ABSTRACT: The aim of this article is to identify and describe the interactional flow dynamics between participants of a course developed using web technology mediation by a consortium of graduate programs in different Brazilian states in the first half of 2015. Based on the analysis of multimedia records on the development of the course, three interaction spaces, or locales, are identified and described between the participants of the course (Skype, live-and-in-person learning classes and Wikispaces), understood as heterogeneous spaces, but interwoven through technological mediation. Based on the affordances and constraints of the technologies used, as well as multi-scale topography observed in these spaces, the interactional flow at and through each level is not linear, as it is governed by legitimacy and authority parameters that not only refer to the conventional school participation modes, but also point to more complex ones.

RESUMO: Este artigo tem por objetivo identificar e descrever a dinâmica do fluxo interacional entre participantes de um curso desenvolvido através da mediação de tecnologias web por um consórcio de programas de pós-graduação de diferentes Estados brasileiros no primeiro semestre de 2015. Por meio da análise de registros multimídia do desenvolvimento do curso, são identificados e descritos três espaços, ou locales, de interação entre os participantes do curso (Skype, Sala de aula presencial e Wikispaces), compreendidos como espaços heterogêneos, mas imbricados através da mediação tecnológica. E em função das affordances e dos constraints das tecnologias utilizadas, bem como da topografia multiescalar verificada nesses espaços, o fluxo interacional em cada nível e através deles não é linear, sendo regulada por parâmetros de legitimidade e autoridade que tanto remetem aos modos de participação escolar convencional, quanto apontam para outros mais complexos.

1 THE EVENT

The event in question consists of interactions that occurred during the first half of 2015, as part of a multimedia course offered on a trial basis by a consortium of different graduate programs in the country. The meetings took place in 6 different institutions (UNICAMP, UECE, UFG, UFOP, UFRGS and UFRJ) and discussions were videotaped and streaming from the Graduate Program pole in Applied Linguistics (AL) at IEL/UNICAMP.

The main objective of the program developed in this discipline was to prepare by means of the analysis and discussion of publications the holding of a High Studies School in Language and Society, scheduled for the following semester. The agenda proposed the "study of theoretical and methodological contributions from contemporary authors, considered relevant for the development of reflection in AL".

To develop the program, the classes were previously distributed among the participating programs of the consortium. Once the contact among them was established via Skype, the contributions of publications under discussion were presented and new reflections were brought forth and contributions or theoretical and methodological innovations of eventual interest for research in Applied Linguistics were questioned. At a second moment during the class, a time for discussion by the different participating groups was set up, each in its own classroom, with a view towards a new general discussion for the conclusion of the work from that class. The aim of the local discussions was to create opportunities for the participating teachers and students to set up questions, present queries and/or more general interest contributions. The interaction
between participants, both students and teachers, occurred, therefore live-and-in-person in each group or between groups using Skype\(^7\) during the two class moments, and/or at a distance using the Wikispaces platform\(^8\).

By analyzing multimedia records of the course development, it can be seen that the interaction between participants (both teachers and students) develops in three different spaces and which can be represented by a hierarchical topography, as described in the next section. It can also be seen that the interaction flows occur horizontally and vertically, in other words, in each of these spaces and through them, in a complex way, that is, nonlinear and based on regulated scalar nature topography by both opportunities and constraints of the technologies used, as well as by authority and legitimacy filters of the interactional participation structure itself in each live-and-in-person classroom pole, as described in the following section.

### 2 MACRO-DYNAMIC INTERACTIONS

The streaming space was set up for presentations and multimedia communications that is why it was equipped with projectors, a computer with internet access, cameras and microphones, enabling class streaming in real time. Thus, in terms of the Unicamp classroom, which before was used as a regular classroom, it became concomitantly a broadcasting studio with an audience. It also had a disembodied audience, which was not necessarily distributed at simultaneous, but at interrelated space-times. This configuration of the space implied in the imbrication of two chronotopic references that have shaped the interactional flow; and contextualization and meaning production processes (BLOMMAERT 2015; BLOMMAERT, WESTINEN and LEPPÄNEN 2014) in that specific context: the reference class space/time and that of the space/time of the broadcast studio.

Thus, apart from a hierarchical distribution of teacher and student/entertainer and audience roles, as the space configuration pointed to a main speaker (in this case, the teacher responsible for the class) who always put himself/herself forward and made himself/herself visible to others, there was also a large screen that showed the image of the other main speakers from each pole (in this case, professors from other programs and their presentations). The fact that the camera is in a set place required that each one, be they teacher or student that took the floor to speak, move so as to be in the same place to be seen/heard by everyone in the network.

The students' participation modes not only reproduced the conventional classroom (greater interaction between students than between students and teacher), but also the studio (silence; concern with his/her own voice/image on the screen). Three constitutive dimensions of space described by Blommaert, Collins and Slembrouck (2005, p.203) can be seen here: space 1. "provides legitimacy to some forms of behavior while disqualifying or constraining other forms"; 2. "attaches different values and functions to individuals' linguistic repertoires"; and 3. "shapes how an individual positions him/herself, and how he/she is positioned/ascripted by others."

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\(^7\) Skype is a video, audio, and text-based communication tool that provides a platform where multiple users can engage in synchronous dialogue (http://edutechwiki.unige.ch/en/Skype).

\(^8\) A wiki is a Web site that allows users to add and update content on the site using their own Web browser. This is made possible by Wiki software that runs on the Web server. (http://techterms.com/definition/wiki).
SCALAR ORDER FOR SPACE PARTICIPATION

Figure 1 – Movements, filters and participation scales at the event

As mentioned in the previous section, the event in question unfolded into three interactional spaces that are configured as three ordered participation scales according to two axes, as described in the chart (Figure 1) above. On the vertical axis, the interactional flows that cross more than one space or participation scale (inter-scale) can be verified. On the horizontal axis, the interactional flows in a same space or participation scale (intra-scalar) can be verified. As pointed out by Goodwin and Goodwin (2004, p.239-240): “The notion of Participation provides one framework for investigating how multiple parties build action together while both attend to, and help to construct relevant action and context.”

Authority/legitimacy filters regulated the movements in both axes, as shown by the arrows in the chart above. Thus, a participant positioned in a classroom could take the floor in an upper scale, about the discussion via Skype (inter-scalar movement), when driven by an authority filter. This occurred when a teacher in the Skype scale took on the role of interaction mediator (intra-scalar movement), defining when and who could speak.

The operation dynamics of each of the participation scales is better described in the following sections.
INTERACTION MEDIATED BY SKYPE

Even with the limitations caused by the network oscillations, which required participants to keep the microphones off while listening and seeing who had been appointed to speak, *Skype* led to the setting up of an intersection space (a nested space) among the other interactional spaces that made up the event in question, in that it enabled the synchronization of all participation scales in a single pedagogical space-time, in/by the connection between classrooms, *Wikispaces* platform and remote participants positioned outside the poles. Moreover, it operated on a larger scale, or broader range, when greater productivity in interactional terms was verified, due to the participation and control of teachers, subject to institutionally legitimized authority to speak to all participants, both live-and-in-person, as well as at a distance.

As a result of this dynamics, the interactional flow involving teachers placed in the Skype scale acquired greater volume and visibility, compared to that seen between teachers and students. However, the low student representation in the Skype scale is not only explained by the control turn dynamics of the groups due to the pre-defined institutional roles. The choice of *Skype* as an interaction tool in itself is also factor to be considered, because the *software* features used create both participation possibilities as well as impossibilities, making the identification of interactive patterns more complex.

Similar to many other VoIP services, the *Skype* service is aimed at the general public and it is not intended for broadcast videoconferences in institutionalized spaces, where quality and stability of streaming are essential. Apart from this, it does not simulate a conference but a chat environment, and does not incorporate the possibility of electing a mediator in that environment in its design. Moreover, affordances such as call, video, chat and file sharing were only available for professors, restricting the participation of students in that space.

It is believed that interaction via Skype was reserved for the professors of the consortium discipline and for invited professors from other Higher Education Institutions as a matter of logistics (it is not very hard to imagine the difficulty of having about 150 students interacting at the same time). In fact, Skype was set up by and for professors as a teaching resource and as a fully interactive tool, while for participants positioned at lower scales, the tool was perceived more as a means of synchronized streaming of sounds and images, which brings us back to what was said earlier about the two chronotopic references that have shaped the interactional flow, and contextualization and meaning production processes in classrooms/broadcast studios. As shown by the studies on the agentive character of technical objects (*LATOUR*, 2005), the presence of technological devices that form such processes made the different forms of ownership of the same object emerge, which both facilitated and extended, as well as limited and regulated the interactants’ participation modes.

CLASSROOM INTERACTION

According to the dynamics represented in the above chart (Figure 1), the local interactional spaces of the classrooms for each participating program were in the intermediate scale. As already mentioned the IEL/UNICAMP classroom had atypical
functioning in relation to the others and were managed by three teachers (B, C and D). Students did not know each other, which was a relevant factor, considering that since the beginning of the course they were under the supervision of a video streaming apparatus for an also unknown audience. In addition, as the sound and image systems of the IEL classroom were not turned off during the local discussions, as per the request of the participants positioned outside the poles, the students of this room were therefore under constant surveillance. Thus, the other classrooms, which turned off the sound and/or image systems for local discussions, had some privacy and not everything they said or did was shared with the other participants, as was the case of IEL.

It is important to mention that even if there were not stereo audio and video recording, the interaction would likely be limited due to the atypical presence and mediation of three teachers, who represented different authority figures. Moreover, as already pointed out in previous sessions, the physical and semiotic composition and organization of the space were typical of the participation structure and interactional flow in that pole.

INTERACTION MEDIATED BY THE WIKISPAces PLATFORM

The *Wiki* virtual classroom was set up as an alternative to the (in)visibility of the presence of students with remote access. In addition to classes streaming in real time, the platform provided publications, comment forums and access to the class videos (edited). Interactions mediated by the platform point to a less hierarchical topography than that seen in interactional spaces described previously, since in the discussion forum there was no class group distributor or class group regulatory figure. And as participants could watch online classes’ live streaming without identifying themselves, student presence placed on this scale was only noticed when they posted on the Wiki forum.

In fact, classroom virtualization showed a nomadic, heterogeneous, scattered and discontinuous audience, given the existence of students placed in different spaces who were also participating at different times, which ended up being a complex undertaking for the transmitter pole in order to deal with these particularities. Virtual participation is understood as a non-territorial mode (a non-assignable space), given the fluidity of borders and non-coincidence between the public space and event time, of access and interaction. The substitution of physical presence by an electronic communication medium coupled to tools and remote participation resources promotes therefore the redefinition of the here/now on another scale of participation.

These observations led to the understanding that on the scale of interactions mediated by Wiki, there was no common chronotopic relation to the live-and-in-person classroom, in that the educational space created in/by wiki is configured as a fluid, unstable and mutant space (students’ houses, hotels, schools, universities, etc.) in concurrent time (live participation) and/or at non-assignable times (later viewing of videos). In this way, the interactional flow observed in this space of participation is shaped by mobility, hybridity and dynamism of access contexts and recontextualising processes of the linguistic and semiotic resources.
3 SCALAR MOVEMENTS: THE DEBATE ON THE USE OF THE TERM 

To better understand the dynamics of the interaction flow between and in the participation ranges described above, the dialogue, mediated by Skype, between teacher B (located in an IEL room) and teacher A (located in a non-institutional space in the south of the country) is transcribed below. This dialogue is important because it triggered a debate on the designation of alemoa used by teacher A in his presentation on 24th April. The debate began in the IEL classroom during the time set up for local discussions, and ended up involving the other classrooms, which were connected.

In his presentation, Professor A, who had no students in the classroom, showed comic performances that were broadcasted in southern Brazil involving immigrant stereotypes. To do so, he showed a video in which an actor, taking on the role of a female descendent of German immigrants, creates a caricature of the character and, indirectly, of the community in question (GARCEZ; this volume). The caricaturing of ethnic groups had been analyzed in an article discussed in that class (JAFFE, 2000).

At one point, teacher B, from the IEL classroom, asked if anyone felt uncomfortable with the stereotypes and the "exotic tone" created from this type of humor and at the end of the discussion called everyone's attention to comments on Wiki forum on the use of the term alemoa, as shown in figure 2 below. In these comments, a participant (y) questioned the use of the term by teacher A, referring to the suffering caused by the tendency towards making ethnic terms exotic; he drew attention to the use of the term alemoa as an indexical of "inferiority", making it "insulting"; and defended the idea that the type of humor shown in the video belittled and caused suffering to the eyes of the immigrant descendants.

| Humour that belittles, I amuse myself in my pain, you amuse yourself in my pain |
| April, 24th, 2015 |
| These videos already work on German immigrant descendant stereotypes. That is the reason for the laughs, which is framed by the other, but for the immigrants it is always a laugh that hurts, because it always places them in an inferior place. I don't know if teacher A knows but “alemoa” is very insulting, because it is the way that the other belittles the German descendants. |

| About immigrant language communities |
| April 24th, 2015. |
| The laughter does cause pain, because these videos show that this German and this Italian have restricted circulation and the other sees the speakers of these languages as exotic subjects, that is why their speech can only cause humour. It would not appear on a news reel (the anchor speaking in this German or this Italian). When it is not seen as exotic it is because its circulation is very restricted. |
Comment

**Figure 2 - Participant (y): the debate on the term *alemoa***

What is observed in this discussion is an intra and inter-scalar movement, in which participants were positioning themselves both in the horizontal axis - discussion in the classroom and virtual rooms - and in the vertical axis - discussion of a comment posted in the Wiki forum by all participants in all the classrooms. Because of the authority filter on each scale, the access to the comment made in the forum was only opened in the dialogue mediated by Skype with all participants after teacher B’s question, who regulated the online turn distribution of that class in the IEL classroom. This is shown in the snippet below, cut out from the video recordings that make up our corpus:

Teacher B "- Guys, I'm going to share here a post from User (y) with everyone. He is here live on the broadcast page and has made two comments. I think that based on these comments we might have another perspective, right, going in the same direction of what teacher C has mentioned [post reading]. Okay, Professor A, would you like to comment?"

Teacher A: "- [...] Yeah, that is, there could be a general understanding that these people do not appear in the media, and I think what Jaffe [author read in that class] is saying is that it is like this there, and it starts to appear and not only the accent, the mix, but the identity appears and this can be legitimation. [...] Well, when user (y) speaks of *alemoa*, I think this is variable, I know many *alemoas* that self-refer to themselves as *alemoa* and in fact it is the female term that distinguishes a German female from *alemoa* and the Brazilian German from the German from Germany. In fact,
often, people need to say, it is a German from Germany. By using the term *alemoa* this is not necessary. And there are many times when this is neither derogatory nor insulting. Of course anything can be turned into an insult, all these terms and... I think that part of the pain and of the feeling [...] I agree with Jaffe that it is legitimacy to bring this, the conflict itself, the very tension that is there, that did not show up before... and sometimes it is restricted to a local media plan, but also there is a lot of struggle for it to be there... [...] So I think that this is what she is reporting from Corsica and our cases here, yes, they reflect a diversity of the public and it may appear to different people as derogatory, as exotic, and this is one of my concerns, to show you this kind of thing, and... but also as being positive, and this is also what Jaffe is pointing out, it is... the comic performances... [...] the media exposure of the tension is a painful form of legitimacy."

In the excerpt above, the conflict has occurred in terms of the use of the term *alemoa*, seen as derogatory by participant (y) and as positive by teacher A. The question to ask here is why the term *alemoa* seemed derogatory to (y), but not to teacher A. But as linguistic signs do not have a fixed discursive framework, due to the fact that they vary based on the speaker's experiences (BLOMMAERT and HUANG 2010), the term *alemoa* has invoked meanings and diverging representations among subjects with very different immigration and Germans descendant community experiences in Brazil. For participant (y), who is closer to this community, the term indicates a history of discrimination, rather than positive identity, as it does for teacher A, who corroborated the view held in the article of the author mentioned.

Thus, the dynamic scale and the intersection between them, over the network mediated by Skype, enabled the mobility of participants’ voices and stances between the scales. In this case, the positioning of (y), located in the range of interactions mediated by the Wiki subject, moved up scale when they become a debate focus in the IEL classroom followed by the interactions mediated by Skype, the highest scale of interactional dynamics of the event as a whole.

Jaffe (2000) argues that stancing is also made up of an institutional order, which can define interactional structures in which the subject is an agent and a model of specific practices. Stances are associated with subjectivities crossed by identities, images and power relations. When asked about the use of the term *alemoa* in the above snippet, teacher A, as one of the people in charge of the subject, based himself on another authoritative discourse, the one from the author he referred to, so as to analyse (y)’s position in a relative way. In doing so, the asymmetry between Skype and Wiki participation spaces are indexed. This can be observed when he says: "[...] it may appear to different people as derogatory, as exotic, and this is one of my concerns, to show you this kind of thing, and ... but also as being positive [...]", or when he avails himself of his social experience to prove participant (y) wrong: "I know many *alemoas* that self-refer to themselves as *alemoa*".

Another aspect shown in this fragment is (y)’s participation mode, as he relies on his personal experiences to justify his position: "[...] for immigrants it is a laugh that hurts [...]"; "The laughter does indeed cause pain, yes [...]". Teacher B, who, in the IEL classroom, introduced the comments in the discussion, gave legitimacy to his position, making it change scale on the vertical axis of the participation spaces in the event. Another important factor to be considered is that the scattered and diffused audience from interactions mediated by the platform can be aligned with either of the two positions, or with none of them, without having apparently any echo on the scales.
focused on here.

4 FINAL CONSIDERATIONS

The discussion of the interactional flow and mobility of voices and stances of the participants in multimedia contexts is very relevant when one considers that, more and more, information technologies are used in knowledge production practices, not just academic ones. The sample studied in the previous sections, taken from a translocal academic event, can be verified in larger scales, such as when the access to global networks can greatly expand the scope and consequences of these practices\textsuperscript{10}.

On the other hand, the classes demanded much more from the students than traditional classes in which a main authority (the teacher) is in the center of interaction, giving room at the same time to various authority figures and with different alignments, not only among themselves but also in relation to the theoretical concepts under discussion. Thus, both the management of attention to the classes and of the contents demanded more of the students as well as the presence of the network and an unknown audience.

The examination of the working dynamics of the different participation scales and different interactive patterns, verified in the event as a whole and in the debate on the meaning of the term *alemoa* in particular, reveals the importance of local and translocal scalar topographies that constitute the interactions mediated by digital technologies particularly in institutional settings with its proper rules and regulations.

The question of the authority and legitimacy filters, which as shown, affect the interactional flows, both horizontally (intra-scalar) and vertically (inter-scalar) would need, however, to be further investigated in non-academic contexts. Recognition of the importance of shifts in these axes is important to reflect on how the (im)mobility of voices and positioning in learning contexts extended by digital technologies\textsuperscript{11}.

REFERENCES


\textsuperscript{10} As in the case of the event carried out in the second half of 2015, piloted by IEL and UFRJ Post graduation Programs and which had the participation of different researches and study groups, not only held in Brazil: School of Higher Studies in Language and Society; Mobility, Multilinguism and Globalization (Available at: http://www2.iel.unicamp.br/altosestudosla/. Access on 05.02.2016).

\textsuperscript{11} The anonymously cited participants gave authorization for publication.


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