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Studying pedagogical interactions in synthetic worlds

Key words: on-line interactions – synthetic worlds – research methodology – language learning

The aim of this communication is to present some subjects of reflection on the methodology used to put in place a research protocol to study language learners' interactions within synthetic worlds.

Bell (2008: 3) defines a virtual or synthetic world as "a synchronous, persistent network of people, represented as avatars, facilitated by networked computers ». The main interest for language learning is that synthetic worlds provide similar social interactions as in the real world. This is of a particular interest for distance learning.

On-line interactions as part of language learning have already been well explored in research (De Wever et al., 2006 ;Mangenot, 2007 ; Jeanneau&Ollivier, 2009, etc.). Synthetic worlds, as Second Life, are more and more used in education fields such as design, marketing, economy... The important presence of universities as well as the numerous training courses taking place "inworld" are proofs of this interest. However, if studies on practice in education do exist (Molka-Danielson &Deutschmann, 2009 ;Wankel& Kingsley, 2009, etc.), research is still emerging and a need is felt (Peachey et al, 2010). This is particularly true for the field of language learning which is only just beginning to be explored in a research perspective.

Our communication will seek to explore different aspects of research in language learning within synthetic worlds. It will be based on a European project, ARCHI21¹, in which CLIL (Content and Language Integrated Learning) formations mix architecture and language learning. In the context studied, multicultural groups of learners work on collaborative building tasks in Second Life.

We will particularly develop the following points:

- Data collection and analysis
- Researcher's positioning
- Ethical aspects

Concerning data collection, problems can emerge as we deal with multimodal interactions. Indeed, a user can communicate simultaneously with several tools (chat, gestures, voice...). Chat logs can be automatically saved but, because of the 3D environment, it is difficult to record and exploit data concerning visual interaction, either between avatars or with objects (Moschini, 2010).

If recording represents a delicate aspect, the presence and point of view of the researcher "inworld" are also parameters that need to be taken into account. Recording is often made from the point of view of the researcher's avatar. This avatar is visually present and needs to be close to what is being observed / recorded but at the same time, this presence should not disturb the interactions. Second Life enables the separation between the avatar's body and the look with the camera tool. This is something that needs to be explored as it may renew the position of the researcher in the research.

Ethical aspects have to be dealt in a slightly different way given the issue of avatars' identity (Banakou, 2010, Macintyre, 2008, etc.). Do we study avatars' or people's interactions? What about anonymity?

¹Architectural And Design Based Education And Practice Through Content And Language Integrated Learning Using Immersive Virtual Environments For 21st Century Skills (Archi 21, 2010-2012), programme Lifelong Learning Programme, KA2 Languages.

The methodological framework we are putting forward leans upon existing research on interactions in language learning while integrating the synthetic worlds' specificities and issues.

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