the relevance and possibilities on the condition that signs are understood as philosophical and theoretical foundation for research into the theory and practice of education (Campbell 2019). To elicit a framework of edusemiotics for the purpose of this study, we will highlight two key perspectives, namely the inherent link between semiotics and educational studies and the semiotic understanding of learning-as-semiosis that involves choice-making, which can be referred to as abduction and can be habituated.

Semiotics and education

Even though Danesi's comment could be regarded as acknowledgement of the previous effort in the investigation of education using semiotic perspectives, such as the special issue of "Deleuze and education," guest-edited by Semetsky for *Educational Philosophy and Theory* in 2004, it is more an emphasis that education and semiotics are inherently in link. Historically, the concept of "education" has two Latin origins, *educare* and *educere*, as explained by Bass and Good (2004):

[T]here is an etymological basis for many of the vociferous debates about education today. The opposing sides often use the same word to denote two very different concepts. One side uses education to mean the preservation and passing down of knowledge and the shaping of youths in the image of their parents [*educare*]. The other side sees education as preparing a new generation for the changes that are to come – readying them to create solutions to problems yet unknown [*educere*] [...] To further complicate matters, some groups expect schooling to fulfill both functions, but allow only those activities promoting *educare* to be used. (Bass and Good 2004: 162)

In other words, both *educare* and *educere* are referring to the teaching-learning process. Yet *educare* focuses on the passing down of values and thoughts in a particular culture with a logic of control, or the part of "teaching," while *educere* seems to associate more with the transformation of experience. That is, *educere* focuses more on the potential and possibility of accepting, interpreting, and reinterpreting what has been passed down, or the part of "learning." Tim Ingold also elaborated on *educere* for his anthropological exploration of education:

Education, for me, is about what it means not just to live life but to lead it. The word comes from the Latin compound *ex*(out) plus *ducere*(to lead). Thus, to educate is literally to "lead out". This is the very opposite of what it is commonly taken to mean today, namely to instil, into the minds of novices, the approved knowledge, values and mores of a society. Education in this majoritarian sense starts from the assumption that the novice is ignorant, therefore weak and vulnerable. To make our way in society, it is supposed, we need to be provided with the intellectual armory to cope with the vagaries of experience, and the combative skills to hold our positions and defend them. Knowledge gives us strength and power. But it does not always make us wise. For the more we think we know, the less inclined we are to attend to what is there, to listen to other people and things around us, and to learn from them. Wisdom lies in not pretending that we already know, or that problems already contain their solutions. In the minoritarian sense of leading out, education is a process of becoming wise to things, and to the world. It teaches us to attend, and to learn from what we observe. Far from making us strong and invulnerable, this kind of education disarms us: it leaves us feeling exposed, literally "out of position". But it also allows us to open up to the truth of what is there. (Ergül and Ingold 2017: 8)

According to these elaborations, it can be contended that *educare* also takes effect through *educere*. That is, the passing down of values and thoughts cannot not be realized or achieved without the interpretation, or *educere*, though *educare* aims to ensure that the interpretation abides with the intention of teachers, while *educere* allows for freedom of diversified interpretation. The learning process indicated by *educere* does not exclude changes or revisions of what have been passed down, it rather focuses on and advocates for adaptations and defamiliarization, “being led out of our familiar positions and habits so that we may re-cognize the world anew” (Campbell 2018: 547). Hence, although *educare* and *educere* are endowed with different purposes of education, they both indicate that education, be it acquisition of academic knowledge or mastering of practical skills, takes place only in *learning*, or *becoming*, or changes and transformations of learners as individuals. In semiotics, this is basically what has been termed as *semiosis* by Charles Sanders Peirce.

Learning-as-semiosis

The common and core orientation of edusemiotics has been the conceptualization of learning-as-semiosis, or the process of signification that mediates between learner and environment, on the basis of which educational practices could be guided or problematized (Campbell 2019). Basically, Peirce referred semiosis to the interaction between the *representamen*, the *object*, and the *interpretant* (CP 5.484). Peirce defined such interaction as follows:

A sign [...] is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the interpretant of the first sign. The sign stands for something, its object. It stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called “the ground of the representamen.” (CP 2.228)

Such interaction is often presented by a triangular model in Figure 1, which, nevertheless, is far from sufficient to show and elaborate the complicated triadic relationships and interactions, nor the types of signs that Peirce categorized.

According to the trichotomy by Peirce, semiosis could also be understood as interpretation, or the formation of interpretant, because interpretant is “not an interpreter but rather the sense made of the sign” (CP 2.303). Yet to justify learning as being semiosis or interpretation, we need further exploration of what happens *in* semiosis than the simple description of what semiosis is.

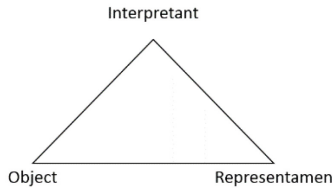


Figure 1: Model of Peirce's trichotomy

For Umberto Eco, interpretation, or semiosis, always includes choice (Eco 2018) and Kull explained such semiosis-as-choice explicitly as a complementary description of Peirce's triadic model:

The aspects in the choice process that correspond to the three relata can be described as follows. *Representamen* by itself is ambiguous, as it is possible to interpret it in various ways. This means that representamen may refer to different objects. In semiosis, a choice is made between these possibilities, which appear as options, and representamen becomes related to a particular *object*. This relation is a decision, which is the same as *interpretant*. Representamen, object and interpretant emerge together at the event of choice-making...semiosis supposes a choice between options. (Kull 2018: 455)

In other words, interpretation or semiosis is a result of the choice of individuals; it is an individual's choice that can decide what object the representamen could be interpreted as. When describing the role of interpretant in our analysis of the intercultural communication process, we used an example to illustrate arbitrariness as well.

Arbitrariness is the first nature of sign when regarding the signifier-signified relations[...]Let's look at the two conversations below:

Conversation (1)

A: Time flies.

B: Yes, it has been more than 10 years since we met last time.

Conversation (2)

A: Time flies.

B: No, you can't; they fly too fast.

In Conversation (1), "time flies" is understood as time passes very quickly. In Conversation (2), "time" is taken as a verb meaning measuring how fast someone or something is going or how long it takes to do something; and "fly" is taken as a noun standing for small flying insects with two wings; therefore, "time flies" here means measuring the speed of the insects. In these two conversations, the sentence "time flies" is obviously understood in different ways, and though the influence of other elements should be accounted for, the understanding is still definitely arbitrary. (Shen 2010: 128)

Yet arbitrariness in the example above entails a choice as well, though the choice might have been a casual, random, or sophisticated one; the choice is not absent in any sense. Hence, to explore the role of learning-as-semiosis, the questions becomes: How is choice made through semiosis?

For Peirce, such choice or arbitrariness was not left unattended but rather explained through the concept of *abduction*, a mode of reference that is intuitive and insightful but not logically articulated (Semetsky 2015). According to Peirce, “abduction, in the sense I give the word, is any reasoning of a large class of which the provisional adoption of an explanatory hypothesis is the type. But it includes processes of thought which lead only to the suggestion of questions to be considered, and includes much besides” (CP 2.544).

According to Peirce, abduction is the third irreducible and indispensable form of reasoning in addition to *deduction* and *induction* (Psillos 2011). He took abduction as the only type of reasoning through which new ideas can be introduced: “[A]bduction is the process of forming explanatory hypotheses. It is the only logical operation which introduces any new idea” (CP 5.171). Moreover, he also considered abduction to be the mode of reasoning through which new ideas have actually been introduced: “All the ideas of science come to it by the way of Abduction [...]. Abduction consists in studying facts and devising a theory to explain them. Its only justification is that if we are ever to understand things at all, it must be in that way” (CP 5.145).

In other words, abduction is the process that a sign or a sign-relation strives to develop from the unconsciousness into consciousness through integration in a form of reference that is peculiar, imperceptible, and non-verbal. For Peirce, abduction is essential to the growth of intelligibility, or *learning* or *becoming* in educational contexts. As Peirce states, “it is the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis. Deduction proves that something must be; Induction shows that something actually is operative; Abduction merely suggests that something may be” (CP 5.172).

To be specific, abduction brings what is now unconscious into conscious in the future; the unconscious realm as a deep psychological ground now determines acts and behaviors in the future (CP 6.156). In other words, the generation of meaning, or changes, or learning, takes place through semiosis as a choice-making process, yet such choice-making process, or interpretation, is not simply choosing from options, but involves projecting what is unconscious now into conscious in the future and, analogically, bringing what was unconscious in the past into conscious now.

Meanwhile, such learning, or abduction, or the choice-making that brings unconscious into conscious is by no means arbitrary or uncontrollable, but rather can be shaped via *habituation*. Peirce proposed the concept of *habit* to be applied in a wider sense, “in which it denotes such a specialization, original or acquired, of the nature of a man, or an animal, or a vine, or a crystallizable chemical substance, or anything else, that he or it will behave, or always tend to behave, in a way describable in general terms upon every occasion that may present itself of a generally describable character” (CP 5.538). Kull further elaborated how habituation is correlated with choice-making, and thus learning:

Habituation is generally a fine-tuning of the connection made by learning. This occurs in repeated use of the same, or nearly the same, sign or choice-making. It means that when choosing, the same connection is found as in some earlier choices, thus the choice does not make a new connection, but it repeats already existing ones, still possibly deepening traces or slightly shifting constraints. Repeated decision usually strengthens the connection and causes further choices in an analogical situation to be more automatic. However, on certain occasions, if the difference is greater, a habit may reverse, and sensitization takes place. (Kull 2018: 459)

In a word, for edusemiotics, learning is embedded in semiosis or interpretation by means of choice-making which can be habituated. With the interpretant and interpretation accounted for, semiosis not only mediates the learner and environment, but also transcends dichotomies like nature/culture and matter/mind. Interpretation as a choice is a process of abduction that traces back to the experience in past as well as predicates the possibilities of the future, and learning is realized and achieved through the habituation of the abduction. In the next section, we will explore the process that corresponds to such learning or habituation of abduction in the development of intercultural communication competence.

3 Adaptation and intercultural communication competence

In this section, we will apply the edusemiotic framework established above to the investigation of the conceptualization of intercultural communication competence centering on the concept of *adaptation*. We will first problematize the existing conceptualizations of ICC to reveal that, although the significance of adaptation has been recognized in the studies and associated with learning, there has been very limited discussion on what adaptation actually is regarding

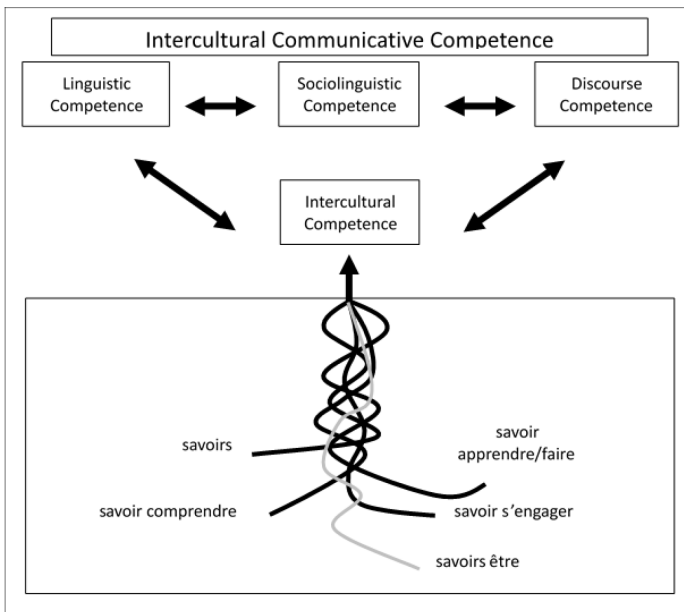
the development or demonstration of individuals' ICC. Such absence will be explained by explicating that studies on ICC have been rooted in dualism and hence inherently deprived of their capacity of probing into the adaptation as the "middle."

"Adaptation" in the conceptualizations of ICC

Since the concept of intercultural communication competence was initiated by Hymes (1972) and expanded by Canale and Swain (1980) from the linguistic perspective, the research into the conceptualization of intercultural communication competence has attracted and scholars from various disciplines (e.g. Byram 1997; Chen 2010; Deardorff 2006; Fantini 1995; Gao 2014; Lustig and Koester 2010; Shen and Gao 2015a; Spitzberg and Changnon 2009; Ting-Toomey and Kurogi 1998). Meanwhile, most of the conceptualizations in these studies largely followed two major directions, proposing theoretical approaches and establishing models of ICC, with the former being more popular in the 1980s and 1990s and the latter increasingly adopted since the 2000s. In this section, we will briefly review some of the key conceptualizations so as to identify and problematize the consensus they have reached.

Among all the theoretical approaches developed so far, five of them have been widely influential. They are anxiety/uncertainty management (AUM) theory by Gudykunst (1995, 2005), Kim's personal network approach (1986) and systems theory approach (1995), social skills perspective by Martin and Hammer (1989), multidimensional construct by Wiseman, Hammer, and Nishida (Wiseman et al. 1989), and Ting-Toomey's (1993) identity negotiation process approach. Through a review of these theoretical explorations, we can identify three features of ICC that they have revealed as consensus. First, intercultural communication competence is determined or affected by individuals' internal or personal attributes. Such attributes may range from affective status like anxiety and uncertainty (e.g. Gudykunst 1995) to skills of cognition and behavior (Ting-Toomey 1993) as well as social skills (Martin and Hammer 1989). Second, individuals' development of intercultural communication competence is also affected by or related to the external environment such as personal networks (Kim 1986) and the specific cultural contexts (Wiseman et al. 1989). Third, which is also the most important, is that almost all the approaches have acknowledged that it is through individuals' own effort of changing or adaptation that intercultural communication competence can be developed, demonstrated, and applied. For example, in Gudykunst's (2005) approach, intercultural adaptation is considered as the reflection of ICC. For Kim (1991),

intercultural adaptability is the vital element of ICC, which is distinguished as the ability of individuals to change the existing characteristics and structures to fulfill the requirements of different conditions. However, this acknowledgement has not been pushed forward further to the exploration of how individuals actually adapt themselves, or develop their ICC. Although Kim (1991) recognized that an individual's skills in being flexible during intercultural communication reflects his/her adaptability, there has been little elaboration on how the skills are related to the adaptability.



- 1) *Savoirs*: knowledge of self and other; of interaction; individual and societal.
 - 2) *Savoir être*: attitudes; relativizing self, valuing other.
 - 3) *Savoir comprendre*: skills of interpreting and relating.
 - 4) *Savoir apprendre/faire*: skills of discovering and/or interacting.
 - 5) *Savoir s'engager*: political education, critical cultural awareness.
- (Adapted from Byram 1997: 34)

Figure 2: Byram's Model of Intercultural Competence (1997)

Several ICC models have been established based partly on these approaches. Among all the models that have been established, we will highlight four of them, since they have been broadly influential in that several inventories have been developed on their basis for measuring individual's ICC (Gao 2014). The first

model is Byram’s (1997) model of ICC developed from the aspect of foreign language teaching based on studies in the European context (Figure 2).

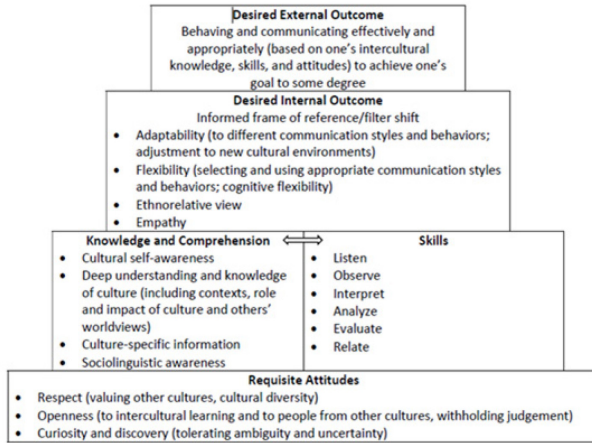


Figure 3: Deardorff’s Model of Intercultural Communication Competence (2006)

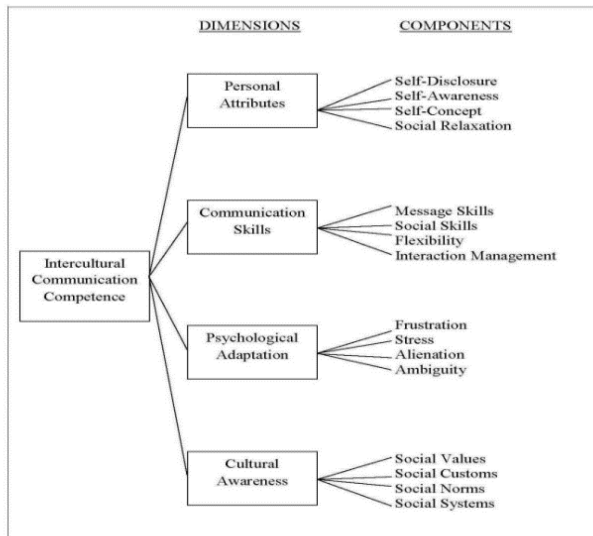


Figure 4: Guo-Ming Chen’s First Model of Intercultural Communication Competence (1989)

This has been one of the leading models for developing ICC in language education settings. One of the key contributions of Byram’s model lies in its classification of the detailed aspects of elements, the composition of which differentiates ICC from general communicative or linguistic competence. The second is a more sophisticated model by Deardorff (2006) that also classifies the aspects of ICC regarding the skills, knowledge, and attitudes that constitute ICC; it is often regarded as the “Pyramid Model” (Figure 3).

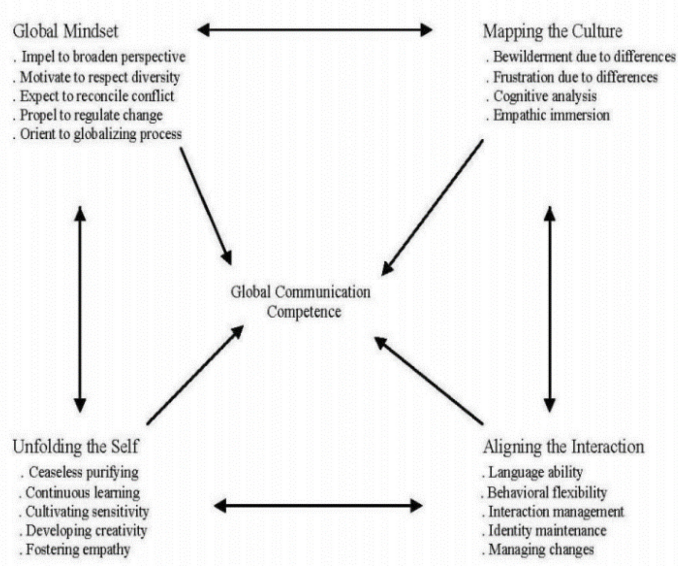


Figure 5: Guo-Ming Chen’s Revised Model of Intercultural Communication Competence (2005)

The third model, which is in fact a series of models, is that by Guo-Ming Chen, who proposed his first version of the ICC model in the late 1980s and continued updating it in the following decades (e.g. Chen 1989, 2005, 2010; Chen and Dai 2014; Chen and Starosta 1996). Chen’s model is significant in that although his early version (Chen 1989) was typically a classification of aspects of ICC (see Figure 4), his later version emphasized much more the interaction between the different aspects (Chen 2005) (see Figure 5).

Adopting the viewpoint of Wang Yangming, an ancient Chinese philosopher, that *knowing* and *doing* should be one instead of separated, we also developed a model, as well as an assessment inventory, aiming at explaining the link between knowledge and action regarding intercultural

communication competence (Gao 2014; Shen and Gao 2015a, 2015b), as in Figure 6.

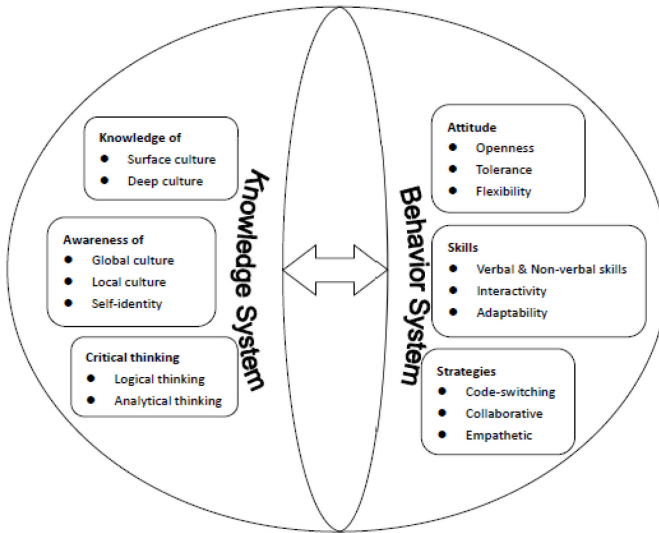


Figure 6: Knowing-and-Doing Model of Intercultural Communication Competence (Gao 2014; Shen and Gao 2015a)

It can be inferred that these models align with the approaches aforementioned in that they also reflect the three features of ICC identified. For example, several of the *saviors* in Byram’s model, the “knowledge,” “skills,” and “awareness” in other models, can be referred to individuals’ internal or personal attributes; the external environment or specific cultural contexts can be related to such components as “sociolinguistic” in Byram’s model, the “external outcome” in Deardorff’s model, and the “map of culture” and “global mindset” in Chen’s latest version, which seems implicit though. Meanwhile, the feature of “adaptability” has been prominently highlighted in these models and, more importantly, it can be inferred from them that the adaptability is a result of the interaction between the different personal attributes, as well as between the internal attributes and external environment, which is the entwined lines of the *saviors* in the model by Byram, the linking between knowledge and skills, as well as the overall Pyramid-shape in Deardorff’s model, the multiple single-headed and double-headed arrows in Chen’s latest model, and the wrap-up of all six dimensions in our own model.

However, it seems these model establishers, similar to those who proposed the theoretical approaches, also stopped furthering their investigation into what *adaptation* is. There has been very limited discussion about how the interaction between the attributes and internal attributes–external context actually effect the adaptation. For example, Byram did not give much explanation on how such entwining actually takes place (1997), while also acknowledging that more research is needed to investigate the relationship and interaction or integration between the different aspects of ICC:

The compositional models are helpful in identifying the content and scope of the concept by providing an analytic scheme or typology with a lucid chart or diagram. However, it is important to go one step further to examine the relationships between or among dimensions or components in the compositional model so that the hierarchical or determinative order of the dimensions or components toward intercultural communication competence can be specified. (Chen 2014: 11)

One of the approaches that has endeavored to explore adaptation a bit further is the Sociocultural Adaptation Scale (SCAS) developed by Searle and Ward (1990), which has been adopted by a large number of studies on ICC assessment. Essentially, the scale is based on the assumption that problems or failures of intercultural communication arise from the difficulties that individuals encounter when managing daily social encounters. Hence, following the Cultural Learning Theory, adaptation takes the form of learning the culture-specific skills so as to function effectively in intercultural contexts (Ward and Wilson 2014).

However, although Ward and Wilson’s (2014) meta-analysis of the correlates of SCAS has proved the utility and validity of this approach with the skill-acquisition rooted in Culture Learning Theory and the measurement grounded in the Sociocultural Adaptation Scale, again, there has been little discussion on how adaptation actually takes place. The cause–effect analysis, though having proved the validity of adaptation or learning, has ignored the “middle.” Such absence or ignorance of the “middle” can be well explained following edusemiotics.

3.2 An edusemiotic perspective on adaptation

One of the major reasons behind the “inability” of the approaches and models to investigate or reveal what adaptation is, or rather how the dimensions and components of ICC interact with each other is that they are to a large extent orient to paradigms of function or discovery and rely dominantly on positivism

and empirical philosophy (Muhammad Umar et al. 2018). Meanwhile, such positivist and empirical approaches and perspectives are integrated into and mutually supportive of the famous taxonomy raised by Benjamin Bloom more than half a century ago, which is still prevalent in contemporary contexts of education or training, because both conceptualization and measurement of ICC entail, explicitly or implicitly, the task of developing or improving individuals' performance in intercultural communication. This might be attributed to the fact that the discipline of intercultural communication studies was initiated with very pragmatic objectives, as we have mentioned above. Yet the positivist and empirical approaches to ICC are well-suited to Bloom's taxonomy, which defines competence to be measurable and able to be developed with particular guiding instruments (Pikkarainen 2014).

However, the philosophical foundations of Bloom's taxonomy can be largely traced to Cartesian thought, especially the mind/body dualism (Bertucio 2017), from which have developed a range of dichotomies such as idea/material, mind-dependent/mind-independent, and, in educational contexts, "mind/world, subject/object, culture/nature, content/expression, event/description" (Campbell 2018: 540). Following the dualistic viewpoint, the conceptualization and models of ICC mentioned above can be found as referring to such dichotomies as knowledge/cultural norms or traditions, awareness/cultural differences, skills/verbal or non-verbal behaviors, attitudes/evaluations, etc., and hence, the dichotomy of competence/ performance. While we cannot deny that the dualistic perspectives and approaches have contributed to the recognition of the features of a competent individual in intercultural communication, they have ignored or somewhat excluded the "middle" between the dichotomies, which is adaptation for intercultural communication competence, which has been recognized as a learning process as well following the SCAS approach. Nevertheless, when such adaptation or learning is examined according to the framework we established in the previous section, it can be well explained following the route of learning-as-semiosis, and further, semiosis-as-choice and choice-as-abduction.

To be specific, in a context of intercultural communication, cultural differences are supposed to affect communication. Therefore, individuals are required to abduct in a way that fits the other culture or at least in a way that is mutually understandable. In other words, in an intercultural context, due to the indeterminacy caused by such situations as incompatibility between cultural differences, conflicts or misunderstandings in intercultural communication, and ambiguity or confusion about cultural norms, individuals as communicators have to choose from options for reaction, while such a choice,

though often observed as simultaneous action, is a result of both tracing back to the past experience and predicting into the future.

Furthermore, according to the framework we derived from edusemiotics in the previous section, though individuals have the freedom of interpretation, or choice when interpreting, abduction can also be habituated, which is the approach to learning. While an individual habituated in one culture is put in a different cultural context or an intercultural context, his/her habituated abduction in his/her own cultural context may no longer be appropriate, and thus adaptation, or a different approach to abduction, is required. That is, in an intercultural context, an individual may have to trace the past and predicate the future in a different way from how he/she abducts in the intracultural context. Finally, this abduction-changing process, which is actually realized through abduction itself, can be habituated as well, the result of which is adaptation. That is, adaptation can be referred to as the habituation of changing the approach to abduction in intercultural communication contexts.

In a word, following the edusemiotic framework, adaptation as a core part in developing an individual's intercultural communication competence can be understood as a process of learning-as-semiosis-as-abduction when such abduction is habituated to be changing regarding the intercultural contexts. In other words, when an individual is habituated to abduct differently in an intercultural context from an intracultural context, he/she is capable of adaptation, and thus of intercultural communication competence.

To differentiate our semiotic conceptualization of ICC from existing ones, we hereby term it as *Meta-Intercultural Communication Competence*, or *Meta-ICC*. Although this semiotic conceptualization seems to be more philosophical than practical, it does shed light on a new approach to understanding ICC, as well as to the pedagogical practices for developing ICC. We will conclude this paper by explaining and highlighting this approach.

4 Concluding remarks

As the conclusion of our study, we'd like to briefly examine the models of ICC introduced in the previous section using the semiotic conceptualization we have proposed above. Although it is not our aim in this paper to elaborate the approach to developing or measuring ICC, such an analysis will highlight the significance of our meta-conceptualization of ICC by providing the approaches to developing ICC, which also conforms with our previous attempts to elaborate

intercultural communication following semiotic perspectives (Shen 2010; Shen and Su 2015).

According to our semiotic conceptualization, adaptation, or the habituation of abduction, is the core of ICC. As abduction refers to the process of a choice that traces back to the past and predicts the possibilities of the future, the illustration of adaptation can achieve an inquiry into what the past that can be traced is and what the possibilities of the future are. The answer lies in the fact that the components in the aforementioned models can be categorized either as the traces of the past or the future possibilities which are linked by abduction. For example, in Byram's model (Figure 2), the *savoirs* of knowledge, be it about the self, others, or society, and the skills, be these in interpreting, relating, discovering or interacting, as well as "cultural awareness" refer to what an individual has acquired, the traces of the past. Meanwhile, the *savior être*, meaning (various) attitudes, (possible) relations, and valuing/devaluing others, are all predictable possibilities. For Byram, all these components are linked and integrated to constitute ICC.

Deardorff's model (Figure 3) illustrates this relation more clearly and directly. In her model, the "knowledge" (including awareness according to this model) and "skills" are referring to what an individual may have developed or acquired while the "attitudes," made up of "respect" (whether or not valuing other cultures), "openness" (whether or not accepting other cultures), "curiosity and discovery" (whether or not tolerating ambiguity and uncertainty) are all about possibilities resulting from the choices of the individuals. Moreover, the "adaptability" (to adjust), flexibility (to select and use a particular behavioral or cognitive manner), ethnorelative view (to adopt an ethnocentric or an ethnorelative viewpoint), and empathy (to be empathic or not) are all processes of choice, that is, abduction. Such a process can be generally illustrated by modifying the triangular model that describes Peirce's trichotomy (Figure 7):

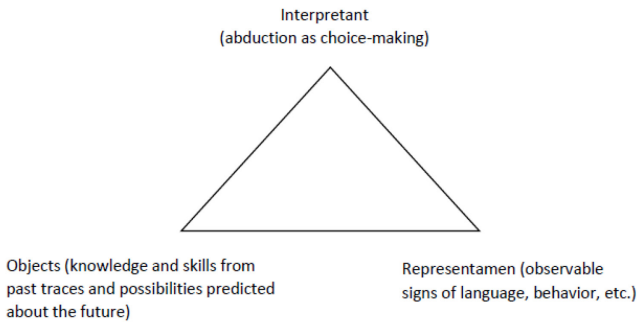


Figure 7: Modification of Peirce's trichotomy

According to Peirce (CP. 2), representamen is an infinity of further interpretants both proceeding from and preceded by any given representamen, and this process would produce new objects as well. Therefore, such an interpretation/abduction process as semiosis is infinite and continuous, which causes intercultural communication to be dynamically affected. In edusemiotics by Semetsky (2014), it is “a series of interpretants that leads to new meanings arising as the outcomes of learning from lived experience and elicits the transformation of habits due to revaluation of this experience” (p. 495).

Finally, following Peirce's philosophy that abduction is habituable, the essential and ultimate inquiry of such a semiotic perspective on intercultural communication competence might be a question of *how* to habituate the individuals as communicators. For us, the answer can be possibly derived from the educational thoughts and practices of John Dewey (1916/1924), who also asserted that “to learn from experience is to make a backward and forward connection [that] [...] becomes instruction—discovery of the connection of things” (p. 164). For Dewey, the value of experience lies in the fact that “if education [...] is identical with the operation of living a life which is fruitful and [...] significant [then the] ultimate [educational] value [...] is just the process of living itself” (Dewey 1916/1924: 248). Therefore, if the essence of democratic education lies in the necessity of coordinated participation in life situations (1925/1958), so does that of intercultural communication competence.

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