

LANGUAGE EDUCATION, DIGITAL CITIZENSHIP, AND JURI LOTMAN'S SEMIOSPHERE

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Abstract

The present paper explores the use of language teaching for educating students into becoming digitally-literate citizens, as well as conscious, active members of the digital universe. The material discussed derives from the eLang project, a flagship project of the European Centre for Modern Languages. The guidelines, and real-world and reflexive tasks put together by the eLang team of experts, along with the theoretical framework employed are examined with respect to the notion of semiosphere by Juri M. Lotman, and the way this endorses digital transformation in language education. Seen, thus, as partaking in the digital semiosphere, and at the same time in the multiplicity of the semiotic systems ingrained in it, the current

language student and future citizen assumes different roles, interacts with distinct as well as overlapping communities, is asked to make sense of multimodal resources, so as to eventually acquire far more than the skills of a digital user. The eLang material addresses, in this way, the demand for training language students in the multifarious literacies that digital literacy has come to encompass. The language student overrides, thus, classroom topography and the boundaries of conventional language education, and traces those of the globalised digital semiosphere, within which it cannot but soar.

Keywords: Language education, digital citizenship, semiotics, semiosphere, ECML

1. Introduction

Language education has long ago set itself free from the restrictive conception of literacy as merely the ability to read and write. Obligated to rise to the challenge of embracing the World Wide Web, of incorporating Web 2.0 tools and, more recently, of implementing distance learning, and addressing the AI technology breakthroughs, language education is constantly adapting to an ever expanding and transforming digital world. With great power comes great responsibility, and the need to train language learners to become digital citizens seems imperative. The present paper explores the use of language teaching for educating students into becoming digitally-literate citizens, as well as conscious, active members of the digital universe. More specifically, the theoretically informed teaching material created by the eLang team of experts, and the overall framework of their “Digital Citizenship through Language Education” project that was commissioned by the European Centre for Modern Languages, a body of the Council of Europe, are studied here with respect to the notion of the semiosphere by Juri M. Lotman. Such a semiotic approach underscores the theoretical groundwork, and the real-world tasks and reflective tasks proposed by the team as not only effecting digital citizenship through language education, but also attesting to the function of language learning in connection to the semiosphere(s) in the digital world.

In order to address the above, different aspects of Lotman’s theory of the semiosphere will be employed, so as to shed light on the multifarious output of the eLang project. The topography that the Tartu scholar proposed will be discussed, with the organizing function of the boundary, and the collective, dynamic character of the core taking precedence. Of course, the “unified mechanism” that Lotman (2005: 208) described cannot but be

examined here in the context of the digital semiosphere, as this has been outlined by Hartley, Ibrus and Ojamaa, among others (2021: 59).

2. Lotman's semiosphere

In his introduction to Juri Lotman's *The Universe of the Mind*, Umberto Eco (1990) famously traces the evolution of thought of the prevailing figure of the Tartu school of semiotics, with specific reference to the connection between structuralism and the notion of the semiosphere. The latter, according to Eco (1990: xi), combines the synchronic, structuralist approach, on the one hand, inasmuch as it describes a culture system at a specific moment in time, with an interest in the formation of cultures and their comparison along a diachronic axis. In the same book, Lotman (1990: 123–124) himself would underline the analogy between Vladimir Vernadsky's biosphere and the semiosphere, defining the latter as “the semiotic space” outside of which “there can be neither communication nor language”. Placing emphasis not on the Saussurean sign and the indivisibility of its constituent parts, but on semiosis, Lotman describes it as the “smallest functioning mechanism”, and its locus, the semiosphere, is deemed as “the result and the condition for the development of culture” (125).

The aforementioned attributes of Lotman's theory offer an overview of his conception of the semiosphere, with various implications to be considered. Starting with the term, Lotman (2005) explains its affiliation with Vernadsky's own term in his “On the Semiosphere” article, where he highlights the primacy of the semiosphere over any one of its parts. In fact, though fashioned after the biosphere which “defin[es] everything [...] which falls within it”, the semiosphere is not regarded by Lotman as the sum of its parts, but rather as a “greater system” or an organism (Lotman 2005: 208). Whether the result of scientism or misappropriation, as Vladimir Alexandrov (2000) suggests in his critique of Lotman's reliance on biology, the semiosphere theory ventures upon a comprehensive outlook upon culture.

The above is evident in Lotman's well-known aphorism that the semiosphere is the semiotic space per se, “outside of which semiosis itself cannot exist” (2005: 208). Seen as a defining principle of culture, as well as of his theory, semiosis was placed in the limelight early on, with Lotman (1990: 123) acknowledging that this semiosphere approach presupposes that examining communication acts would “throw light on all the chief features of semiosis and that these features can then be extrapolated on to the larger semiotic processes”. For Bogusław Żyłko (2015: 39), this is linked to Lotman's synthesis of structuralism and semiotics, which in the Estonian scholar's master plan would take the form of charting out the topography of the semiosphere.

2.1. The topography of the semiosphere

The semiosphere is termed by Lotman (1990: 150) as “the space of culture”, and its overarching importance for describing the functions of culture is attributed to every culture’s way “to get to grips with life [by means of creating] a spatial model of the universe”. Thus, it is with reference to the semiotics of space that Lotman justifies both the abundance of spatial metaphors that he employs in his theory, as well as the construction of a comprehensive model for the function of culture. In his words, “spatial modelling becomes a language in which non-spatial ideas can be expressed” (Lotman 1990: 150), as space gradually shifts from its non-metaphorical use in “On the Semiosphere”, on the one hand, to “real space [being defined as] an iconic image of the semiosphere” in *The Universe of the Mind* (Lotman 1990: 191; Nöth 2015: 17).

Essentially, the topography of Lotman’s semiosphere adopted a triadic structure, with the study of the notion of boundary prevailing in semiotics over those of the core and the periphery. This prevalence was anticipated by Lotman (2005: 210), who stated that “[t]he border of semiotic space is the most important functional and structural position, giving substance to its semiotic mechanism”. Delineating the realm of semiosis and what lies outside that, the boundary of the semiosphere appears in Lotman in a dual role. Bearing resemblance to the membrane of the living cell (Lotman 1990: 140), the boundary encompasses the given semiosphere and, at the same time, differentiates it from what is not included in it. Capitalizing on the spatial metaphor, this inward perspective that the existence of the boundary provides, has not only a delimiting, but an identifying function as well, with Lotman (2005: 212) propounding that it “serves to accentuate absolutely those features by which a given sphere is outlined” in opposition to what lies outside it.

The implications of Lotman’s “spatial turn” manifest themselves in the second role that the boundary acquires. For what lies in between spaces is also a point of contact and, given the specifics of the spherical shape, the boundary can be seen as a series of points by way of which “the semiosphere is able to establish contact with non-semiotic and extra-semiotic spaces” (Lotman 2005: 210). In essence, this entails that the boundary acquires the status of a filtering “bilingual mechanism”, whereby what lies outside the semiosphere may permeate it, and is “semioticized” or “translated” in the process, and, finally, incorporated (210, 208–209).

The “imperialistic” nature of the semiosphere, as this was described above, is in line with the dynamic processes that reside within it. For Lotman (2005: 213–214), this is the outcome of the semiotic irregularity in the

semiosphere, which gives rise to multiple levels, and a stream of constant movement from the periphery to the core, and vice versa. Novel semiotization, therefore, as the semiosphere comes into contact with what seems chaotic outside, is combined with constant re-appropriation of what lies in the semiosphere, and the creation of new semiotized constituent parts.

This, of course, brings to the fore the model that Lotman uses for describing the connection between the structural heterogeneity of the semiosphere – which is, however, given the status of a single mechanism – and its parts, which are characterized as in a dynamic correlation to each other. Whether Lotman's own calf metaphor is used or Eco's equivalent of the forest, the fact remains that the semiosphere is seen as a unity of dynamic elements, whose interrelations are in constant change (Lotman 2005: 208; Eco 1990: xiii). According to Peeter Torop (2005: 169), the notion of the semiosphere is one that allows semiotics of culture to reach "a holistic analysis of dynamic elements".

All of the above will be discussed with reference to the eLang project promoting digital citizenship through language education, where both strands are seen as partaking in the digital transformation of education in general.

3. The eLang projects

Established in Graz, Austria, in 1994, the European Centre for Modern languages has since then promoted quality language education and relevant reform within what has been described as "an interface between policy, research, teacher education and practice" (Council of Europe *n.d.*). One of its latest projects, the eLang project titled "Digital Literacy for the Teaching and Learning of Languages", was launched in 2016, placing communication at the heart of the digital, and vice versa. As the eLang experts state, "[d]igital literacy results from the intertwining of three main sets of competences within an ethical and critical framework: technology literacy, meaning-making literacy and interaction literacy" (Council of Europe 2019). Anticipating, thus, a semiotic approach but also keeping in mind a classification that would facilitate pedagogy, the eLang team's reference to meaning-making involves information literacy, media literacy, and visual literacy (Ollivier 2018: 10–11).

Sprung, in part, from the ethical and critical framework digital literacy was seen as partaking in, digital citizenship pedagogy became the focal point of the follow-up project by the same team of experts. The "Digital Citizenship through Language Education" project, which was launched in 2020, acknowledged the urgency of training language learners to become

“aware of the impact that technologies and digital practices may have on the environment, culture, society and people” (Ollivier 2018: 13). In fact, language education was regarded as a pathway to digital citizenship, just as active, conscious citizens of the web were considered active language learners/ users (Ollivier 2018: 66). This attested to the socio-interactional approach adopted by both eLang projects, which considered language users and digital citizens alike to be “social agents within multifaceted (online) communities ranging from speech communities to global social groups” (Caws et al. 2021a). The definition of digital citizenship offered by the eLang project would embrace this approach, which delineated the term as:

[t]he competent and positive engagement with digital technologies (creating, working, sharing, socializing, investigating, playing, communicating and learning); participating actively and responsibly (values, skills, attitudes, knowledge) in communities (local, national, global) at all levels (political, economic, social, cultural and intercultural); being involved in a double process of lifelong learning (in formal, informal and non-formal settings) and continuously defending human dignity. (Council of Europe 2019)

The above definition also aligns with the overall objectives of the Council of Europe. Its potential for policy-making and transforming education was confirmed in the “Developing and Promoting Digital Citizenship Education” Recommendation adopted by the Committee of Ministers in 2020, as well as in a number of different publications on the same subject, funded by the Council (Council of Europe 2020a).

3.1. The digital citizen as social agent

The socio-interactional approach employed by the eLang team is central to their conceptualization of a digital user/language learner. In a fundamentally dialogical and essentialist approach, therefore, communication in the digital world is underlined as intersubjective social interaction, and adopted on the grounds that the socio-interactional framework determines communication and plays a significant role in meaning-making (Caws et al. 2021b: v, 99). This perspective has led the eLang team to refer to digital users as social agents, participating in multiple communities, underlining, thus, the diversity of the digital world.

Taking into account, however, that, in the case of digital users, all communication happens within a global, encompassing, and interconnecting space of semiosis, the notion of the semiosphere will prove useful in drawing further insights. In fact, with respect to the construction of meaning,

Hartley, Ibrus, and Ojamaa (2021: 60) would jump in and remind us, at this point, that in the digital world, “many of the meaning-making processes are made happen by billions of computational devices connected to each other in complex ways”. For the three scholars, this is one of the reasons why exploring the notion of the digital semiosphere is mandatory, the other one being that the digital semiosphere showcases the premise that there is currently “only one self-knowing human culture of global extent” (Hartley, Ibrus, and Ojamaa 2021: 59).

Though the semiosphere appears as a unit, the dynamic element which Lotman attributed to it, as being nurtured by diversity and effecting constant reappropriation, is present in the digital semiosphere as well. In this context, and in order to facilitate the training of educators who would be interested in implementing or even producing teaching material for incorporating digital citizenship through language education, the eLang researchers have created a profile for the social agent. Assigned the gender-neutral name “Sam”, the digital citizen is one that acts as a social agent, who functions as a consumer, a creator, a mediator, and, essentially, as a changemaker (Caws et al. 2021a: 7). For the eLang project members, all of the above are functions in which the sense of responsibility and action that digital citizenship requires can be channeled.

The digital citizen, though, seen as a social agent, participates, at the same time, in multiple digital communities, which may or may not have a non-digital counterpart: a social media network, a music band, a think-tank, for example, and so on and so forth. Rather than visualizing that digital citizen as a juggler, or even a magician – to use Lotman’s words –, they can be considered to inhabit different cultural spaces, and act “as a kind of interpreter, settling in the territorial periphery, on the boundary” between these spaces, and within the digital semiosphere (Lotman 2005: 211). Such “interpreting” is regarded by the Estonian scholar as a dynamic, “[repeated process of traversing] internal borders”, which “gives birth to meaning, generating new information” (Lotman 2005: 215). Transcribing the above to the digital semiosphere, the digital citizen is treated in the eLang project as an inhabitant of various cultural spaces, and one that generates meaning as he/she interacts within those, and traverses or renegotiates their own boundaries.

3.2. The real-world tasks

The conceptualization of the digital citizen/language user as a social agent participating in multiple communities and cultural spaces is theoretically enticing and, at the same time, paves the way for the teaching com-

ponent of the eLang project. The real-world tasks employed by the team derive from the Task-Based Language Teaching (TBLT) method, as one that, according to Rod Ellis, has sprung from the communicative approach and focuses on meaning and its connection to language structure, rather than structure alone (cited in Caws et al. 2021b: 104). Having embraced the social interactions of the digital citizen/language user, the eLang group of experts foregrounds the significance of real-world tasks for their “digital citizenship through language education” project, just like the Council of Europe officials propose that digital citizenship education should:

use real-life situations and the diversity of opportunities as a basis for learning and teaching approaches through activities such as participation in governance, problem-solving and intercultural dialogue, promoting democratic citizenship principles while enabling learners to exercise their values, attitudes, skills and knowledge and critical understanding in meaningful situations with tangible outcomes. (Council of Europe 2020a: 15)

The real-world tasks that the eLang project fosters would, of course, include a wide range of activities, from online discussions about the personal data protection form (GDPR) to creating a vlog, or from producing and uploading content for a social media platform to recording an audio description of a video for the blind. To fulfill their pedagogical potential, though, one would assume that the real-world tasks would have to be compromised to fit classroom objectives and, consequently, acquire the features of a teaching activity, that is, be implemented “in stages with a priority on meaning making” (Caws et al. 2021b: 111).

From the point of view of digital citizenship education, the pedagogical significance of real-world tasks is self-explanatory, despite the fact that, depending on the circumstances, the question of equal access to digital technology may be raised. On the other hand, given the very nature of similar tasks, these are treated as belonging to a different cultural space – hence the need to be modified – that pedagogy can only simulate in the language classroom. This touches upon the problematics of authenticity in the classroom, and it would have been altogether beyond the scope of this paper, if the eLang scholars did not address it from a socio-interactional vantage point.

More specifically, in their proclamation of the significance of real-world tasks for digital citizenship education through language learning, the eLang team argues that, apart from traversing meaningful stages, students are not asked to act in an imaginary – as is usually the case – context so as to perform such tasks. Instead, the tasks assume a different, outward perspective,

and are embedded in a real social context that is meaningful in relation to the social context in which they are performed (Caws et al. 2021b: 117). Thus, as parts of the digital semiosphere, the meaningful communication acts bearing socio-interaction authenticity which were previously excluded from the classroom, are now incorporated in it, or, better, it is the “specific semiotic continuum” of the classroom that is incorporated and appropriated within the real world, in the unifying mode that Lotman (2005: 206) has described. Ali Pakdel’s dynamic conception of learning activities would be employed here to affirm that real-world interactive tasks are not based on imaginary contextualization, but rather that it is the classroom that is contextualized within the all-encompassing social entity (cited in Caws et al. 2021b: 118).

3.3. The reflexive tasks

The notion of the boundary of the semiosphere, as this was described by Lotman, is one that constructs an “allegedly unitary ‘barbarian’ world”, a semiotic individuality and an otherness, its definition being essentially “relational”, as Sedda puts it (Lotman 2005: 212, 209; Sedda 2015: 683). For just as “the boundary unites two spheres of semiosis, [...] it divides them”, allowing for “self-knowledge” or “self-description on a metalevel to emerge” (Lotman 2005: 211). This introspective approach is what the eLang reflexive tasks capitalize on, with respect to digital citizenship through language education.

An important counterpart of the overall project, reflexive tasks are designed so as to provide language learners with a critical outlook upon the meaning-making workings of the digital semiosphere (Caws et al. 2021c). They, naturally, involve reflection upon the digital behavior of the language learner, with tasks that allow students to assess the use that learners make of websites and digital tools, from surveying the number of hours teenagers spend on online games to the popularity of camera filters in social media profile posts. The reflexive tasks that the eLang scholars propose, though, employ and promote CALP skills, that is Cognitive Academic Language Proficiency, in order to draw attention to the responsibility that digital citizenship comes with. Thus, language learners explore the digital semiosphere and its workings, critically assessing the language used in comments or reviews, the ways fake news are constructed and spread, or the framework within which personal data is handled and construed. Such reflexive tasks, in turn, allow for instruction as to the dangers and limitations of the digital world (Caws et al. 2021c), as well as incite active digital citizenship, fulfilling thus the objective of the eLang project.

Conclusion

Juri Lotman was clear about it: in his theory about the semiosphere, the concept of space may be abstract but it was not used as a metaphor. Instead, he envisioned “a specific sphere, possessing signs, which are assigned to the enclosed space. Only within such a space is it possible for communicative processes and the creation of new information to be realised” (Lotman 2005: 207). The reality of the language classroom upholds his words with respect to the generic notion of space, since it embodies space, hosts and shelters communicative processes taking place during teaching/learning/interaction. Although certainly not confined to the concrete reality of a four-wall room, the semiosphere realises its dynamic character in the language classroom, with new information bearing novel semiosis.

In the traditional classroom, communication is confined by way of its spatial dimension. The real world and reflexive tasks, though, which the eLang team of scholars has put together extend communication both on the spatial and the temporal axes. As the language student enters unknown cultural semiospheres and/or actively partakes in the digital semiosphere, the potential communication processes proliferate, with more novel information entering the scene. The interaction, therefore, between the infinite digital world and the spatially confined semiosis of a language classroom results in a truly open class.

By way of an epilogue, in the celebratory brochure featuring the 25th Anniversary Declaration of the European Centre for Modern Languages, the title reads: “Quality language education for the democratic, socially cohesive and peaceful Europe” (Council of Europe 2020b). The authors then proceed to list nine cornerstones of their holistic vision upon education, one of which involves language educators exploring new media “by developing digital literacy through task-based, collaborative, experiential pedagogy” (Council of Europe 2020b: 2). The present study has attempted to showcase the pertaining deliverables of the “Digital citizenship through language education” eLang programme as embracing connectedness and social inclusion, as well as targeting critical thinking and the sense of responsibility that active digital citizenship and an imperative to transform education mandate.

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