

# Turning Constructionist Intercultural Communicative Competence and Complex Systems Theory into Praxis

*Ariadna Strugielska & Katarzyna Piątkowska*

Nicolaus Copernicus University - Poland

## Abstract

While approaches to intercultural communicative competence (ICC) view the phenomenon as a modular notion, recent studies emphasize its constructionist nature. Thus, in this exploratory article we analyze critically current perspectives on ICC and discuss the potential applicability of the theory of complex systems for research on ICC drawing from a constructionist perspective. In order to illustrate the perspective, we evoke research on developing ICC of European teacher trainees of English, non-native speakers of the language. The results of a qualitative analysis indicate that ICC meaning cannot be captured through models advocating either psychological or contextual reductionism. Instead, ICC requires an approach which reconciles the cognitive and the social through a complex systems perspective on the constructionist framework.

**Keywords:** *intercultural communicative competence, constructionism, complex systems theory, international educational project*

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## Introduction

Despite over twenty years of theoretical consideration and research, a methodological framework and an epistemological positioning of intercultural communicative competence (ICC) are far from delineated.<sup>[1]</sup> While contemporary models of ICC (e.g. Kordes 1991, Byram 1997, 2008, Byram and Zarate 1997, Byram, Gribkova and Starkey 2002, Heyward 2002, Anderson et. al 2006, Deardorff 2006) view the notion as a certain compositional, modular and cognitive disposition in an individual's mind which develops in a linear way, recent studies (e.g. Foncha and Sivasubramaniam 2014, Moeller and Nugent 2014, Rygg 2014, McBride and Gu 2015) point to instability, variability unpredictability, aperiodicity, and non-linearity in the acquisition of ICC. These features are at the same time some of the main aspects of meaning construction (van Lier 2000). Thus in this article we enter into dialogue with contemporary perceptions of ICC and propose to discuss the concept from the perspective of complex systems theory with constructionism as an encompassing framework.

The structure of the article is the following. First, we make a critical analysis of current approaches to ICC, stressing the lack of interface in these conceptualizations between the key components of ICC, i.e. cognition, affect and intercultural action, which we consider essential if the goal of intercultural development is the ability to interact effectively in cross-cultural contexts. Acknowledging communication as the basis for the acquisition of ICC, we suggest discussing the concept from a constructionist perspective. Recognizing the unpredictability and aperiodicity of this development due to the interface of factors in a given situation, we point to congruence between constructionist ICC and the theory of complex systems, which emphasizes dynamicity, complexity, change, and co-adaptation as permanent features of processes (Larsen-Freeman and Cameron 2008). The basis of our consideration

derives from the qualitative analysis of data obtained from students (teacher trainees) participating in the international project ‘Developing Intercultural Competence of European Teachers of English’ (DICETE) described below, which has allowed identifying factors influencing unpredictable shifts in the students’ construction of ICC.

## **Intercultural communicative competence from a constructionist perspective**

Current models of ICC within the educational framework (e.g. Kordes 1991, Byram 1997, 2008, Byram and Zarate 1997, Byram, Gribkova and Starkey 2002, Heyward 2002, Anderson et. al 2006, Deardorff 2006) perceive ICC with reference to affective and cognitive domains to be developed as knowledge, skills and attitude. An exemplary model viewing ICC as a three-component concept is Byram’s (1997) proposal. Treating these three elements of ICC as autonomous, categorical and modular entities acquired in a linear way, Byram’s (1997) model represents a reductionist position. The rationale behind this stance is the assumption that components of ICC are related to psychological and behavioural domains. However, if intercultural communicative competence is defined as “the ability to interact effectively with people from cultures that we recognise as being different from our own” (Guilherme 2000:297), then any model of ICC should account for the cognition-affect-intercultural action nexus, i.e. explain how cognition and affect translate into intercultural action. Yet, none of the models, including Byram’s (1997), elaborate on the relationship (Dervin 2011, Castiglioni 2013) and instead assume the existence of cognitive invariants which enable the acquisition of ICC in a linear and universal way on the basis of comparing and contrasting cultures. Consequently, ICC (or its goal, the ‘third space’) in Byram’s (1997) model emerges as a notion constructed from one’s cognitive stabilities, not affected by other factors. Thus, the model represents a Piagetian cognitive constructivism (we distinguish between constructivism, i.e. a cognitive perspective represented by Piaget and constructionism, i.e. a social perspective represented by Papert). However, if the goal of ICC is the ability to engage in cross-cultural communication, as quoted above, the assumption that ICC is constructed in interaction is justified (Bennett 2005).

Therefore, we argue that individuals (re)construct their intercultural worldview when interacting with others. Focusing on the constructionist and interactionist nature of ICC, we take Vygotskian and Papertian perspectives and view ICC as a concept which is affected by a set of dynamic, mental and social factors comprising context, which can have a double nature, i.e. it can be prior or actual situational. By prior context we understand individuals’ mental representation of a given phenomenon (ICC in our case) which they bring to actual context, i.e. the here-and-now situation. In other words, prior context is a certain cognitive stability or fixed patterns existing in an individual’s mind as a result of past experience, prior practices, knowledge, beliefs, values, etc., while actual situational context is a social phenomenon, a certain sociocognitive disposition in a given situation at a given time. (Kecskes 2014) Furthermore, depending on a situation (e.g. the place of interaction or the interlocutors’ roles), these factors undergo constant changes and permeate one another, forming complex systems and leading to unpredictable results. Thus, we postulate that individuals are under two types of pressure when they try to construct their ICC meaning – prior and actual situational context. The outcome of this pressure depends on which type of context is stronger in a given situation as the role of prior and actual situational context changes in the process of communication. Prior context is viewed through actual situational context and the other way round and interaction between them leads to the creation of a third space. (Kecskes 2014:134) We recognize the equal importance of both types of context in ICC meaning construction and maintain that there is a constant interaction between them. Likewise, we distinguish between two types of interaction, i.e. off-line and on-line. Off-line interaction takes place between individuals and prior context whereas on-line interaction takes place between individuals and actual situational context. As a result, the construction of ICC meaning will emerge as a fixed and stable pattern if prior context dominates in a given situation (in which case prior context functions as an attractor on meaning construction), as a blended, evolving notion if actual situational context dominates, or as a hybrid bearing the signs of both a fixed pattern and an evolving notion if prior context blends in with actual situational context. Consequently, we acknowledge the contribution that the theory of complex systems (Larsen-Freeman and Cameron 2008) can bring to the interpretation of ICC within a constructionist perspective. Following

Rizolatti and Craighero (2004), we acknowledge a double nature of human beings, i.e. as individuals and as social beings. Consequently, we assign an important role to individuals interacting in a given context in the process of constructing ICC meaning. To sum up, we suggest approaching ICC from a more sociocognitive perspective.

## **Complex systems theory in a constructionist intercultural competence perspective**

Assuming interaction as a process lying at the heart of ICC, we argue that it entails dynamicity and change as a consequence of factors (i.e. context) constantly interacting and interfacing one another. These two features are essential elements of complex systems (Larsen-Freeman and Cameron 2008). Presupposing change, aperiodicity and unpredictability as permanent features of processes, complex systems theory acknowledges discontinuities of meaning. Thus, rather than the interplay of three components, i.e. knowledge, skills and attitude, constructionist intercultural competence from this perspective is viewed as the convergence of factors (with ICC being one of them) fluctuating in a reciprocal manner and influencing the construction of the concept in interaction. As a consequence, assigning an important role to factors which constitute context for the construction of ICC, we reject a cause and effect link between cognition, affect and intercultural action. In other words, we argue that context functions as a constraint (i.e. an attractor as understood in complex systems theory) on intercultural meaning construction and affects the process to a large extent. As a result, ICC is treated as a non-categorical concept, whose development proceeds in a non-linear way leading to unpredictable outcomes.

In line with this reasoning and following the works of Burns and Knox (2005, 2011) on complex systems theory, we regard a classroom as a complex adaptive system consisting of factors (i.e. context) referring to institutional, pedagogical, personal and physical aspects, constantly permeating one another, causing change and instability, and allowing intercultural meaning negotiation to take place. Another consequence of adopting complex systems theory in an educational setting is the rejection of the input-output link. Thus, a classroom is not a space where input is provided to students for processing, whose consequence is generating output. Instead, it is a space where intercultural meaning is constructed through communication and interaction. Consequently, influenced by the aperiodic, unpredictable, though constrained, nature of factors, the construction of intercultural meaning will oscillate between settled and unsettled categories, or attractors.

## **Complex systems theory in a constructionist intercultural competence approach - the empirical perspective**

In what follows, we are going to demonstrate that ICC emerges from (re)constructing individuals' experience subjected to factors (i.e. context) interacting and fluctuating in a reciprocal manner rather than in a cause and effect link. Furthermore, we are going to illustrate that the construction of ICC will be constrained by two sets of attractors, i.e. settled and unsettled, encompassing the imposed and the negotiable, the static and the dynamic, the autonomous and the dependent, the modular and the blended, the localized and the distributed, and emerging in an educational setting.

The classroom described to illustrate the construction of ICC came out of an Erasmus Intensive Programme (IP) launched in September 2013 by four partners, i.e. University of Eastern Finland (Finland), Catholic University of the West (France), Nicolaus Copernicus University (Poland), and Vigo University (Spain), with a view to creating a trans-European interpretation of intercultural competence with reference to university teacher training. The programme – DICETE (Developing Intercultural

Competence of European Teachers of English) – culminated during a two-week summer school in Toruń, Poland in June 2014 ([www.dicete.umk.pl](http://www.dicete.umk.pl)).

In what follows, first research objectives are formulated and the two central categories, i.e. ICC and its context, are described. Next, the participants' constructions of ICC, understood as their outputs, are analyzed. Finally, results are presented and conclusions pertaining to a complex systems approach within the constructionist perspective on intercultural communicative competence in educational settings are formulated.

## Objectives

As stated above, the main aim of the empirical part of this article is to demonstrate the validity of a complex systems perspective within the constructionist approach to developing intercultural communicative competence in educational settings. The objectives are thus formulated as the following research questions:

1. Are the factors (i.e. context) aperiodic, dynamic aspects adapting to other factors?
2. In what way(s) does context (i.e. factors) influence the shifts in the participants' construction of ICC meaning?
3. Are the proposed constraints on meaning construction, i.e. the two set of attractors, detectable in the outputs?

## Context affecting the construction of ICC

As postulated above, the construction of ICC meaning is significantly related to and regulated by the interaction of prior and actual situational contexts. The four sub-contexts distinguished within prior and actual situational context, i.e. institutional, personal, pedagogical and physical, possibly influencing the construction of ICC, appear to be dynamic factors likely to impact one another as well as the system, i.e. intercultural competence. The system-context interpenetrability is likely to be constrained by two sets of attractors, leading to meaning constellations involving both modular, imposed, localized, static and autonomous interpretations as well as blended, negotiable, distributed, dynamic and relativized constructs.

## Institutional factors

With reference to institutional aspects, the meaning of intercultural communicative competence was constrained by, first of all, the formal requirements of the European Commission, the Polish National Agency and the Lifelong Learning Programme Guide 2013 ([http://ec.europa.eu/education/llp/doc848\\_en.htm](http://ec.europa.eu/education/llp/doc848_en.htm)), in that the operational aims of the IP needed to address the objectives of the Erasmus sub-programme, which included facilitating the development of innovative practices in education and training at the tertiary level and supporting the development of innovative ICT-based content, services, pedagogies and practice for lifelong learning. As declared by the partnership, the most important contribution of the IP was to build intercultural communicative competence of the participants and develop a teacher training module in which the target language and culture were negotiated by the actual users of the English language. These goals were to be realized through lectures, presentations and workshops on intercultural competence, its dimensions and role in the English language classroom, as specified in the syllabus of the IP.

## Pedagogical factors

It needs to be emphasized that the IP's syllabus was partly constructed on the basis of the teacher training programs in the four partner universities. However, while teacher training discourse in the countries involved tended to evoke teaching the language and culture of English-speaking countries alone, for the sake of the IP, the English as a lingua franca perspective was adopted and countries where English is spoken and can be a working language in the school setting were incorporated in the agenda.

Consequently, the program of the summer school emerged as a result of European and national constraints of the Erasmus sub-program and the teacher training curricula of the four universities, negotiated from the ELF perspective.

The course outline included ten working days and embraced two interrelated categories: intercultural competence in everyday life and institutions (week 1) and intercultural competence in the teaching-learning process (week 2). The first series of classes concentrated on presenting and negotiating the concept of interculturality and ICC through defining the construct and its dimensions, i.e. texts, institutions, educational and teacher training systems. The main idea was to let the participants construct the meaning of intercultural communicative competence from the learners' perspective, focusing explicitly on the content (intercultural topics) and implicitly on the possible methods and techniques of intercultural education with reference to foreign language teaching. Next, the students' role shifted towards that of teacher trainees, when their task was to analyze course books and observe English language lessons, both live and recorded, in the four countries involved, according to their own, negotiated criteria. Finally, the participants were to conduct a fragment of an intercultural lesson in a way that revealed both the content elements from the first week and the critical observations in the second week.

With reference to the teaching theories of the IP instructors, these were a mixture of cognitive and constructivist assumptions, as revealed in the pedagogical sub-context.

The pedagogical framework was set in the IP's application form, and thus bound by the institutional sub-context described above. The pedagogical sub-context at the institutional level was a general declaration to adopt a communicative language teaching approach. At the level of particular sessions, each of the partners was responsible for developing lesson plans for 2 of the 8 themes included in the IP's syllabus. The sessions were organized on the basis of a common template, which included the lesson's format and objectives, procedure, assessment techniques and criteria and key intercultural terms introduced. In most cases, the sessions were a combination of an interactive lecture/presentation, followed by group work. Thus, ICC was developed from knowledge to practice, often highlighting individual instructors' "favourite" terminology related to ICC, e.g. pluriethnicity, uncertainty avoidance, diversity or multilingualism, and/or preferred patterns of interaction, e.g. workshop, stations, or field work (<http://www.dicete.umk.pl/wordpress/wp-content/uploads/2014/07/DICETE-complete-session-plans.pdf>). Students' and teachers' roles were obviously related to particular sessions' formats but, on the whole, both were to be discoverers, experiencers and negotiators as well as providers of input and feedback, while the instructors were also to assist, monitor and coordinate.

## **Personal factors**

Three factors can be distinguished which constitute a personal sub-context, i.e. the subjects, the teachers and the initial construct of ICC.

### **Subjects**

The learners of the IP were 44 students, teacher trainees, of the four partner universities. They embraced six nationalities: Basque, Cameroonian (an exchange student), Finnish, French, Spanish and Polish, came from both BA and MA programs and showed a variety of educational backgrounds, including education and teacher training, literature, linguistics and culture studies, translation and intercultural communication.

The personal sub-context influencing the construction of ICC meaning is best represented by the participants' research/study commitments and their theories of teaching/learning, which, to a large extent, transpire from the results of the ICC questionnaire (presented below). Other personal factors, e.g., the participants' private lives and experience, though significant for the construction of intercultural competence, were not included in the personal sub-context since the data were not collected and examined in a systematic way.

### **Teachers**

The teachers of the IP were 13 academics coming from various cultural backgrounds, educational systems and teacher training programs. Four teachers were native speakers of English employed in France (2) and Finland (2), and the instructors' expertise ranged from professional intercultural competence training of language teachers (Finland) through teacher training and cross-cultural communication courses (France and Poland) to training in innovation strategies in ELT. More detailed research commitments of the teachers were the following: translation studies, language variation and change, Conversation Analysis, CALL, language education and English literature. All of the instructors had previous experience in teacher training though not necessarily in intercultural competence training. This variety of research commitments, which was an intentional element of the IP, had an obvious impact on the understanding of ICC.

## **The initial construct of ICC**

In order to talk about the process of ICC construction, its initial stage needs to be described so that comparisons can be made and changes tracked. The first meaning of ICC was constructed by the partnership in consonance with the objectives of the Erasmus sub-programme and the ensuing aims of the Intensive Programme. The early nature of intercultural competence was reflected in the questionnaire, negotiated by the teachers in March 2014, which consisted of 15 questions (<https://docs.google.com/forms/d/10pepRG5KLmsJn2ZHTZ43OVJyEgXj14230sSMh94TLII/viewform>). The statements roughly pertained to the thematic categories included in the IP's syllabus, i.e. stereotypes, texts, institutions, language education and teacher training, and addressed the two sets of attractors, i.e. settled and unsettled, between which the category of ICC could oscillate. Since the ICC questionnaire was prepared by the teachers themselves, leaving little room, apart from the last question, for the students' contributions, the early interpretation of intercultural communicative competence was rather limited. This partial interpretation of ICC became one of the aspects affecting a further process of meaning construction.

The students' understanding of ICC, as reflected in the results of the ICC questionnaire, showed a clear polarity of the responses, possibly resulting from the two broad areas of the IP's syllabus mentioned above, i.e. intercultural communicative competence from everyday and educational perspectives. In the case of the first viewpoint, the results showed that the students considered the target-language culture to be related not only to the culture of a country/countries where the language is the mother tongue (e.g. Great Britain's culture in the case of English) but also to the culture of countries where the language is either official or plays a major institutional role (93% and 89% of the responses to Questions 1 and 9 respectively); however, with reference to foreign language education and teacher training (Questions 10 and 12), the participants less uniformly supported this view (79% and 75% of the responses respectively). Likewise, when ICC was not bound by the educational setting, stereotypes were criticized more (89% of the responses to Question 6) than in the case of Question 11, where as many as 61% of the participants were in favour of a one-sided image of the target-language culture. This polarity of responses, whereby a change, or specificity, of the context clearly influenced the meaning of ICC among the students, was reinforced once the answers were grouped according to percentages. The highest scoring statements were 1-6, 8 and 9, with results between 89% and 95%, pointing to an ICC meaning predominant among the participants. This initial construct was rather unstable, oscillating between a fairly modular, localized, static, imposed and autonomous ICC (Questions 1-3) and its dynamic, blended and dependent (Questions 4-6) or even distributed and negotiable (Questions 8 and 9) interpretations. All in all, then, the understanding of intercultural competence by the DICETE students, as displayed through the ICC questionnaire, was far from uniform, depending on a number of factors, e.g. the national syllabus, the notion of ICC conveyed in the questionnaire, and the conditions in which the task was performed. One of the key factors which may have influenced the results is the fact that the students filled in the questionnaire individually, in familiar surroundings. This parameter was changed during the summer school in Poland, where the educational setting was unlike any of the students' previous experience, and one of its crucial components were the DICETE teachers.

With reference to the former, the statements included in the ICC questionnaire could be taken to mean that the early interpretation of intercultural competence by the DICETE teachers was far from settled and uniform. For instance, question 2: Students should learn facts about the target language culture (e.g. its institutions, history, literature, political system, festivals, lifestyle, cuisine, customs, everyday life, etc.), promoted a rather imposed, modular and autonomous interpretation of ICC, whereby the knowledge of

facts is given and separated from both other aspects of (inter)culture and the context in which it is constructed, while question 10: Course books should contain both information about cultures other than English speaking culture and tasks that will develop generic cultural skills which will help learners communicate with people representing these cultures, pointed to a more blended and context-dependent interpretation of ICC, where specific and generic skills and competences merge. Likewise, question 3: It is important to develop foreign language learners' awareness of their own cultural identity, revealed a rather autonomous perspective, while question 5: Students should be taught to deal effectively with misunderstandings stemming from cross-cultural differences, promoted a more dynamic construct of ICC.

As shown above, the ICC questionnaire created possibilities for DICETE participants to construct intercultural competence in ways constrained by a number of attractors. Simultaneously, an additional limitation upon the notion of ICC in the setting was introduced by the questionnaire itself since the categories included in it, e.g. cultural facts and stereotypes, the target language and culture, course books, foreign language proficiency or teacher training courses, revealed the IP instructors' near-universal and predictable, i.e. available in the relevant literature, understanding of ICC. Finally, the process of negotiating the ICC questionnaire, built on one teacher's suggestions and later modified by the other instructors, as well as the partners' idea to have the students do the survey on their own rather than in national groups point to a rather localized meaning of ICC. Still, the fact that the partners were going to use the results of the questionnaire from April 2014 as one of the inputs for the summer school in June 2014 shows that intercultural communicative competence was, to some extent, perceived as dynamic and context-dependent.

## **Physical factors**

In the first week of the summer school the classes were conducted in a modern, air-conditioned building on the main campus in a spacious room with moveable tables and chairs, fully equipped in terms of both ICT-based and more traditional teaching aids. The acoustics were perfect, snacks and drinks were available next door and an extra room was provided in case of emergencies, i.e. last-minute consultations before presentations. The classes were conducted close to the participants' accommodation and the canteen. In the second week, the summer school was moved to the city campus, and the classes were conducted in a historic building in the old town. The room was far less comfortable, with no air-conditioning, shortage of space and poor acoustics. Although the venue was situated in picturesque surroundings, the students had to travel half an hour to get there. Since the second week also involved lesson observations in local schools, the participants often had to move about quite a lot, which, given the hot weather and the standards of local public transport, may have been demanding.

## **Data collection**

The students' output was collected after the class when it was generated and uploaded on Moodle.

## **Method of data analysis**

The data used to address the three research questions presented above were selected outputs of the DICETE participants. The choice of the products was motivated by two requirements. First, the outputs needed to represent the two broad perspectives embedded in the IP's syllabus, i.e. learners' and teachers'. Secondly, they were to be related to the thematic areas delineated in the ICC questionnaire (and the IP's syllabus), i.e. cultural facts and stereotypes, the target language and culture, coursebooks, foreign language proficiency or teacher training courses. The discussion presented below is based on a qualitative analysis.

## **Results**

Three outputs were selected for the analysis and studied in the following way. First, elements of the four sub-contexts, i.e. institutional, personal, pedagogical and physical, relevant for the actual classroom practice are presented. Then, the outputs are discussed with reference to the criteria (sets of attractors) introduced above. Finally, the meaning of ICC, emerging from each product, is proposed according to the three research objectives.

The first output chosen for the analysis was produced by the participants on completion of Theme 3: Dimensions of interculturality: institutions (<http://www.dicete.umk.pl/wordpress/wp-content/uploads/2014/07/DICETE-complete-session-plans.pdf> ).

The context: Theme 3 consisted of three sessions, all moderated by the Polish DICETE teachers. The first one was fieldwork/a workshop, for which the students were divided into two groups. Group 1, consisting of non-Polish participants, was to run intercultural errands in the city centre, with maps and instructions, e.g. a list of possible criteria, provided, while group 2, the Polish students, was to meet in the classroom, equipped with all possible documentation of their experiences abroad, particularly those involving the home countries of the other participants. The idea was to “discover” foreign institutions, e.g. banks, shops, public transport, or post offices, and compare experiences, pictures and reflections. Thus, the second session involved discussing similarities and/or differences among Poland, Finland, France and Spain with reference to selected institutions, and finding possible intercultural elements in their functioning as well as suggesting what can be done to make them more intercultural and open to people of various cultures. The students worked in six international groups, with the teachers acting as observers and/or co-participants, and the results, in the form of posters, were presented during the final session.

The meaning of ICC emerging from the six products was clearly polarized – four posters showed intercultural institutions according to the categories of skills, knowledge and attitudes, and hence were classified as modular, while the remaining two reflected a blended approach, whereby intercultural traits were merely listed and no divisions were suggested. With reference to the quality of the intercultural characteristics mentioned, some products included elements of ICC readily available in the relevant literature, e.g. knowledge of religion, history or language, but the majority of the posters highlighted area-specific traits, e.g. knowledge of first aid, elements of psychology, specialist languages or the law. Interestingly, two posters concentrated solely on the building, and the most common elements of an intercultural institution included: a customer-friendly atmosphere, information in many languages and formats (letters, pictures, sounds), ICT assistance and access for the disabled. The other four posters highlighted the human factor and the intercultural staff were characterized as open-minded, attentive, tolerant and friendly. This division may well signal a tension between a distributed, environmentally-supported and a localized construct of ICC. All in all, the interpretation of ICC emerging from the products of Theme 3 is stretched between the two sets of attractors proposed above, and the meaning which seems to have been construed in most cases interprets ICC as modular, static and localized, on the one hand, and context-dependent and negotiable, on the other hand.

The second output chosen for the analysis was produced by the participants on completion of Theme 4: Educational systems in Europe (<http://www.dicete.umk.pl/wordpress/wp-content/uploads/2014/07/DICETE-complete-session-plans.pdf> ).

The context: Theme 4 consisted of three sessions, all moderated by the Spanish DICETE teachers. During the first one, student teams presented their national educational systems, with a spotlight on language education. After a question-and-answer session, the participants, in international groups, were to discuss the systems and evaluate them, pointing to advantages and disadvantages of each. The next session began with the Spanish teachers’ seminar on a Glogster – a new ICT tool which the students were to use for session 3. The seminar was followed by a workshop during which a common framework for European language education was to be negotiated by the participants and presented in the form of interactive posters. The students worked in six international groups, with the teachers acting as observers and/or co-participants.

The meaning of ICC emerging from the outputs of Theme 4 was, first of all, incomplete since two of the six teams failed to prepare a Glogster. In the four posters available, language teaching was, on the whole, presented out of an overtly intercultural focus. Although the Glogsters each consisted of as many as 6-10

suggestions concerning language education in Europe, only two of the 38 recommendations provided referred explicitly to (inter)cultural issues: supporting regional languages and teaching culture through authentic materials, while the remaining ideas, i.e. the age of students, the number of teaching hours, the choice and number of foreign languages, the need to develop communication skills through contact with (preferably) native speakers, revealed the meaning of ICC bound by general educational criteria. Three presentations were modular, with categories and subcategories neatly arranged in the form of diagrams, while the fourth one consisted of randomly listed characteristics. Interestingly, the modular presentations were clearly based on the particular learning experiences of the authors, describing the CEFR and its levels, the theories of learning and teaching as well as the details (age, number of hours, methods of teaching) concerning first, second and third foreign language instruction. All in all, if the products of Theme 4 are to be taken as the participants' intercultural constructs of foreign language teaching in Europe, the notion of ICC appears fairly segmented and pre-conceived. The categories provided are readily available in methodology textbooks rather than negotiated by the students themselves. Thus, the solutions proposed seem idealized and hence applicable to any educational setting. This highly autonomous meaning of ICC leads to a lack of generic competences, e.g. the ability to solve problems or work in a group, in the outputs. Finally, and relatedly, the meanings appear rather static and localized as change and/or group learning are not mentioned and a student(s)-teacher division is favoured instead.

The third and last output chosen for the analysis was produced by the participants as one of the requirements for completing Themes 6, 7 and 8: The practice of foreign language teaching (<http://www.dicete.umk.pl/wordpress/wp-content/uploads/2014/07/DICETE-complete-session-plans.pdf>).

The context: Themes 6, 7 and 8 were in fact parts of a larger set of sessions pertaining to observing and evaluating the practice of foreign language teaching in the four countries at three educational levels: primary, middle and high. Lesson observations in Poland took place in the actual classrooms, while the remaining participants were to provide videos of lessons recorded in their home countries. The themes were planned for three consecutive days, when the mornings were spent in Polish schools, located in different parts of the town, and the afternoons in the venue of the summer school. The morning schools visits were paid by international student groups, accompanied by the DICETE teacher(s). Still, attendance was difficult to check since the students introduced some last minute changes among themselves, resulting from personal preferences. Moreover, it was not uncommon for the students to come late for the afternoon sessions due to, in most cases, exhaustion – let us recall that the themes took place in the second week of the summer school, in the building less suitable for the needs of the course. Another important issue were misunderstandings among the DICETE teachers, who interpreted their roles for the sessions in different ways, which resulted in a lack of consistent criteria for lesson observations within the three days. In fact, the students were only provided with a set of general educational factors, including type of interaction, adequacy of the materials or variety of tasks, while a more comprehensive and interculturally focused observation sheet was produced at the end of Theme 8. Consequently, the students' role was to discover and negotiate a lot on their own since they were to observe the lessons and evaluate them with reference to their degree of interculturality, with hardly any guidelines provided. Finally, there was a problem with the Finnish videos since it turned out that the materials for observing lessons at the primary level had not been uploaded on time and hence unavailable for viewing.

The meaning of ICC emerging from the outputs of Themes 6, 7 and 8, i.e. ppt presentations prepared by international groups, is non-modular in that the features of an intercultural lesson are provided in an unplanned way. Simultaneously, the intercultural attributes evidently oscillate between the imposed and the negotiated. For instance, on the one hand, the characteristics provided by the students elaborate the criteria proposed by the DICETE teachers in the preliminary observation sheet in that the participants view group work, involving tasks, communication, structured lessons, involving aims and a summary, or a consistent use of L2 as desirable, while overcrowded, teacher-centered classes based on drilling and/or theoretical explanations are not welcome in intercultural teaching. On the other hand, however, the students list a number of features of an intercultural language classroom negotiated among themselves, e.g. icebreakers, joking, reflection, the use of body language, autonomous learning, evoking the learners' topic-relevant experience and confronting it with stereotypes, or using the European cultural heritage to foster transculturality. Interestingly, the most common negative aspect of an intercultural classroom, as negotiated by the DICETE participants, is a lack of intercultural content in the lessons observed. In other

words, while the students agree that the classes they viewed included cultural elements, mostly focusing on the UK and the USA, no intercultural substance was noticed. Finally, the features of an intercultural language classroom seem to polarize along the autonomous/context-dependent continuum, and the characteristics provided can be classified as either near-universal traits of a “good” foreign language classroom, where communication in L2, student autonomy and discovery learning are promoted, or as more generic, i.e. applicable to any context, competences of an interculturally capable person, e.g. joking, reflecting on experience, or using body language.

## Discussion

The main aim of the empirical part was to verify the validity of a complex systems perspective within the constructionist approach to ICC in educational settings. The objectives of the qualitative study presented above were to check if the four sub-contexts, i.e. institutional, personal, pedagogical and physical, were dynamic and aperiodic and how they influenced the construction of intercultural competence, which, on the basis of the theoretical framework discussed, was tentatively defined as fluctuating between two sets of attractors: settled (modular, localized, static, imposed, and autonomous) and unsettled (blended, distributed, dynamic, negotiable, and the context-sensitive).

With reference to the first research question, the four sub-contexts discussed are clearly aperiodic, adaptable and dynamic categories, and their co-occurrence leads to an overall randomness of the influence of the context upon the system. In other words, the descriptions of institutional, personal, pedagogical and physical conditions of DICETE, provided above, are mere meaning potentials which, when merged and concretized, turn into unpredictable configurations of features. Consequently, the four sub-contexts of ICC, i.e. institutional, personal, pedagogical and physical, were all altered and/or specified during the actual educational experience of the summer school. As a result, the setting of the initial stage of ICC development, i.e. the conditions in which the ICC questionnaire was compiled by the teachers and completed by the students, was guided by rather idealized institutional and personal sub-contexts, conducted in a comfortable and safe physical environment in a pedagogically uniform manner, i.e. individually. The three products of the summer school, however, were each influenced by a different kaleidoscope of factors, whereby the pedagogical sub-context, for instance, could feature field work, group work, or seminars, and hence involve different roles of the students and their instructors and dissimilar inputs. On a more specific note, it seems that an implicitly, as opposed to overtly, (inter)cultural focus and the presence/absence of observation checklists may have had a crucial role within the pedagogical milieu of DICETE.

The personal sub-context also changed in that, for instance, both national and international groups cooperated at different times and new relations were built among the participants. Also, taking into account the impact of novelty, the intercultural experience in Poland is likely to have influenced the participants’ teaching-learning theories declared at the beginning of the IP. Indeed, in the case of the Polish team, three of the DICETE students are now working as English language teachers abroad.

With reference to the second research question, the meaning of intercultural communicative competence emerging from the participants’ products seems prone to alternate interpretations. Consequently, ICC cannot be neatly defined in terms of the input-output dependency and should instead be viewed as an unpredictable though constrained result of the system-context interplay. In other words, the system, i.e. intercultural competence, and its sub-contexts, i.e. institutional, personal, pedagogical and physical influences in the form of both prior and actual experience, are in constant interaction, the results of which have been described above in terms of possible configurations of attractors. The initial construct of ICC, produced by the DICETE teachers, was quite modular and non-negotiable and hence it constituted a rather fixed starting point for further meaning construction. The students’ reaction to the concept of ICC set in the questionnaire can be described as unstable, i.e. fluctuating between modular, localized, static, imposed and autonomous ICC and its dynamic, blended, context-dependent, distributed and negotiable interpretations. Importantly, the first set of constructs is characteristic of intercultural competence in educational settings, while the other defines ICC from a more general, everyday perspective. In fact, this basic polarity, whereby intercultural competence is viewed as either a generic human feature or as a professional trait, can also be detected in the remaining outputs. For instance, while constructing ICC

through the lens of a European institution, the students, on the one hand, described intercultural competence as modular, static, localized and, at the same time, related to specialist knowledge. On the other hand, though, ICC was defined as non-autonomous, and thus applicable to virtually any social situation, as well as negotiable. The outputs related to educational systems and language teaching in Europe presented ICC as less symmetrically divided, with pre-conceived and imposed meanings dominating over more flexible and dynamic constructs. Finally, the ICC meaning emerging from the students' lesson observations again polarized between generic communicative competences, e.g. the use of body language, and skills typical of an educational setting, e.g. clearly structured lessons. Importantly, however, in this case the students were less definite as far as the autonomy/dependence parameter of ICC is concerned since the same features, e.g. the use of body language or the ability to reflect, were classified as both specialist, i.e., typical of the educational setting, and generic characteristics.

This propensity, i.e. lack of a clear distinction between autonomous and dependent elements of ICC, may well result from its blended and dynamic rather than modular and static construct, which points to an overall validity of the two sets of attractors, evoked in the third research question. The imposed/negotiable continuum could also be detected in the data analyzed, whereas the local/distributed range was less noticeable. On the whole, then, it can be stated that the two sets of attractors proposed for the description of the state space of intercultural communicative competence are suitable, while their particular configurations will vary, depending on the context. This variability may, in turn, lead to the emergence of new attractors and consequently, certain tendencies proposed in the current study, e.g. the autonomous/dependent distinction, might, in particular contexts, be better articulated in alternative terms.

As a final remark, let us observe that a complex systems perspective within the constructionist approach to developing intercultural communicative competence, through its focus on dynamicity, change, interdependency, negotiability and unpredictability, means that fostering ICC is a journey whose destination cannot be set in advance but emerges on the way, with every intercultural experience being a goal in itself.

## Conclusions

The purpose of this paper was to make a plea for a complex systems approach within a constructionist perspective in the analysis of ICC by demonstrating the inadequacy of psychological and contextual reductionisms inherent in contemporary models of ICC. Both theoretical and empirical consideration presented above has shown that ICC is a concept which is constructed by individuals in the process of off-line and on-line interaction, where context, defined as both a mental and a social notion, plays an essential role. Consequently, we have demonstrated that individuals enter the process of ICC meaning construction with prior contexts in their minds that create an actual situational context in terms of institutional, pedagogical, personal and physical factors in an educational setting. These two types of context permeate each other in a reciprocal manner rather than in a cause and effect link. In other words, prior context becomes actual situational context and vice versa, which produces unpredictable outcomes in terms of ICC meaning construction. The result of this constant interaction is a hybrid of a mental and a social context, which leads to the creation of a third space. Consequently, ICC is always context-dependent and can be constructed as a meaning which is both stable and dynamic, fixed and emergent, universal and relative.

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## About the Authors

Ariadna Strugielska is an assistant professor in the Department of English at Nicolaus Copernicus University in Toruń. Her research interests include educational discourse, quality in higher education, intercultural communicative competence and teaching English as a foreign language. She has published extensively on intercultural aspects in applied linguistics research.

Katarzyna Piątkowska is an assistant professor in the Department of English at Nicolaus Copernicus University in Toruń. Her research interests include intercultural communicative competence and teaching English as a foreign language. She has published numerous papers on intercultural competence and presented the results of her research at many international conferences.

## Authors' Address

Ariadna Strugielska Department of English, Nicolaus Copernicus University ul. W. Bojarskiego 1 87 – 100 Toruń Poland  
E-mail: [ariadna.strugielska@umk.pl](mailto:ariadna.strugielska@umk.pl)

Katarzyna Piątkowska Department of English, Nicolaus Copernicus University ul. W. Bojarskiego 1 87 – 100 Toruń Poland  
E-mail: [kapia@umk.pl](mailto:kapia@umk.pl)

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[1] Throughout this article both intercultural communicative competence and intercultural competence are used as expansions of ICC.

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