# A plea for a socio-cognitive perspective on the language-culture-cognition nexus in educational approaches to intercultural communicative competence

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Intercultural communicative competence (ICC) links three notions, i.e. language, culture and cognition, which are declared crucial in approaches to ICC in educational context. Despite the announced importance of the notions, none of the ICC models specifies the relationship between these elements in a motivated way and hence unjustified dichotomies arise. Educational approaches to ICC can be divided into cognitive or social ones with the former emphasizing an autonomous nature of language, culture and cognition and the latter focusing on social aspects and thus marginalizing cognition. The article aims to stress the need for a socio-cognitive approach to ICC which will view language, culture and cognition in a holistic way. While this approach is based on complexity science, cognitive psychology, grounded cognition and intercultural pragmatics, we demonstrate that cognitive linguistics can become an encompassing framework for a holistic model of ICC.

**Keywords:** ICC, socio-cognitive approach, language-culture-cognition nexus, cognitive linguistics

### 1. Introduction

Although the notion of ICC in education has been the topic of theoretical and exploratory considerations for many decades, the intersection between language, culture and cognition is far from delineated despite the researchers' explicit declaration about the relationship between these three elements and their centrality in ICC. In fact it is noticeable that despite the multitude of perspectives, approaches and models of ICC, the role of the language-culture-cognition nexus has so far been marginalized in ICC in educational context, which is reflected in the fact that

although all educational models of ICC make explicit reference to the three notions, none of them represents these elements in an integrative manner. Furthermore, the relation between these three concepts is asymmetrical and atomistic, i.e. there is always one fundamental concept which is foregrounded with the remaining two marginalized. In his recent analysis of ICC, Byram (2012, p. 7) expresses the need for a more holistic model of ICC in educational context and argues that establishing the language-culture-cognition nexus can pave the way to a model of ICC which will integrate language and intercultural competences into wholeness. Yet, contemporary educational approaches to language, culture and cognition in ICC fluctuate between those that focus on a cognitive perspective which emphasizes a modular and autonomous nature (ascribing to the Chomskyan tradition) of the notions and a social perspective (referring to the Vygotskyan perspective) which treats language, culture and cognition as social practice emerging from interaction with cognition being of secondary importance. In other words, the role and scope of language, culture and cognition are not clearly articulated in either approach with the three notions being either the domain of the mind or society. Thus, these two dichotomous perspectives can be placed on the opposite ends of a continuum. Furthermore, neither of them explains the relationship between language, culture and cognition. In fact both perspectives, as we demonstrate below, lack solid foundations and the separation between the cognitive and the social seems unjustified.

In this article we (re)consider the positioning of language, culture and cognition in ICC by examining the potential contribution that a socio-cognitive perspective, drawing on conceptual tools from complexity science, grounded cognition, cognitive psychology, intercultural pragmatics and, above all, cognitive linguistics, can bring to (re)defining the convergence of language, culture and cognition in ICC, which as we show, should be based on a balance between cognitive and social aspects. In other words, we postulate a holistic approach to the language-culturecognition nexus where cognitive and social dimensions of ICC are integrated as an encompassing framework for a model of ICC.

The paper is constructed as follows. First, we discuss approaches to language, culture and cognition in ICC in educational context by pointing to shortcomings of the two most influential perspectives in this respect, cognitive and social. We analyze these two approaches to ICC and demonstrate their inconsistency in interpreting the intersection of language, culture and cognition and emphasize the need for a holistic model of ICC which would integrate the three notions lying at the heart of ICC. Specifically, we argue that the three notions, language, culture and cognition, are present in both a cognitive and a social approach to ICC. However, we demonstrate that the extent to which they are regarded as essential elements of ICC varies and the relationship between them is either asymmetrical or nonexistent. Then we sketch the role of a socio-cognitive perspective built on cognitive

linguistics, cognitive psychology and intercultural pragmatics in unifying the cognitive and social dimensions of the language-culture-cognition nexus. The focus in this part of discussion is on cognitive linguistics as an encompassing framework. Thus, we point to the potential of cognitive linguistics to integrate the cognitive and the social in ICC, which appears the more justified as discussion on ICC has already followed in the footsteps of cognitive linguistics. For example, Kramsch (2002) makes reference to idealized cognitive models and conceptual metaphors in her analysis of ICC and Bennett (2004) focuses on the notions of perspective and shifting perspectives in his model of intercultural sensitivity, which is close to Langackerian subjectivity. Moreover, recent discussion within the framework of Cultural Linguistics (see Sharifian, 2011, for details), which draws heavily on cognitive linguistics, opens up an avenue for the establishment of the role and use of cultural conceptualizations in second language learning and intercultural communication. All in all, the goal of this paper is to emphasize that cognitive linguistics has the potential to bring forth a model of ICC that melds together contemporary educational approaches to language, culture and cognition in a holistic socio-cognitive approach to ICC in educational context. We postulate that there is no rationale behind the cognitive - social dichotomy and demonstrate that indeed language is the factor which integrates these two aspects.

## The language-culture-cognition nexus in educational approaches to ICC

Perspectives on the role of language, culture and cognition in educational approaches to ICC mediate between a cognitive position which addresses the issue from a psychological point of view and a social position which focuses on a pragmatic aspect of the three notions with language and culture foregrounded and cognition backgrounded.

#### A cognitive perspective 2.1

The starting point for advocates (Białek, 2009; Buttjes, 1991; Byram, 1997, 2000, 2003, 2006, 2009, 2012; Byram, Nichols, & Stevens, 2001; Byram, Gribkova, & Starkey, 2002; Byram & Zarate, 1994, 1997; Corbett, 2003; Council of Europe, 2001; Crozet & Liddicoat, 2000; Derenowski, 2014; Fantini, 1995, 2001; Kordes, 1991; Krumm, 1995; Lankiewicz, Szczepaniak-Kozak, & Wąsikiewicz-Firlej, 2014; Majewska, 2014; Meyer, 1991; Owczarek, 2010; Rapacka, 2009; Siek-Piskozub, 2014; Szczurek-Boruta, 2013; Wilczyńska, 2005; Zylkiewicz-Plonska, & Acienė, 2014) of a cognitive perspective on the role of language, culture and cognition in ICC in educational context is a psychological stance which is reminiscent of the Chomskyan dichotomy of invariant stabilities existing in an individual's mind. The rationale behind the view is the assumption that language and cultural experience is inseparable and unique to individuals in their lives. It is common within this perspective to claim that the development of intercultural competence represents our cognitive development (Trujillo, 2002). In other words, ICC develops as a result of the convergence of several factors, i.e. language and culture and cognition (Fantini, 1995). Thus, language, culture and cognition are analyzed from an individual standpoint. The perspective clearly focuses on language and culture as existing in an individual mind and tending towards stability. Following Byram (1997), all researchers ascribing to a cognitive perspective make an explicit reference to language in the model, however, placing it outside intercultural competence, treating the three, language, culture and cognition, as autonomous entities despite declaring them inseparable. In fact researchers oscillate between the focus on either language or culture, which is best reflected in the 'culture-in-language' (Crozet & Liddicoat, 2000) point of view or the 'language-and-culture' (Liddicoat, Papademetre, Scarino, & Kohler, 2003) position. As a consequence, language and intercultural competences are kept separate in educational models of ICC with intercultural competence appearing to be of primary importance given the number of elements attached to it, i.e. knowledge, skills and attitude. It has to be stressed at this point that language and culture are treated as mutually supportive. The only aspect which unifies them is awareness (a cognitive element), whose links with language and culture are not specified. This leads to the conclusion that language, culture and cognition lack common grounding and are treated as separate elements.

For Byram (1997) awareness is an encompassing framework in the model. Yet, the relationship between the three elements, i.e. language, culture and awareness, is vague and not established by interculturalists, who embrace Fantini's (1995) definition of awareness as awareness in and of the self in relation to someone or something else. Furthermore, essential attributes of awareness are exploration, experimentation, experience, introspection and reflection. Within this perspective awareness is in mutual relationship to deeper cognition, skills and attitudes as it leads to them and is enhanced by their development at the same time. In other words, awareness enhances learning and determines effective interaction. Awareness is not reversed in the sense that once becoming aware, an individual cannot return to the state of being unaware. What is striking is the fact that awareness, whose critical nature is emphasized, is linked to the cultural component but not to language. The unclear nature of the relationship between language, culture and cognition leads to another autonomous dichotomy in ICC, i.e. the division between intercultural competence defined with reference to cognitive, affective

and behavioural domains and language competence, which is a separate element of ICC. Therefore, one may conclude that from a cognitive perspective language and culture are treated as invariants, stabilities independent of each other which are set in an individual's mind. The consequence of this language-culture opposition is an unclear role and scope of language and culture in ICC. More importantly, language, culture and cognition are not influenced by an external context.

Still, despite the treatment of language, culture and cognition as autonomous faculties, there is a strong declaration about a predominance of culture and language over cognition in the discussion of the issue in the literature with the emphasis on an inextricable and interdependent relationship between the two notions. For example, Derenowski (2014) treats language as a by-product of awareness. Similarly, Rapacka (2009) acknowledges that language is an integral part of intercultural competence, whereas Krumm (1995) is of the opinion that the linguistic component is essential in ICC as it determines the development of intercultural competence. In the same vein, Zylkiewicz-Plonska and Acienė's (2014) key contention is that intercultural competence is anchored in language understood as verbal behaviour set in pragmatic competence developing in situations, which vary across cultures and occur along with different verbal behaviour (understood as language chunks by the authors) associated with them. The ability to generate these language chunks the way they are used by native speakers is a prerequisite of communicative competence necessary to obtain intercultural competence. Thus, Zylkiewicz-Plonska and Acienė (2014) consider language and culture on the level of competence as influencing the quality of communication. However, despite this alleged integration of language and culture on the level of learning processes the links between this mediation are not explained by the researchers.

The language-culture dichotomy translates into a dual nature of culture, which is represented as either an individual's first language culture and the target language culture. Similarly, this binary opposition is reflected in the way language is perceived, i.e. a distinction is made between first and target language culture.

The reference to a native speaker as a role model in relation to language is an acknowledgement made by almost all researchers ascribing to a cognitive perspective. This position is, however, criticized by Alptekin (2002), who emphasizes that the communicative approach with its focus on a native speaker has fallen short of its expectations, and calls for a new approach to language, culture and cognition in educational context.

A cognitive perspective tends towards a compositional approach (reminiscent of de Saussure) to the role of language, culture and cognition. A consequence of this tendency is that authors specify necessary elements in models of ICC. According to Byram (1997), these are knowledge about others and oneself, skills of interpreting and comparing, skills of evaluating critically, skills of acquiring new knowledge,

attitudes of openness and curiosity. Another example of a structural approach to language, culture and cognition is reflected in Liddicoat et al.'s (2003) approach to ICC, where the focus is on two elements, language and culture, which are interrelated. Liddicoat et al. (2003) view language as structures within a structure and claim that every level of language is dependent on culture. Consequently, the authors treat language and culture as a continuum with culture affecting linguistic and paralinguistic structures (grammar, lexicon, pronunciation, kinesics), the organization and selection of units of language (norms of interaction), utterances (pragmatic norms), general text structure (spoken/written genres) and context (world knowledge). This relationship between language and culture, as Liddicoat et al. (2003) further elaborate, becomes meaningful in language learning, which is possible through noticing. Consequently, noticing seems to be a cognitive element. Yet, its reference to language and culture is not elaborated on.

To conclude, the three notions under consideration, i.e. language, culture and cognition, are addressed in ICC approaches from a cognitive perspective. Researchers consider these elements as inseparable and closely related but they are treated as separate elements in educational models of ICC. Furthermore, their role, relationship and the extent to which they constitute ICC are asymmetrical and fragmentary. It appears that the most emphasized element is culture, which is linked to language while a cognitive element, critical awareness, is viewed as an encompassing framework rather than as a nexus between the elements. Thus, language and culture are understood as interactants although the nature of this interaction is not clarified as the cognitive element refers only to the notion of culture. Consequently, the positioning of language with reference to cognition is unclear.

#### A social perspective 2.2

A social perspective (Deardorff, 2006, 2009; Kramsch, 1989, 1993, 2015; Papademetre & Scarino, 2006; Risager, 2004, 2005, 2006, 2007) on the role of language, culture and cognition in ICC is a reaction to a cognitive perspective and its psychological focus on an individual's mind. Rejecting the Chomskyan tradition and the three elements as cognitive and stable invariants in an individual's mind, a social perspective takes a more Vygotskian approach and analyzes language, culture and cognition as social practice, i.e. the focus is on how these notions function in society. Consequently, cognition as an aspect of an individual's mind is rather of secondary importance with culture and language being put in the foreground. Thus, the perspective reveals a dialogic approach to the issue. The point of similarity between social and cognitive perspectives is their compositional view of ICC with knowledge, skills and attitudes as necessary elements of the competence. Another

similarity between the two views is that they both recognize the interface between language, culture and cognition. However, a social perspective, similarly to a cognitive view, does not explain the relation between these three elements.

A social perspective on language, culture and cognition tends towards a contextual (social) orientation with culture and language as the most important aspects and cognition backgrounded or even implied. The attitudes towards the three notions mediate between the languaculture (Risager, 2004, 2005, 2006, 2007), and linguaculture (Kramsch, 1993) positions, which reflects the emphasis on two notions, language and culture. These two approaches recognize an inextricable link between language, culture and cognition, however, they differ in their view on how these concepts permeate each other.

The dominant framing of language, culture and cognition in the languaculture position (Risager, 2004, 2005, 2006, 2007) is a social perspective which emphasizes the role of language and culture in intercultural competence with cognition being rather marginalized. Language seems to be the most essential aspect as it is considered a carrier of languaculture. It is a social and cultural phenomenon, always conceptualized as part of society and culture. The perspective articulates the relationship between language and culture (leaving cognition aside despite the declaration of its importance), which is discussed from three perspectives (Risager, 2006), i.e. linguistic practice, linguistic resources and a linguistic system. From the point of view of linguistic practice (social aspect) language and culture are separate as language is seen as merely an instrument for communication across cultures. Thus, this viewpoint recognizes language as culturally neutral, as merely a code, which is similar to a structuralist conception of autonomous language (Risager, 2005, p. 185). From the perspective of linguistic resources (cognitive aspect) language and culture are inseparable since they (cultural experience specifically) are unique to every individual. This viewpoint is close to a universalistic conception of a close bound between language, culture and mentality. In light of the linguistic system the language-culture nexus is not necessary as the linguistic system serves a prescriptive purpose.

Therefore, language, which appears to be the most essential aspect of the languaculture position, is analyzed in relation to culture from a social and cultural view. From a social perspective language is seen in relation to the context of communication and thus as independent from culture. This position emphasizes language as a means of communication in social interaction (Risager, 2005, p. 186). From a cultural point of view the social (which includes language) and the cultural are closely associated. Namely, language is a means of reproduction and representation of meaning that cultural aspects carry. Consequently, the boundary between language and culture appears to be blurred (i.e. the two elements are blended through the interaction with the environment) and the former is a manifestation

of the latter and the other way round. As a consequence, language and culture are rather vague concepts with unclear links.

Thus, the relationship between language and culture from a social perspective mediates between separability and inseparability. However, the nature and extent of this (non)interface is not clearly defined. The languaculture perspective distinguishes between three loci for language, i.e. linguistic practice, linguistic resources and the linguistic system, and two loci for culture, i.e. internal and external factors. Thus, the view integrates social (linguistic practice) and cognitive aspects (linguistic resources) with reference to language, emphasizing that the two loci for language are interdependent and presuppose each other. However, the perspective does not clarify the position of cognition and its relation to culture and language.

The linguaculture perspective (Kramsch, 1993) adopts a linguistic, discourse – analytical approach to language, culture and cognition. Focusing on language and culture in educational context, Kramsch (1993, p. 30) sees culture as emerging dynamically from actual exchanges between individuals. Thus, the starting point for the linguaculture perspective is a dialogic viewpoint where language is culture and culture is language and both concepts are understood as social constructs. Consequently, the position assumes identity between language and culture. In contrast to a cognitive perspective, the linguaculture position understands culture as a concept constantly (re)constructed, as opposed to a naturally given invariant in an individual's mind, when individuals interact through language. Language and culture are linked through criticality, which is a concept similar to critical awareness assumed by Byram (1997). However, in contrast to Byram (1997), for whom critical awareness refers to the notion of culture (associated with evaluation of cultural products), the linguaculture perspective associates criticality with symbolic systems constructing culture (Kramsch, 2015). Therefore, criticality is placed at the nexus of culture and language with culture being viewed "not merely as behaviors to be acquired or facts to be learned, but as a world view to be discovered in the language itself and in the interaction of interlocutors that use that language" (Kramsch, 1989, p. 10). However, it is language and culture, which are in the foreground in the linguaculture perspective. Thus, rather than stability, which is a permanent feature of a cognitive perspective, the linguaculture approach introduces instability, which characterizes the constant flow of language and culture constructed in interaction. Therefore, the role of language and culture is constructed in a situational context through interactive experience, which highlights the importance of society and backgrounds the mind. As a result, language and culture function as social practice and are linked through a symbolic relationship. Consequently, although the relationship between culture and language is claimed to be of a constructivist nature, the linguaculture perspective does not explain the relationship between cognition,

culture and language. In fact the role cognition plays in ICC is marginalized in the perspective.

All in all, the two approaches to language, culture and cognition in educational models of ICC, cognitive and social, can be placed on two opposite ends of a continuum, which demonstrates a dichotomy in ICC research (see Table 1 below for an overview). Consequently, the nature and role of language and culture is not clearly defined in ICC models as they are situated either in the mind or society with neither position being thoroughly motivated. More importantly, neither a cognitive nor a social perspective treats the three elements, i.e. language, culture and cognition in an integrative way; both of them foreground some elements and marginalize others. More significantly, the discussion on the language-culture-cognition nexus is thus polarized between an interface and a non-interface position.

**Table 1.** An overview of approaches to the language-culture-cognition nexus in ICC models

A cognitive perspective	A social perspective
Chomskyan perspective	Vygotskian perspective
ICC – result of the convergence of language, culture and cognition	ICC – result of constructing language and culture
Language, culture and cognition analyzed as existing in an individual mind	Language, culture and cognition analyzed as social practice
Language, culture and cognition as separate entities although declared inseparable	The interface between language, culture and cognition recognized but kept separate in the models
The relationship between language, culture and cognition not clear	The interface between language, culture and cognition not clear
Awareness as an encompassing framework	Criticality as an encompassing framework – a symbolic relationship (linguaculture view)
Language, culture and cognition as invariants, stabilities in an individual mind	Language and culture constructed in a situational context through experience; instability (linguaculture view)
Predominance of language and culture over cognition	Language and culture more important than cognition (languaculture view); identity between language, culture and cognition (linguaculture view)
Compositional/structural approach	Compositional view

# A socio-cognitive perspective on the language-culture-cognition nexus

The gap between the cognitive and the social, which characterizes ICC research translates into either separating cognition from the other faculties of the mind, particularly language, as well as the actual interactive experience or allowing the communal to influence the individual in an unconstrained way. In the former case, cognition, language and culture become solid modules, independent of each other and the actual situational context, whereas in the latter approach the three elements get liquidized and blended with the interactive experience. Thus, there are either individual minds seen as repositories of stabilities, with a rather vague relationship between the mental, including language, and the social, or there are dialogical interactions between the individual and the collective, including language, with a rather vague role of innate blueprints.

The above divide is an instantiation of the classical debate on the uniqueness of humans which, as Sinha (2009) argues, hinges upon the definition of language. Thus, following Descartes, language is an expression of advanced human nature – an innate language faculty; following Condillac, language is a means of social interaction that enables the uniqueness of the human mind. Consequently, language is viewed dichotomously as either intrinsic to human biology or as a form of human culture. However, recent research in biology (Laland, Odling-Smee, & Feldman, 2000) shows that the nature/culture opposition is unjustified and acknowledges the role of culture in shaping the evolutionary process at the level of genes. The capacity for language is thus a cognitive-behavioral relationship and language mediates both cultural reproduction and individual cognition (Tomasello, 2003). So what makes humans unique is not an innate language acquisition device but a generalized symbolic capacity (Piaget, 1945; Zlatev & SEDSU-Project, 2006). Thus, as Sinha (2009, p. 300) argues, signs are both "cognitive tools, and constitutive of specifically human cultural ecologies. The semiotic capacity is the explanatory link binding what is unique to human cognition with what is unique to human culture, bridging the biological with the social" or, in the case of research on intercultural communicative competence, bridging the cognitive with the socio-constructivist.

## A socio-cognitive perspective on the language-culture-cognition nexus in ICC

A socio-cognitive approach which emerges from the above considerations is thus built on the assumption that people are unique due to their semiotic capacity developed from a number of cognitive abilities shared with other species but more advanced in humans. In order then to develop a socio-cognitive approach to ICC, these general cognitive capacities need to be described.

Kövecses (2015) argues that cognitive abilities, including memory, attention, gestalt, comparison, perspective, and processes, e.g. categorization, elaboration, abstraction, framing, or viewpoint preference, are the foundation of the cognitive system upon which concepts are developed. This cognitive base is built on three pillars: classic psychological processes (Croft & Cruse, 2004), perception and action, and the enacted world of experience. However, as Croft (2009) rightly observes, perception and action can be elaborated as joint perception and joint action, making socio-cognitive abilities and processes, e.g. coordination, convention, understanding communicative intentions of others, detecting patterns, imitating and the ability for common ground, equally constitutive of the mind, whereas Tomasello (1999) demonstrates that the human capacity for joint action is the foundation for language. All in all, "cognition does not simply reside in a set of cognitive mechanisms. Instead, cognition emerges from these mechanisms as they interact with sensory-motor systems, the body, the physical environment, and the social environment" (Barsalou, 2016, p. 14).

#### The architecture of embodied cognition 4.1

This complex relationship between cognition, the body and the environment is termed embodiment, "that is, our collective biological capacities and our physical and social experiences as beings functioning in our environment" (Lakoff, 1987, pp. 266-267), and basically implies dual grounding (Sinha, 1999), whereby cognition is both constrained by biology and empowered by symbols, with mental representations, or simulators, forming "a 'rational' and an 'empirical' system, reflecting intertwined genetic and experiential histories" (Barsalou, 1999, p. 586). Hence, on the one hand, coupling cognition to its ecologies results in substantial variability of representations, which are adapted to situations, goals and tasks as well as the other minds (Langlotz, 2015, p. 118); on the other hand, though, it produces "shared embodiment at a more general level" (Barsalou, 1999, p. 599), which is the level of archetypal simulators, or special "attractors within human self-organizing systems" (Gibbs, 2005, p. 115). Archetypal simulators reflect the abilities and processes which underlie and organize perceptual, sensori-motor, physical and sociocultural experience and, depending on the (socio-)cognitive capacity that motivates them, are known as image schemas, e.g. container, path or force (Johnson, 1987), mimetic schemas, e.g. grasping or holding (Zlatev, 2005), or complex primitives, e.g. containment or support (Correa-Beningfield, Kristiansen, Navarro-Ferrando, &

Vandeloise, 2005). According to Langacker (2008, p. 33–34), archetypal simulators include: "a physical object, an object in a location, an object moving through space, the human body, the human face, a whole and its parts, a physical container and its contents, seeing something, holding something, handing something to someone, exerting force to effect a desired change, a face-to-face social encounter". Archetypal concepts are prelinguistic and holistic although particular types of basic simulators, e.g. image schemas, mimetic schemas or complex primitives, highlight different conditions as foundational for language, i.e. biological, social or both.

Despite these apparent differences, archetypal concepts partly presuppose each other since, for instance, a container is a kind of object and so is the human body, and holding something requires that force should be exerted. This hierarchical arrangement may well reflect the evolution of human cognition, with the older, and more schematic, bodily-kinetic part serving as a blueprint for the more recent, and more complex, sociocultural layer, both of which support the linguistic system (Evans, 2009, p. 27). Apart from archetypal simulators employing analogue representations and perceptual symbols, derived from information provided by the five senses, proprioception, and introspection (Barsalou, 1999), propositional protoconcepts (Navarro i Ferrando, 2006) as well as linguistic, or lexical, concepts (Evans, 2006) are proposed as possible cognitive attractors. As a result, archetypal concepts encompass simulators, or cognitive models, anchored in various types of symbols, e.g. perceptual and linguistic, while the relation between them remains unclear. On the one hand, a direct link between conceptual and linguistic systems is proposed by the Words as Social Tools (WAT) theory (Borghi & Binkofski, 2014), which stipulates that linguistic experience is aggregated and schematized in simulators in the form of linguistic representations, i.e. acoustic properties, labels, explanations or inner speech. Since explanations and inner speech are based on the cognitive operation of rehearsing, they involve perceptual symbols related to introspection and are thus linked to perceptual symbols (Borghi & Binkofski, 2014, p. 32). On the other hand, Evans (2009, p. 32), elaborating on the Language and Situated Simulation (LASS) model (Barsalou, Santos, Simmons, & Wilson, 2008), argues for a substantial qualitative discrepancy between linguistic and conceptual content in that the former includes "highly schematic semantic knowledge" while the latter concerns "richly detailed perceptual knowledge". This difference, as Evans further claims, entails that certain linguistic meanings, i.e. those associated with grammatical categories, are represented without recourse to the conceptual system.

All in all, language can be viewed as either the linguistic experience represented at the level of simulators or as a semi-independent system of linguistic symbols,

<sup>1.</sup> Although various typological conventions for archetypal concepts exist in the literature on the subject, we consistently apply small letters.

in which grammatical meanings are disconnected from the conceptual system. However, if human uniqueness, defined above, is to be maintained, the semiotic capacity can never be fully separated from its cognitive scaffolding, i.e. basic (socio-) cognitive abilities and archetypal simulators. Thus, while fully endorsing the WAT proposal in its focus on linguistic and introspective representations, we propose, contrary to Evans (2009), that all types of linguistic meaning, including those of grammatical units, are grounded. In the case of grammatical meaning, which Evans (2009) sees as detached from the conceptual system, the link between the linguistic and the cognitive is formed through such categories as setting, agent, object or action, which are not only the classic types of slots related to linguistic structures but also "local outputs of the situation-processing architecture [within a frame]" (Barsalou, 2016, p. 18). Much in the same vein Langacker (2008, p. 538-539) argues that "grammatical notions are plausibly described as subjective counterparts of basic aspects of everyday experience, i.e. conceptual archetypes. [Consequently,] the schematic meaning resides in a domain-independent cognitive ability". In other words, it seems that grammatical meanings can be plausibly linked to the conceptual system via basic cognitive operations and archetypal simulators, akin to semantic primitives (Zlatev, 2005, p. 14), which emerge from them.

Thus, we assume a hybrid approach to concepts (Gibbs & Colston, 2012, p. 196), in which mental representations can combine perceptual and linguistic symbols. This is due to "the partial identity or interpenetration of cognition, communication, and action" (Streeck & Mehus, 2005, p. 390), which enables "perceptual, motor, affective, introspective, social, linguistic and other information" (Lynott & Connell, 2010, p. 80) to be collected in a simulator, and where special prominence is given to archetypal simulators and the cognitive abilities which underlie them.

Once established, simulators can produce an indefinite number of simulations - partial reenactments of a given concept. Consequently, a concept, i.e. "the ability to simulate a kind of thing perceptually" (Barsalou, 1999, p. 604), encompasses a deep level of generating mechanisms and a surface level of conscious images. Ritchie (2008, p. 36) elaborates on the idea of a hierarchical arrangement of cognition and concludes that meaning making can occur at three levels: "the surface level, primarily in terms of (...) relation to (...) language elements, (...) a deeper conceptual level, with partial activation of a handful of perceptual simulations, or (...) a very deep conceptual level, with complete activation of a complex schema". Importantly, both the simulator and its simulations are situated or, as Barsalou (2009, p. 1281) puts it, "the situated character of experience in the environment [is] reflected in the situated character of the representations that underlie simulation". In other words, concepts are stored as frames, with large amounts of background knowledge supporting inference and interaction.

All in all, the architecture of embodied cognition encompasses a structured array of conceptual phenomena, founded on (possibly) universal socio-cognitive processes and archetypal simulators and developed into a system of multimodal and multilayered situated concepts. These concepts, though potentially rooted in complex primitives and thus multifaceted themselves, can be perspectivized in a way that highlights a particular type of representations, i.e. perceptual or linguistic.

#### Developing ICC within embodied cognition 4.2

Developing ICC within the framework of embodied cognition outlined above means that culture, communication (language) and cognition should be viewed in a holistic way, as if constituting dimensions of one simulator. To be more specific, competence needs to be taken as an ability to simulate various aspects, or layers, of the mind - from socio-cognitive abilities and archetypal concepts through perceptual, including introspective and affective, to sociocultural and linguistic conceptualizations. As noted above, depending on the situation, one type of simulations might dominate the process of meaning construction, thus sanctioning a metonymic view upon embodied cognition, which can be interpreted as, for instance, cultural (Shariffian, 2011) or social (Tomasello, 2009). At the same time though, embodied cognition is integrated and so all possible perspectives permeate each other. Thus, in the language-culture-cognition blend, which is the focus of ICC, on the one hand, "the shape of language is surely affected by limitations of human cognitive processing, [including] categorizing experience, prototyping, using conceptual schema, metaphors, and analogies" (Larsen-Freeman & Cameron, 2008, p. 93). On the other hand, language-driven acquisition leads to the development of certain areas of the brain (Borghi & Binkofski, 2014) or, as Langlotz (2015, p. 114) puts it, "[t]he constant and productive manipulation of linguistic structures in specific task-domains [...] has the power to re-shape and re-organize the mental representations that are associated with them". Likewise, culture reflects cognition through certain "ecological patterns of psychological phenomena" (Sperber, 1996, p. 31), but also controls it since concepts are linguistically coordinated "in line with their institutionalized functionality" (Langlotz, 2015, p. 114). Embodied cognition is thus at once integrated and perspectivized, or even separable, since, as Zlatev and Blomberg (2015) argue, thought is possible both with and without language; likewise, although language is an essential aspect of culture, it is not unfeasible to conceive of cultural influences on thought as separate from language, and vice versa. In the same vein, Risager (2007, p. 187) cautions to specify the conditions, including theoretical underpinnings, in which language and culture can or cannot be separated. For instance, "[f]rom the psychological point of view, [...] language

and culture have always developed together in the individual subject in a unique blend", while from the sociolinguistic perspective (in)separability is always a matter of degree. Consequently, it is crucial that a socio-cognitive approach to developing ICC in educational settings be clear about when and/or to what extent perceptual, sociocultural and linguistic dimensions of simulators are activated in the linguistically-mediated process of meaning making.

### Towards a socio-cognitive approach to developing ICC 4.3 in educational settings

While there are a number of socio-cognitive approaches in various disciplines, including mass media, public health, education, and marketing, what unifies them is an integrative view upon cognitive and social properties of (complex) systems, including human beings, whose functioning is thus viewed as "the product of a dynamic interplay of personal, behavioral and environmental influences" (Kecskes, 2014, p. 42). In other words, both individual prior experience, encapsulated in simulators, and actual situational experience, which can both evoke and (re)shape conceptual frames, are equally important in meaning construction (Kecskes, 2014, p. 14) and reflected in its product, i.e. a situated simulation. Thus, a socio-cognitive approach is not synonymous to social cognition, or the social perspective on the embodied mind, which is the social knowledge individuals have in their heads and which they bring to the communicative situation. The social element in a sociocognitive approach is the "outside-the-head", actual situational context. The two, i.e. the cognitive (individual) and the social (collective), are in a dialogical relationship; mind, body and world are viewed "relationally and integratively constituting a single ecological circuit" (Larsen-Freeman & Cameron, 2008, p. 116). Still, depending on the situation at hand, either the cognitive (apriori) or the social (actual) end of the circuit can be highlighted and hence the resulting situated simulation can be more or less dependent on existing knowledge. In intercultural communication, as Kecskes (2014, p. 158) argues, "prior context and inherent salience [...] play a decisive role in the communicative behavior of participants". We fully endorse this view and adopt a "from-the-inside-out" perspective within a socio-cognitive approach. In other words, while the individual and the social are accepted as equally valid factors shaping intercultural communication, it may be the case that the former is more salient in a situated, emerging simulation than the latter since, as Kecskes (2014, p. 2) puts it, "what seems to be happening [in intercultural communication] is a shift in emphasis from the communal to the individual".

To sum up, in the socio-cognitive approach to developing ICC which is proposed here, culture, language and cognition are always integrated at the level of (individual) simulators, which comprise perceptual, motor, affective, introspective, social and linguistic data, while situated simulations, i.e. situation-dependent conceptualizations, will highlight only certain elements of knowledge and background others. In situated simulations, existing repertoires and newly occurring (situational) elements are intertwined to form a blend. Still, this blend needs to be scaffolded and our focus is on these conceptual blueprints since they seem particularly salient in intercultural communication. In other words, drawing a permeable line between the apriori and the actual, we intend to concentrate on those dimensions of simulators which are most likely to be consistently highlighted in conceptualizations situated between cultures and which therefore should be the focus of intercultural education.

### Common ground in intercultural communication

In order to discuss the impact on the given upon the emergent, the concept of common ground needs to be evoked, i.e. it must be specified which aspects of concepts are possibly shared by those participating in intercultural exchanges. According to Clark (2009, p. 116), common ground is "the sum of all the information that people assume they share" and Kecskes (2014, p. 44) defines it as "the preexisting knowledge that both speakers and hearers must have [...] for the hearer to infer and categorize the intended meaning of a practice". Consequently, what needs to be sought in intercultural communication is the type of knowledge that is consistently part of the speaker's intention and should thus be encouraged as the central inference made by the hearer, i.e. in the course of intercultural education, students should be trained to look for a particular category of information in the input. Common ground can be divided into personal, which involves specific knowledge conceptualizers have about some aspect of their immediate communicative situation, and communal, which consists of general knowledge concerning the non-immediate situation that characterizes a community (Clark, 1996). Communal common ground entails that there exists a group of individuals who share particular knowledge or expertise. Communities, as Croft (2009) argues, can be specialized or broad, which depends on the type of information they assume to have in common. People are usually members of multiple communities within which they communicate employing different aspects of knowledge, or dimensions of simulators. For instance, in intracultural communication, interlocutors rely on core common ground, i.e. "knowledge and beliefs that usually belong to a certain speech community as a result of prior interactions and experience" (Kecskes, 2014, p. 160). Core common ground develops diachronically into fairly stable general categories, encompassing knowledge about the world and the cognitive processes underlying it, social and ethical norms and values as well as the linguistic system. In intercultural communication, participants have different first languages and sociocultural

models and hence they can at best rely on a very limited core common ground, i.e. knowledge structures developed via direct contact and participation (Wenger, 1998, pp. 73-77). We argue, however, that core common ground can be also acquired indirectly in educational settings. Thus, members of the lingua franca community partly share the core common ground of those whose L1 they are using although there are important qualitative differences. These discrepancies result from the fact that in the case of native speakers core common ground is derived from the actual common ground of shared histories of learning, whereas non-native speakers acquire it indirectly through textbooks and teacher instruction.

# Core common grounds in intercultural communication

In view of the above, two types of core common ground can be distinguished in intercultural communication. The first one is formed by the detailed sociocultural frames related to the respective L1s of the interlocutors (L1ccg) and the other to the impoverished core common ground of those whose L1 is used as a lingua franca (LFccg). As stated above, qualitative differences between the two core common grounds result from their development. In the case of L1ccg, the formation of sociocultural representations occurs through repeating and refining a common story (Sperber, 1996). For instance, understanding and employing correctly certain idiomatic phrases in English (and any other language), e.g. "digging one's own grave" and "digging oneself into a hole" involves, according to Ritchie (2004), a few stages. First, a detailed story is told, evoking the intense images of digging a root cellar or a coal mine, which are related to various actions, perceptions and emotions. The tragic implication of death as well as the ironic one, associated with self-entrapment, are gradually foregrounded and strengthened through repeated use. Consequently, the phrases are metonymically construed as conveying tragic loss and humiliation, respectively. Recurrent exposure and constant social rehearsal also mean that the originally rich conceptual content becomes attenuated and the (neurological) connections between the actual experience and the language used become weakened, and finally the expressions become lexicalized. While gradual lexicalization may be obvious to a number of conceptualizers, in the majority of cases formulaic language probably functions at the synchronic level alone since the experience on which it is based is no longer common. Native speakers often employ collocations, phrasal verbs or frozen metaphors without realizing their origins. Nevertheless, because of constant repetition the stories these expressions come from are never fully forgotten and can even develop into new directions. As Evans (2013, p. 83) illustrates, the English word "tart" has not only semantically evolved from positive to negative but also expanded its collocational range in accordance with existing communicative needs - the expression "credit card tart" being a recent example from the British press. Some contemporary stories are fairly short

lasting, as was the case with the word "frankenfood" (Zinken, 2007), which arose in response to perceived dangers of genetically modified foods and disappeared once the collective perception changed.

Stories are the primary medium of memory (Schank & Abelson, 1995). As Ritchie (2009, p. 20) remarks, "how we tell something is how we remember it". Acquiring somebody else's core common ground in educational settings is not rooted in communal story-telling, in re-living the shared narratives; it does not arise through socialization. Consequently, LFccg is not built on the rich sociocultural structure which supports and re-activates communal narratives; it is not tied to beliefs, values and stories, preserved in the language. LFccg arises in isolation through learning rather than participation, and is predominantly constructed through linguistic experience alone.

As argued above, the way in which core common ground is acquired bears upon its quality. As a result, core common ground developed through classroom experience and concepts emerging from multidimensional social practice are bound to differ. According to Borghi and Binkofski (2014), knowledge structures acquired through linguistic experience alone are likely to be more abstract than those developed in a fully-fledged sociocultural milieu. Thus, LFccg, and its components, i.e. knowledge about the world as well as social and linguistic representations, are bound to be more schematic than in the case of L1ccg. Referring to the layers of embodied cognition, we thus argue that LFccg perspectivizes cognitive abilities, schematic archetypal concepts and linguistic dimensions of simulators. L1ccg, in turn, will rely more on socio-cognitive skills, complex primitives and multifaceted simulators. Crucially, both types of core common ground are likely to occur in intercultural communication since the two knowledge structures are "coupled, with the use of one affecting the use of the other" (Larsen-Freeman & Cameron, 2008, p. 143), and this interdependency is reflected at the level of language knowledge and use.

# Linguistic and communicative competences in developing ICC

In a socio-cognitive perspective, linguistic and communicative competences merge since two phenomena can be observed at the same time: "people attempt to fit their language to a situation or context that their language, in turn, helped to create in the first place" (Kecskes, 2012, p. 182). Thus, as Tomasello (2003, pp. 98-101) argues, linguistic knowledge should not be reduced to semantically empty rules but needs to entail the mastery of "a structured inventory of linguistic constructions that arise out of interaction". An essential component of this mastery is constituted by formulaic language, i.e. the preferred way of speaking reflecting the preferred ways of thinking diachronically developed through conventionalization (Kecskes, 2014) or, as we choose to call it, re-living a shared narrative. Using formulaic language appropriately is thus a sign of belonging to a particular group and typically reflects L1ccg. LFccg is not linked to formulaic speech in the same way since the process of socialization is missing. In fact, as Kecskes (2014) argues, intercultural communication is typically deprived of formulaic language; instead, interlocutors are trying to convey semantically transparent messages, which, in our view, results from the quality of the linguistic experience that helps to shape LFccg. To be more specific, non-native speakers who acquire a foreign language in educational settings are exposed to input which is not progressively structured in the way typical of sociocultural environments. Foreign language learners are usually not able to derive patterns from use, strengthen inferences and abstract schemas. Instead, their linguistic experience combines all these stages and hence the stories they tell may well encompass grammatical rules, authentic texts, etymological roots and semicontrolled interactions - all at once. In other words, "individual language knowledge in L2 is not necessarily the result of language socialization and participation in communities of practice as is the case in L1. Much of this knowledge (especially in a foreign language environment) may originate through studying the linguistic code itself rather than just emerging in lifelike social experience through language use" (Kecskes, 2014, p. 101). Moreover, since a lingua franca community is related through indirectly shared histories of learning, interlocutors can never be sure how much LFccg they share.

Formulaic language results from shared L1ccg, while transparent speech may well be the consequence of suppressing L1ccg and activating the most infallible aspects of LFccg, i.e. culture-free, loose language. However, the challenge of intercultural communication is that we can never fully eliminate formulaic speech from our utterances since it is tied to L1ccg, which also shapes situated conceptualization. Thus, developing ICC means, in our opinion, reconciling L1ccg and LFccg in the way that is both plausible from a socio-cognitive perspective and applicable in educational settings.

Integrating simulators, or their dimensions, characteristic of L1ccg and LFccg respectively is founded on the assumption that both types of knowledge structures arise, at least partly, from a shared narrative. In other words, we listen to and/ or participate in stories which become frames for future interactions. In actual encounters, however, only fragments of shared narratives are simulated as either loosely associated words, e.g. "Are you digging your own grave in the garden?" or fixed combinations, e.g. "By refusing this offer you are digging your own grave." In the first case, as discussed above, language is typically processed at a surface level, i.e. with reference to other words and, possibly, a few perceptual simulations, and this seems to characterize both intra- and intercultural encounters. In the second case, where lexicalization and grammaticalization processes have been involved, those sharing L1ccg are likely to interpret "digging your own grave" through the

sociocultural perspective, as if rehearsing a part in a well-known role play, while those sharing LFccg may either follow (partly) the same path or, if this is not available, resort to the physical frame, which, in this situation, will lead to a communication problem – a misinterpretation resulting from mismatching linguistic forms and their meanings, or conceptual levels at which these meanings should be simulated, despite, as will be demonstrated below, relevant clues in the input.

Meaning construction and developing ICC in educational settings It has been already argued that embodied cognition encompasses phenomena at various "depths", and concepts, i.e. perceptual, sociocultural and linguistic dimensions of simulators, form a hierarchy founded on socio-cognitive abilities and archetypal concepts. Language - a structured assembly of symbolic units conventionalized by a particular community (Croft, 2009) – is always coupled to cognition and hence meanings of linguistic forms always can and, in the case of intercultural communication, often should be referred to their conceptual underpinnings. Such associations, however, can only be made if a particular knowledge structure has been developed - we cannot simulate, or infer, a dimension of a simulator that either does not exist or has not been fully integrated within a given frame. In the case of intercultural communication, which is predominantly built on shared LFccg which emerge in instructional settings, this missing, or inappropriately developed, aspect is the sociocultural dimension. Since foreign language learners cannot always felicitously rely on the sociocultural layer of LFccg, which, as extensively argued above, is caused by the way they acquire L2-related knowledge, they compensate for this gap by evoking another dimension, typically related to physical experience. For instance, in an intercultural dialogue discussed at length by Kecskes (2014, p. 117), one person uses the formula "Why don't you sit down?" in its lexicalized sense, i.e. sanctioned by and derived from sociocultural practice. The other person, who does not share this aspect of LFccg, interprets it with reference to the sensori-motor frame, and answers: "Because you did not tell me to". Consequently, the flow of this intercultural exchange falters; it is as if the speaker and the addressee referred to different backgrounds in which their respective conceptualizations could be situated, or different stages along which their (potentially) common story could evolve.

We propose that one way to avoid such misunderstandings is for the process of meaning making to occur at a different conceptual level than is routinely chosen by non-native speakers, and we further argue that this should be the level of schematic, or prototypically linguistic (Evans, 2006), meanings and their underlying representations, i.e. cognitive abilities and archetypal concepts. We believe that if non-native speakers are trained to recognize and use schematic semantic content, intercultural communication may become more successful since it will be scaffolded by (near) universal or "preponderant" (Langacker, 2008, p. 20) elements.

For instance, in the intercultural exchange evoked above, the schematic content of the "Why don't you ...?" construction, i.e. that of a suggestion, derived from the location/motion schema, or placing something before another person's mind, is there for the addressee to infer and integrate with the rest. And if this inference were made, the exchange would not be impeded.

Schematic semantic content, rooted in socio-cognitive abilities and conceptual archetypes, is associated with the deepest level of embodied cognition but they emanate all the way up, through simulators and simulations to situated conceptualizations. They are the foundation of core common ground(s), which are infallibly present but not necessarily obvious in emergent, co-constructed meanings. The bases of grammatical meanings are the blueprints of mental representations - the elements that we know, or should know, for certain in advance of entering a social interaction since they are also the most relevant aspects of the input, capable of yielding positive cognitive effects and/or altering an individual's representations. According to the socio-cognitive approach developed throughout this paper, schematic conceptualizations belong to both cognitive (apriori) and social (actual) ends of the ecological circuit and should thus be consistently developed in educational settings fostering intercultural communication.

However, it needs to be acknowledged that encoding and decoding schematic content is not easy because neither employing nor discovering the abstract basis of language is simple. For instance, Langacker (2008, p. 538) describes the English possessive with reference to "the conceptual operation of invoking a reference point to mentally access a target", which inheres in the archetypal concepts of ownership, kinship and part-whole, and discovering such interdependencies is hard. Still, intercultural communication is about making an effort and learning from each other; it is about active involvement, coordinating and re-shaping each other's cognitive environments. Intercultural encounters are thus, by definition, complex tasks and as such require processing at deeper cognitive levels (Barsalou, 2016). This depth, however, need not be rendered in highly abstract terms, or involve Langackerian explanations. Instead, educational settings for promoting intercultural competence could become canvas for their own stories, foundations for a truly shared lingua franca core common ground. Linguistically-mediated development of ICC is through language and, for the most part, about language. Linguistic frames are thus already present and indeed well developed, particularly in proficient learners. The role of educational settings is therefore to integrate this linguistic knowledge so that it forms a coherent narrative. And to achieve this aim, grammatical meanings need to be consistently evoked. If lingua franca speakers are trained, perhaps even in most foreign language classrooms, how to make schematic, rather than domain-specific, content transparent in the input and how to infer it from the output, a number of intercultural misunderstandings could be prevented. To take another

example from Kecskes (2014, p. 99), in an intercultural dialogue one interlocutor uses the formula "Tell me about it!" in its socioculturally sanctioned meaning, i.e. "Do not tell me about it!", which is, however, interpreted with reference to the sensori-motor frame by the other participant. Thus, the schematic element, conveyed via the intonation pattern, or an "overt closed-class element" (Talmy, 2000, p. 23) has not been inferred or integrated with the other aspects - cognitive and communicative - that contribute to meaning-making.

Grammatical meanings are rooted in a number of archetypal concepts and some useful lists, appropriate for classroom use, can be found in Talmy (2000) or Kövecses (2010). These basic schemas encompass force, which is elaborated, for instance, in English modal verbs, including deontic and epistemic interpretations, distance, transparent in English past tenses and elaborated as social distance in certain expressions of politeness, e.g. "I was wondering ..." Though the purpose of this paper is to propose a theoretical, socio-cognitive framework for developing ICC in educational, primarily EFL or ELF, settings, rather than offer specific teaching strategies and techniques, we cannot fail to mention Radden and Dirven's (2007) Cognitive English grammar – a handbook for advanced learners of English in which schematic content is central.

Still, even if learners are made aware of schematic meanings and their omnipresence in language, and if they deliberately make them part of their input and painstakingly try to infer them, the results need not always be impressive. This is because schematic content is only partly telling about the actual meaning. For instance, if we do not know the lexicalized meaning of "(It is raining) cats and dogs", and we build our interpretation, at least initially, on the grammatical meanings available, the information we get is that there is a lot of rain - conveyed via the two inflectional morphemes and strengthened by the coordinator. Likewise, "beating about the bush" can be understood as not getting to the essence, acting on the periphery, which is motivated by the semantic content of "about", rooted in the centre-periphery archetype. In addition, the schematic meaning of "the", i.e. mental contact (Langacker, 2008), highlights the relevance of the matter at hand ("the bush").

In the same way, the schematic content of other grammatical forms can be brought to bear on utterance understanding, particularly in the case of formulaic speech, provided interlocutors can overlook domain-specific content and go deeper, i.e. to the level of basic cognitive operations and archetypal concepts. This strategy is neither effortless nor highly informative. Still, it is relevant since the properties of the input inferred in this way scaffold other conceptual and communicative clues. Finally, while the ability to handle schematic semantic elements is useful for intercultural communication in general due to, as we argue, its role in interpreting formulaic speech, it is perhaps most rewarding in times of on-line intercultural communication, where hybridity, creativity and novelty are the norm and where many formulaic expressions cannot be understood with reference to any L1ccg. Consequently, schematic meanings and their par excellence repository - grammar – need to become indispensable elements of educational settings.

In advocating a socio-cognitive approach to developing ICC in classroom contexts we join those linguists who, according to Kramsch (2013, p. 71), "are eager to put [...] the subjective aspects of language learning back into the language classroom", and we choose to concentrate on grammatical notions and their underlying schematic content as the most subjective counterparts of human experience. Schematic meanings permeate language understood as both an innate faculty of the mind and a means of social interaction. In other words, they are at once present in the individual mind and emergent in the communicative situation. Thus, knowing the attenuated, (near) universal content evoked by grammatical units allows intercultural speakers to navigate between their different systems of meaning making. These systems, formed by relatively stable knowledge structures, are core common grounds, whose shapes may differ according to the type of experience which formed them in the first place, e.g. sociocultural or linguistic. Consequently, we distinguish L1ccg and LFccg as two major forces influencing the progression of intercultural communication and argue that they are reconciled through fundamental cognitive abilities and archetypal concepts. As a result, the role of culture understood as frames formed through sociocultural interactions within particular L1 communities is downplayed in intercultural communication and the impact of culture viewed as conceptual structures formed by linguistic instruction and classroom interaction in ELF environments is highlighted. Ultimately then we argue that developing intercultural competence in educational settings should be founded on basic socio-cognitive mechanisms residing in the linguistic system.

### Conclusions

The aim of the analysis presented above was to demonstrate that despite a few decades of research into ICC and a multitude of educational approaches and models of ICC so far a holistic and integrative model of ICC focusing on the intersection between language, culture and cognition, three key elements of ICC, has never been fully developed. The discussion on ICC with reference to the language-culturecognition nexus has been polarized between a cognitive and a social perspective and there seems to be no middle ground. The dominant framing of the three elements in a cognitive perspective is an autonomous nature of language, culture and cognition while in a social perspective the fusing of these elements in an unconstrained manner through social practice is highlighted. Thus, language and

culture are situated either in cognition or society. However, neither of these two perspectives, as we demonstrated above, explains the role and scope of language, culture and cognition in ICC in educational context. Consequently, the three aspects in these two perspectives lack a common unifying element. Thus, we postulate a socio-cognitive approach to ICC in educational context and, within this interdisciplinary model, we highlight the perspective of cognitive linguistics, which allows for entrenched (near) universal schemata to be distinguished and linked to both individual minds and actual communicative situations. In this way, cognitive linguistics provides a synthesis of notions which were previously considered separate in intercultural communication.

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