

The affordances of virtual worlds for language learning

An activity theoretical study

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Susanna Nocchi. The affordances of virtual worlds for language learning - Abstract

The attraction towards immersive virtuality is rooted in human history and is deeply connected to our imaginative world. Recent technology has added a further dimension to this human trait, giving us access to immersive three-dimensional computer-based environments, Virtual Worlds that have opened a new space, rich in potential for interaction and socialisation. In the past decade Virtual Worlds (VWs) have become more commonly used for socialising, gaming, commercial ventures and for educational purposes. Language educators and researchers have also begun exploring and studying these environments and their unique set of features for foreign language (FL) learning.

This study aims to provide a contribution to the field of research on the potential of VWs for *education*, with a particular interest on the affordances that these environments can offer for FL teaching and learning. The study is the result of an analysis of the transcripts of the in-world video recordings of SLitaliano, an Italian language and culture course designed and held by the researcher/teacher in the VW of Second Life®. The course was attended by the researcher's students of Italian as a FL, who took part in nine in-world sessions and performed a number of language tasks.

Drawing on an activity theory framework and on the construct of affordance, each language task was chosen as a unit of analysis and instances of disruption to the task were identified. An in-depth analysis of the cause of the disruptions in each episode and of the actions taken by the participants to resolve the disruption, provide an insight into the participants' role, their use of the medium at their disposal and its technical and social affordances. Finally, the research highlights the emergence of social and technical affordances of the medium as affordances that may support FL learning.

List of acronyms, abbreviations and virtual world terminology

Acronyms and abbreviations

3D: Three dimensional

CALL: Computer Assisted Language Learning

CAMELOT: CreAting Machinima Empowers Live Online language Teaching and learning project

CEFR: Common European Framework of Reference for language competence

CHAT: Cultural Historical Activity Theory

CLCS: Computer Supported Collaborative Learning

CMC: Computer Mediated Communication

DCU: Dublin City University

DIT: Dublin Institute of Technology

ECTS: European Credit Transfer System

FL: foreign language

HCI: Human Computer Interaction

IBL: International Business and Languages degree in DIT

ICT: Information and Communication Technology

IM: Instant Messaging

MMORPG: Massively Multiplayer Online Role-Playing Game

MOOs: MUD Object Oriented

MUDs Multi User Domains

MUVE: Multi User Virtual Environment

NIFLAR: Networked Interaction in Foreign Language Acquisition and Research project

NMC: New Media Consortium

Open Sim: Open Simulator, open source server hosting virtual worlds

PBL: Project-Based Language Learning

SL®: Second Life®

SLA: Second Language Acquisition

SVW: Social Virtual World

TILA: Telecollaboration for Intercultural Language Acquisition project

VOIP: Voice-Over Internet Protocol

VE: Virtual Environment

VLE: Virtual Learning Environment

VW: virtual world

Wiki: a website that allows users to add, delete, or revise content by using a web browser

Virtual world terminology

Avatar: representation of a Resident or bot in the virtual world

Bot: bot is a short for robot. It is a programme that acts like a virtual world user. Bots often have a human form and provide useful service to other users

Build (to): to create an object in the virtual environment

Crash (to): to be logged off the virtual world due to technical problems

Crosshairs: a type of ray-casting feature of the virtual world, which gives the possibility to point to objects, by displaying a ray going from the avatar's hand to that particular object

Hover tips: a feature of the virtual world software, which allows users to access information about an object when hovering their mouse cursor over that object

In-world: within the virtual world

Inventory: the collection of all the items that a resident owns or has access to in the virtual world

Landmark: an address, which provides a shortcut to a place in the virtual world. Landmarks can be saved in the Inventory

LC (Local Chat): the text chat tool in the virtual world

Linden dollars (L\$): currency used in the virtual world of Second Life®

Machinima: the process of making animated films by utilising 3D graphics technology and films made in this way

Morph (to): to alter the sound of the avatar's speaking voice when using voice chat

Notecard: a document that the resident can write and save in-world, in his/her Inventory. The document can be passed on to other residents.

Object: a collection of one or more linked prims

Prim: abbreviation of *primitive*, a 3D shape like a cube, sphere, or cone. All SL® objects are made of prims

Profile: information about the avatar that is shared with other residents and is provided in the avatar's Profile Tab. The profile can include images and descriptive texts

Real-life: a term used by virtual world residents to indicate their non-in-world life

Resident: a virtual world user

Rez (to): to make an object appear in the virtual environment

Script (to): to write/put together a set of instructions that define or control the behaviour of an object or an avatar in the virtual world

Sim: a term used to denote a region in the virtual world

Teleport (to): to instantly change your location in the virtual world

VC (Voice Chat): the spoken chat in the virtual world

Viewer: computer programme that allows users to access the virtual world

Chapter 1 Introduction

“Thinking in 3D is transformational for learning” (Hinrichs, 2011)

Il computer non è una macchina intelligente che aiuta le persone stupide, anzi è una macchina stupida che funziona solo nelle mani delle persone intelligenti (U. Eco)

1.1 Prologue

When Su Nacht¹ first stepped into the virtual world (VW) of Second Life® (SL®) in the summer of 2008, she was soon hooked. That summer she spent many nights exploring different worlds, trying out all sorts of shapes and outfits and talking to everyone she would meet. The virtual world had caught her interest and given wings to her imagination and she cherished the opportunity it gave her to meet so many people from all around the world. But her enthusiasm was not only fired by this; being a passionate language learner, this exciting environment appeared to her as a great way to brush up those languages she had not had a chance to use in a long time. She visited German and Scandinavian sims and even tried her chance with Spanish (a language she never studied properly). The voice option was not very popular at the time and she wrote away in different languages to many avatars. Those first months in SL® were like an adventure; Su had the world at her fingertips and could teleport anywhere she wanted to and communicate in any language she wished. She realised the great potential that these 3D online environments could provide for Foreign Language (FL) communication and, indeed, FL learning. On my return from my summer holidays, I contacted Dublin City University (DCU) and proposed to be accepted as a PhD student with a study of language learning in virtual worlds that would explore ways to exploit their potential for FL teaching. That was the beginning of this research study.

¹ Su Nacht is the name of my avatar in Second Life®

1.2 Scope of the study

Social virtual worlds have developed and changed a great deal from those early days; the introduction of online 3D virtual worlds for gaming in the late '70s² had already sparked the interest of educators and VWs soon started to be used as a teaching venue for many subjects, foreign languages being one of them (Sadler, 2012). It soon became clear, though, that replicating the traditional classroom in a VW “fails to both inspire students and take advantage of the rich environment that virtual worlds have to offer” (Sparrow, Blevins & Brenner, 2011, p. 51). Now, after about a decade of VW use, the first euphoria and commercial hype in virtual worlds has calmed down; after going through what the Gartner Hype Cycle for Emerging Technologies³ describes as the *Trough of Disillusionment*, VWs are now climbing up the *Slope of Enlightenment* (Gartner Hype Cycle, August 2015), a phase during which “more instances of how the technology can benefit the enterprise start to crystallize and become more widely understood” (www.gartner.com). Similarly, the academic community has now scaled down their initial enthusiasm and has adopted a more critical perspective, advocating for:

sound pedagogical decisions and careful consideration about the reasons for using virtual worlds [...] to ensure that the technology can be transformative in its application rather than merely being used as a replacement way of doing something tutors typically do (Wimpenny et al, 2012, p. 539).

Second Life® is a social virtual world that was launched in 2003 and soon gathered a great deal of interest in the public, the media and, eventually, the community of educators. The following is a snapshot of a moment in Second Life® and is explained as follows: Snapshot 1-1 shows the eight avatars of eight participants, standing on an island and looking at some pictures. The faintly discernible green waves over the head of one of

² The Massively Multi-Player Online Role-Playing Game (MMORPG) Habitat by Lucas Film Games was launched in 1978

³ The Gartner's Hype Cycle Special Report illustrates the market excitement, maturity and benefit of technologies

the participants standing back left show that that avatar was talking at the time the snapshot was taken.

Snapshot 1-1. A moment in the virtual world of Second Life®



One other participant, Su Nacht (with the long red hair, standing next to the Easter eggs poster, with her back to the camera), was communicating in writing using the Local Chat feature of the virtual world. Local Chat can be seen at the bottom left of the green grass in the snapshot. The buttons at the bottom appear on each user's screen and can be used by the user for accessing one's inventory (a collection of artefacts), interacting with the environment and for interacting with the other participants by voice and also gesture. The top border shows the software controls, the time in the virtual world, and the amount of money the avatar has (a currency exists in Second Life). Also, the top border features a search facility which can be used to search for residents, groups of residents, places and items in the virtual world.

Teaching in VW is indeed not without its challenges and only with a deep understanding of the potential and constraints of this medium, and of how learning takes

place in it, can we learn how to use it at its fullest. In order to do so it is important to recognise how deeply intertwined technology is in our lives and our society. Indeed, technology is not just a tool we use to speed up our actions in the world or to ease our life and work, it is “produced within a culture, and a society is conditioned by its technologies” (Lévy, 2001, p.7). It is therefore crucial to frame the study of what happens in a technology-mediated environment in a conceptual theory that takes into account the distinctiveness of that environment.

This thesis proposes Cultural Historical Activity Theory (CHAT, Engeström 1987, 2015) as a suitable theoretical framework to make sense of the complexity of technology-mediated learning environments. The past forty years have seen a sociocultural shift in the approach to the study of mental development (Wertsch, 1985; Wertsch & Tulviste, 1992). The sociocultural theory of mind sees the development of human mental functions as derived from social interactions and participation in social activities. While this approach has been applied to the study of second- and foreign-language developmental processes and to second- and foreign-language pedagogies (Lantolf & Thorne, 2006), the focus of this thesis is on what occurs in a technology-mediated learning environment. For this focus, Cultural Historical Activity Theory provides a strong theoretical lens and offers an integrated framework to analyse activities that are mediated by a broad range of tools, including technology and language. Cultural Historical Activity Theory stems from sociocultural theory and gives a central role to the mediation of tools and artefacts in social human activities. Language in Cultural Historical Activity Theory is seen as a fundamental psychological, cultural artefact, mediating thinking and communication, as the individual mind is not isolated from the culture and society it is part of. Thus, language becomes the product of historical, cultural, social, institutional and discursive forces.

CHAT, the third generation of activity theory, has evolved from the works of the Russian psychologist Vygotsky (1896-1934), translated and printed in the West from the 1960's (1962, 1978). Vygotsky's initial framework of socially mediated cognition and learning has heavily influenced teaching and learning approaches. Activity theory sees human activity and cognition as inseparable and mediation as central to any activity and to the development of cognition. CHAT has been adopted in studies on Human Computer Interaction (Nardi, 1995a; Kaptelinin, 1996). Also, it has been used in educational research (Russell & Schneiderheinze, 2005; Murphy & Rodriguez-Manzanarez, 2008) to study contexts of implementation of new technologies (Lim & Hang, 2003), or changes in teachers' practices, after the introduction of new technologies (Hedestig & Kaptelinin, 2002). In studies of Computer Assisted Language Learning (CALL) activity theory has been successfully used to obtain an insight in the learning that arises from collaborative problem solving and the social interaction of learners within a complex and mediated environment (Nelson & Kim, 2001; Blin, 2004; Haught, 2006; Basharina, 2007) and it has been applied to a study of how such contexts affect learners (Blin, 2004).

Further, this study views language learning from an ecological perspective (van Lier, 2004) according to which language learning is a process that happens through interaction and as part of a broader context comprising the social conditions and "students' concerns, attitudes and perceptions" (Tudor, 2003, p. 10). The construct of affordance, in its conceptualisation from the ecological and the activity theory perspective, is deployed in this study when interrogating the data, to highlight the language learning affordances of the virtual world and, thus, to obtain a clear understanding of how best to exploit these environments for language learning. This introductory chapter continues by providing a description of the research objectives and context of the study and an outline of the thesis.

1.3 Research objectives and context of study

Technology and technology mediated communication play a pervasive role in the daily life of most of us. Computers have been extensively used as a valuable tool in education for decades, to the point that, in the field of CALL, Kern (2006) has envisioned the disappearance of the term itself, which, he claims, given the normality and frequency of technology in our lives, would be as superfluous as using the term BALL to design Book Assisted Language Learning. As mentioned earlier, virtual worlds are one of the online technologies that have recently become an object of experimentation in foreign language teaching and have been considered to show an interesting potential in terms of language and intercultural interactions (Kim, Lee & Thomas, 2012; Jauregi & Canto, 2012; Diehl & Prins, 2008; Ikegami & Hut, 2008). The focus of this research is foreign language learning in virtual worlds; in order to conduct it, a study was undertaken at the Dublin Institute of Technology (DIT), Ireland.

I have been a lecturer in Italian as a Foreign Language in the International Business and Languages (IBL) degree run by DIT for over ten years; in the past seven years I have also been the co-ordinator for the Erasmus exchanges between the School of Languages in DIT and its Italian partner universities. The IBL degree is a 4-year degree course and its students are expected to complete their third year of study in a university in the country of their FL of study. My dual role as language teacher and as Erasmus co-ordinator has made me aware of the great importance of properly preparing students for their Erasmus year. The year abroad is always a source of expectations and worries at the same time; students look forward to the adventure in the foreign country but are also anxious about their FL competence and their linguistic and intercultural ability to properly study, live and integrate in the target language (TL) country. My own experience in Second Life® convinced me that this VW would be a perfect environment for carrying out a course whose learning objective would be to prepare my IBL students for the

Erasmus experience, by facilitating contacts with native speakers and interaction in the TL. This consideration was corroborated by research in the field (Diehl & Prins, 2008; Ikegami & Hut, 2008; Canto, Graaf, & Jauregi, 2014), but there has been no extensive empirical research that has investigated the affordances of virtual worlds for language learning. With this aim I formulated the following research questions:

Question 1: What do learners ‘do’ while performing different language tasks set to them in a virtual world? How do learners use the virtual world’s potential to fulfil the language tasks and how does the virtual world environment affect task performance?

Question 2: Which affordances for language learning emerge while performing the language tasks, and what happens when certain affordances fail to emerge and be noticed by the learners?

Question 3: Through the identification of the affordances for language learning, can we draw ideas of best practice for foreign language educators in VWs, in terms of course design?

Question 1 and 2 focus on identifying the potential of virtual worlds for language learning, Question 3 aims to provide foreign language educators, who are interested in FL teaching in a virtual world, with guidelines on how best to tap into this potential. In order to collect empirical data and answer the research questions, a pilot course (*Italiano in gioco*) and a second language course (*SLitaliano*) were designed and implemented in the virtual world of Second Life®.

Conducting research in virtual worlds presents specific challenges for which, in part, there is not yet an agreed protocol amongst researchers (McKee & Porter, 2009; Deutschmann & Panichi, 2009; Hunsiger & Krotosky, 2010; Minocha, Tran & Reeves, 2010; Girvan & Savage, 2012; Banks & Martey, 2016). Consequently, in order to carry

out this study, I had to make relevant decisions regarding the design and organisation of the language course and the methodology adopted in conducting the research. Further, working with activity theory requires the development of the activity theory system, so that it frames the empirical data in the way needed for the study, providing the correct focus for data analysis. This implied, for this study, two main epistemological choices: (i) choosing the activity system that constitutes the minimum unit of analysis and (ii) deciding the level of analysis on that activity system. The activity theoretical researcher can choose whether to observe the activity system at a macro level, in its macro historical and social context or take a subject's view, zooming in on the micro level of the chosen unit of analysis. The choice made for this study on the language learning affordances of virtual worlds was to designate the language learning task as minimum unit of analysis and to zoom in on the micro plane of analysis of each language task, investigating what happens during the performance of the task. This approach to the analysis would show how instances of tension and disruption during the performance of the language task cause deviations from the script of the task that develop into linguistic episodes within the task, which are then scrutinised to see what happened during those episodes of disruption, and to identify the emergence of affordances for language learning.

Borrowing the definition of the construct of affordance from the activity theoretical mediated action perspective in Human Computer Interaction (Kaptelinin & Nardi, 2012) and expanding it with contributions from the ecological linguistics perspective (van Lier, 2004), this study conceptualises a language affordance as *an action in potential that allows the opportunity of language learning* (Chapter Three). Affordances will be identified during the empirical analysis of episodes of deviation from the language task script. The data analysis shows how sub-activities are performed by means of actions that, as is argued in this thesis (Chapter Three), are the enactment of emerging affordances of the virtual world. Identifying these actions will lead to the identification

of language learning affordances of virtual worlds and to answering the research questions.

The next section provides an overview of the structure of this thesis.

1.4 Outline of the thesis

The thesis is structured in eight chapters. The next chapter, Chapter Two, describes Virtual Worlds, expanding Bell's (2008) definition of these online spaces. Foucault's definition of heterotopias is also introduced, as a way of looking at virtual worlds as spaces that are detached from our physical reality and, at the same time, part of it. The chapter then proceeds to introduce and define the constructs of immersion and presence (individual sense of presence and social presence) and discusses the relationship between immersion, presence and performance. On the other side of the sense of presence spectrum is situated Virtual Corpsing, a condition deriving from a breakdown in the sense of presence and the feel of immersion in online environments. As the occurrence of Virtual Corpsing can affect learning, it is relevant to this study. The second part of Chapter Two provides a literature review of educational research in VWs, summarising the positive findings and critical issues identified by the research. The literature is also investigated to evidentiate recent trends in the research and developments in the use of virtual worlds for language learning.

Chapter Three consists of two main sections. The first section introduces the concept of affordance, from its initial conceptualisation by James Gibson (1977, 1979) in ecological psychology, through its adoption in the field of HCI, to its use in Information and Communication Technology (ICT) educational research. The construct of affordance is presented as a valuable tool in the analysis of what happens during a learning experience in a computer-mediated environment. The chapter proceeds with a critical review of studies in the educational affordances of virtual worlds which shows the lack of

a unified conceptualisation of this construct in this field of research. Thus, it is argued, that the theoretical framework of activity theory can assist in the definition of the construct of affordance. In the second section of Chapter Three activity theory is introduced as a theoretical framework that can be useful in the analysis of learning activities in computer-mediated environments. The historical development and the main principles of activity theory are outlined, with a special focus on the key role of mediation in every activity and on the concept of systemic contradictions within and between activities, as these provide the grounding for the methodology adopted in this study on the language learning affordances of virtual worlds. It will be argued in the chapter that an analysis of episodes of disruption in the task activity that may be caused by underlying contradictions in the language learning activity system, can lead to the identification of emerging affordances in the medium. Subsequently, the chapter proceeds to conceptualise the construct of affordance based on the definition of affordance provided by activity theorists in the field of Human Computer Interaction (Kaptelinin & Nardi, 2012) and expanded for language affordances by van Lier (2004) in his theory of ecological linguistics. Finally, working definitions of social and educational affordances and affordances for language learning are offered.

Chapter Four deals with the choices made in terms of epistemological approach and methodology when applying the activity theory framework to this research in a virtual world environment. The chapter starts with a presentation of the three research questions, grounding them in the literature in the field of educational research presented in Chapter Two, and in the theoretical framework of activity theory and the construct of affordance, presented in Chapter Three. The organisational and ethical choices that researchers have to make when working and conducting research in virtual worlds are then presented, followed by the choices connected to the use and operationalisation of the activity theoretical framework. Particularly, two methodological choices relevant to this study will be examined: the choice of the minimum unit of analysis and the level of analysis.

The chapter then concludes with a section that outlines the phases of the research design and presents the practical implications that researching in a virtual world within the frame of activity theory had for this study.

Chapter Five provides a detailed presentation of the context of the study, of its design and implementation and of the data collection and encoding. The pilot course, *Italiano in gioco*, and the following language course, *SLitaliano*, are described and compared, highlighting the lessons learned during the design and running of *Italiano in gioco* and how they were applied in the design and running of *SLitaliano*. Subsequently, the structure of *SLitaliano*, of each of its sessions and of the language tasks is detailed, as well as the participants' selection process and the different groups of participants in the course. Finally, the procedure followed for data collection, the timeline of data collection and the typology of data are explained. The approach followed for the encoding of the data is described and the chapter concludes with two taxonomies resulting from the encoding: a taxonomy of the Focus Shift episodes observed in the data and a taxonomy of the actions enacted during the Focus Shift episodes.

The taxonomies provided in Chapter Five constitute the backdrop for the data analysis, which is presented in Chapter Six and Chapter Seven. Chapter Six presents the first phase of the data analysis and opens with a vignette of the three *SLitaliano* sessions chosen for data analysis. This narrative account presents what happened in the course of each of the sessions, where it happened and what the different groups of participants did. The chapter then proceeds with a detailed analysis of the different types of disruptions that were observed during the sessions and the focus shifts episodes initiated by these disruptions. The focus shift episodes are analysed as evidence of the presence of possible underlying contradictions in the language task activity system and it is argued that the actions that the subjects performed while being involved in these episodes are the enactment of emerging language learning affordances. Finally, an Intercultural focus shift

episode is analysed in detail to show what happened during an activity created by a departure from the script of a language task. The analysis of this focus shift episode and the identification of the actions that constituted this new activity will be the starting point for the second phase of the data analysis, presented in Chapter Seven.

The first section of Chapter Seven opens with an overview of the affordance related actions that were performed during the focus shift episodes observed in the data analysis. These actions are then analysed in detail in terms of incidence, subjects performing them, and mode of communication used. The analysis reveals how, when correctly leveraged, the technical and social affordances of the virtual world emerged as language learning affordances. Particular attention is paid to episodes of *Languaging*, which emerges in the data as one of the language learning affordances of the medium, and a result of the enactment of both the social and the technical affordances of the virtual world. The second section of Chapter Seven investigates cases of non-realisation of technical affordances engineered in the language tasks. The analysis focuses on episodes of *Virtual Corpsing* and shows an extensive use of the foreign language by the participants during each of these episodes. It is argued that the failure of a technical affordance to emerge, despite initiating *Virtual Corpsing*, favours the emergence of language learning ‘alternative’ affordances of the medium, acted upon in order to resolve the technical disruption.

Finally, Chapter Eight presents a discussion of the data analysis and the conclusions reached by the researcher, revisiting the research questions at the core of this study in view of these findings. The chapter then proceeds to illustrate the contributions made by this study to research in the field of foreign language teaching and learning in virtual worlds, outlining the limitations of the study, and proposing ideas for further research in the field.

Chapter 2 Virtual Worlds: what, where and how

In 2007 the Acceleration Studies Foundation⁴ envisioned in their Metaverse⁵ Roadmap (describing the future of the space that merges virtually-enhanced physical reality and physically persistent virtual space) that virtualisation and 3D web tools and objects would become more and more embedded in our environment. These tools are indeed turning into a common feature of our lives and virtual worlds are one of the key ones, as they are used for socialisation, commerce, gaming, and education. Educators have picked up on this trend and have been experimenting with VWs since the early nineties. The New Media Consortium (NMC)⁶ first mentioned VWs in their *Horizon Report* in 2007, and identified these environments as one of the six innovative technologies to watch, which would become more widely used within the following 2-3 years.

In the past decade many universities have indeed had their own virtual space and run a number of courses in-world; a 2007 overview of the state of education in Second Life® (SL®), for instance, mentioned over 200 universities or academic institutions involved in SL® (Kelton, 2007) and in 2010 the Virtual World Watch⁷ blog reported that all UK universities were active in VWs. Also, in the same period, Australia and New Zealand saw an overall increase of subject offerings in which VWs were used, with SL® being the most popular VW (Dalgarno et al, 2011); a noticeable proportion of higher education teaching staff and institutions across both countries started developing ‘bespoke’ VWs and hosting them on their own servers and networks, even though there were higher costs

⁴ ASF is a non-profit organisation that deals with education, research, and selective advocacy of communities and technologies accelerating change.

⁵ The term Metaverse was coined in Neal Stephenson’s 1992 science fiction novel *Snow Crash*. The word is mostly used to describe the concept of the future of the internet, made up of persistent, shared, 3D virtual spaces linked into a perceived virtual universe.

⁶ NMC is an international community of experts in educational technology. Its role is to help their member universities, colleges, museums, and organizations drive innovation across their campuses.
<http://www.nmc.org/>

⁷ The Virtual World Watch was a project that ran from 2007 to 2012. Its main purpose was to find academics in the UK using virtual worlds and to find out about their experience of VWs.

and a heavier time commitment. A tendency to move to alternative VWs, beyond the still pervasive SL®, was also highlighted in Kirriemuir's 2010 report on the situation in the UK.

The excitement around these environments has reached a plateau in the past few years. The number of SL® residents has stopped growing at a furious pace, many of its sims have disappeared and many once flourishing commercial transactions are not as active as they were. A more attentive look at the situation, though, shows that the actual number of VWs visitors and residents has not decreased. One of the latest records of VWs accounts (ITU, 2014) recorded approximately 2.8 billion of them, but the rhetoric of success and confidence of the early years has changed (Gregory et al, 2014) and, these days, different groups, consortia and educational institutions are actively working on the development of new virtual environments and of web-based and mobile VWs. In a review of the 1995 Contact Consortium white paper, which set up expectations of what VWs would be like in the future, Damer and Hinricks (2014) used the questions posed in that paper as a benchmark for what the reality of VWs was in 2013. They saw that many of the questions had not been tackled yet: there was still a lack of real acceptance of VWs meeting rooms in the business world or of virtual learning spaces in schools (p. 36, 37), real-time motion capture was still in its infancy, but the use and potential of the medium had improved and virtual communities were increasingly being studied. Also, the work that is currently being done on the development of new and more easy to use VWs, let alone advances in technology (for instance the Oculus Rift), is bound to greatly influence how we will use VWs in the near future (Gregory et al, 2014).

Currently, the great enthusiasm shown by researchers in the early years of VWs adoption has adjusted its pace. The aim and focus of research have also changed, moving from descriptive, experiential studies, to a more theory based interest on how learning happens in this type of environment and the pedagogy connected to this. It is a time now

in which researchers are studying and assessing the use of VWs, creating knowledge of this technology that “should allow for the development of best practice principles and guide the future design of the new virtual world order” (McDonald et al, 2014, p.162). As Boellstorff (2015, p. 4) asserts in an article on the futures of VWs “regardless of their size or novelty, virtual worlds are part of the spectrum of possibility for digital culture, and so are extremely worthy of study”.

This chapter offers a description of virtual worlds, starting from the terminology used to define them and moving to the characteristics that differentiate them from other online virtual environments. Virtual worlds will be presented as heterotopias (Foucault, 1967) of our times and two constructs, which are central for any understanding of virtual worlds’ potential for education, will be introduced and defined: presence and immersion. The chapter will then present a literature review of research studies on using VWs for education, highlighting the potentials and critical issues identified by research, and draw attention to the recent shift of focus in research in this field.

2.1 Virtual Worlds, terminology

From the early years of VW usage the terminology adopted to label these virtual environments has been varied. The term Virtual Worlds is definitely one of the most commonly used and generally recognised by the industry, the public, the media and many researchers. Some researchers have decided to restrict the meaning associated to this encompassing term by writing about 3Dimensional Virtual Worlds or Environments (Dickey, 2003, 2005a; Fournier et al, 2005; Minocha & Roberts, 2008; Jarmon, 2009; Lee, 2009; Minocha & Reeves, 2010; Inman, Wright & Hartman, 2010; Dalgarno et al, 2011; Lucke & Zender, 2011; Kim, Lee & Thomas, 2012; Milton et al, 2012). Others use the term Immersive Virtual Worlds, (De Freitas, 2008; Savin-Baden et al, 2010), 3D Immersive Virtual Worlds (Scopes, 2011), or Social Virtual Worlds (SVWs) (Jin, Zhigang & Gough, 2010). Another perspective comes from academics who have accepted

the acronym MUVE (Multi User Virtual Environment), such as Clarke and Dede (2005) as well as many others (Calogne & Hiles, 2007; Diehl & Prins, 2008; De Lucia et al, 2009; Molka-Danielsen, 2009; Omale et al, 2009; Salmon, 2009; Warburton, 2009; Vasileiou & Paraskeva, 2010; Burgess & Ice, 2011). MUVE was a term first used in 1990 by Chip Morningstar, who wanted to highlight a generational change in environments such as MUDs (Multi User Domains), MOOs (MUD Object Oriented) and MMORPGs⁸ (Massively Multiplayer Online Role-Playing Games). Other researchers use the label Synthetic Worlds (Wigham, 2012).

Nevertheless, the term Virtual Worlds is still the most recognisable (Svensson, 2003a; Bell, 2008; Kluge & Reily, 2008; Schroeder, 2008; Bignell & Parson, 2010; Moore & Pflugfelder, 2010; Hunsinger & Krotoski, 2010; Thomassen & Rive, 2010; Hinrichs & Wankel, 2011; Sparrow, Blevins & Brenner, 2011; Wimpenny et al, 2012; Falconer, 2013), and, although it can be associated with a variety of virtual spaces (Mabrito, 2012), it is the term used in this study.

2.2 Virtual Worlds, a description

The virtual has a history as long as that of our Western civilisation and digital technology has only given us a different tool to experience that virtuality (Grimshaw, 2014). As Damer & Hinricks (2014, p. 18) state:

Virtual worlds [are] ... immersive experiences delivered through the imagination [and] have their origin in deep prehistory.

Maria Beatrice Bittarello (2014), a religious studies specialist, in her article on VWs and myths in history, mentions five elements of the new “digital virtual worlds” three of which are very similar to the historic virtual worlds and two which are typical of these new environments. Firstly, all virtual worlds can be accessed through a medium, which,

⁸ MUDs, MOOs, and MMORPGs were also used in education, but, differently from VWs, were based on predetermined player goals and were text-based.

in this case, is a technology (in the past, paintings and the voice of a story-teller were the technologies of these times). Both digital and pre-digital VWs are located in a world which is not normal or usual and both digital and pre-digital VWs are immersive. The two main differences are, according to Bittarello (2014), the presence of avatars and the strong interactivity given to the users.

In fact, it should be noted that the three-dimensional interface is a relatively recent feature that has been applied to virtual environments that existed long before. MOOs, for instance, already attracted the attention of educators in the '90s. They were synchronous virtual environments in which users could move and interact with each other in a text-based setting. They had a plot-driven storyline, which made them very ductile for education and the experience was deemed positive in terms of learning, with research verifying that they could provide a rich potential for collaboration and construction of knowledge, and for communication in a setting where the affective filter was lowered by virtue of the anonymity afforded by the technological medium (Bruckman, 1997; Warschauer, 1997; Turbee, 1999; von der Emde, Schneider & Kötter, 2001; Kötter, 2002; Dickey, 2005a). In many of their aspects, MOOs were a precursor of VWs; only, being text-based, they lacked the opportunity of expressing non-verbal cues, which made communication less realistic. When more advanced graphics and avatars were introduced in the late 90's, these new avatar inhabited virtual environments started to be more widely used. Active Worlds became one of the most used VWs, and was then followed by more VWs, amongst which, Second Life®, opened publicly in 2003.

Since then researchers have provided various descriptions of what constitutes a VW. In 2005 Dickey (2003) looked at Active Worlds and observed three important features of that virtual environment, which made Active Worlds a space where users could interact as social beings. The features were: their virtual space representation, the use of avatars, and their interactive chat. Her description, and others, was integrated by Bell (2008), who

clearly identifies a VW as an Internet-based environment with a strong social component (a network of people) and with three characteristics. The characteristics identified by Bell (2008) are: synchronicity, persistency and the use of avatars that differentiate VWs from previous virtual environments used in education (p. 2). These three characteristics are described in turn in the next sections.

2.2.1 Synchronicity

VWs are synchronous, as their users can move, act and communicate by sharing the same time and space, and interacting directly with each other. This ‘being in the same space at the same time’ can favour immersion and make the interaction feel more like it was happening in a real life situation, thus shaping both the kind of communication occurring between the users and the results of such communication. An invaluable affordance of the Web is, according to Anderson “the profound and multifaceted increase in communication and interaction capability” (2004, p.42); this is even more evident in VWs, as they allow geographically dispersed users to explore an environment concurrently, to communicate using text-based and/or audio communication, and to jointly and synchronously carry out kinaesthetic or tactile activities within the world. As seen in previous CALL research, synchronic communication can foster interaction and collaboration, which, in turn, create additional conditions for learning (Schroeder, 2008). Communication in SL®, for instance, has become even more realistic since the introduction of Voice-Over Internet Protocol (VOIP) technology in 2008. The blending of text and audio, plus oral and written communication genres blurs the lines between orality and literacy, thus creating a new and more ductile mode of communication.

2.2.2 Persistency and generative capability

VWs are also persistent, as they continue to exist and evolve when the individual user is not logged on. Other users can in effect shape the environment, build and rez objects, organise and run events, meetings and courses, in such a way that residents feel as if the

environment is as real as their own physical reality. Persistency can in this way contribute to creating a sense of expectancy and an illusion of reality in the user, who feels part of a real world, which exists both outside and inside his/her physical world. Communication can corroborate persistency, too; VWs offer the option of asynchronous communication, where users can leave messages for each other and can store both those messages and communication taking place in the local chat. Virtual conversation leaves a perceptible trace for learners, to reread, and to recheck; this, combined with textual and graphic cues, can compensate for the loss of social cues present in face-to-face conversation (Erickson & Herring, 2004). One of the features only partly mentioned by Bell is the VWs “generative capability” (Kluge & Riley, 2008, p.129), which makes them especially interesting for educators, as their users can create environments and objects that can then be shared, distributed, used and exchanged with and by other users.

2.2.3 Avatars

The user’s experience of a VW is made even more real through the use of customisable avatars, that is, graphic representations of each individual user. The term “avatar” was first used in 1985 by platform creators Morningstar and Farmer in Habitat, an online role-playing game developed by LucasFilm. Through avatars, users can feel a sense of embodiment made possible by the option to represent themselves as they like, show some facial expressions and body movements, and communicate orally. According to Lee (2009, p. 151), compared to previous virtual environments, VWs:

allow users to align non-verbal elements with their written and/or spoken words. They provide distinct communicative advantages over textbased CMC and groupware tools that do not capture facial expressions and body language and that are therefore limited in terms of their ability to convey feelings and emotions.

It has also been observed that users can develop a strong connection with their avatars and that avatars can motivate interaction, make communication more efficient and create identification (Talamo & Ligorio, 2001). An experiment by Peña, Hancock and Merola

(2009), for instance, showed that avatar appearance could activate and inhibit specific thoughts and affect its user's cognition, even in a negative manner. In their study, participants who had been assigned avatars whose aspect could be associated with aggressive cues (dressed in black or wearing a Ku Klux Klan robe) had comparatively shown more negative thoughts and more violent re/actions, and had inhibited positive concepts more often than those who had been assigned avatars that could be associated with positive cues (dressed in white or wearing a doctor's uniform). Participants in the experiment had remained unaware of the influence of their virtual self-representations, which, on the other hand, had affected their thoughts and attitudes. In a similar study, Yee et al (2007) used the term *Proteus effect*, to describe a process whereby an individual's behaviour tends to conform to their digital self-representation. A powerful link between avatar and real-life user resulted also in Dean et al's (2008) experiment. The researchers found that their preliminary results in a study on perceptions of avatar's body size and link to real-life body size and active life-style showed a strong positive correlation between avatar's habits in the VW and real-life habits.

At the same time, Yee et al's (2007, p. 120) studies of eye gaze movement and proxemics between avatars in SL® support the hypothesis that social interactions in VWs are governed by the same social norms as the interactions that occur in the physical world. The authors write:

even as our identities became virtual, we insisted on embodiment. And in doing so, the rules that govern our physical bodies in the real world have come to govern our embodied identities in the virtual world.

In VWs the physical and virtual are thus continuously interacting and blending as these environments are shaped both by Simulation technology and by Intimate technology⁹, where avatars are graphical representations of the user or the user's alter ego, and where

⁹ Simulation technology refers to technologies that model reality, offering new environments, providing simulated worlds and shaping any reality or fantasy of the designer. Intimate technologies are identity-focused, the user has agency in the environment, either through the use of an avatar/digital profile or through direct appearance in the system.

the user/avatar has agency in an environment that is identity-focused. This gives a new depth to the feeling of ‘presence’ of the individual in the virtual environment, as the VW becomes an extension of our physical environment and, at the same time, a separate, different space in our reality, or, as explained next, a heterotopia.

2.3 Virtual worlds as heterotopias of our times

The concept of heterotopia as a different space in our reality, a space that has more than one layer of meaning, seems well suited to VWs. The term was first introduced in the 1967 lecture “Des espaces autres”¹⁰ by the philosopher Michel Foucault, who describes heterotopia as a physical site that is in relation to other physical sites but, at the same time, “is capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible ” (p. 4). Examples of heterotopias are museums or libraries, places where different times and spaces are collected within a common space.

The idea of heterotopia has been applied to research in educational environments (Blair, 2009) and in virtual spaces (Ritella, 2010; Ligorio & Ritella, 2010). Educational spaces are indeed not unlike heterotopias, in that they "presuppose a system of opening and closing that both isolates them and makes them penetrable” at the same time" (Foucault, 1967, p. 7) and can be likened to mirrors, as they show our environment, making it both real and unreal at the same time. While Foucault certainly could have not imagined the advent of cyberspace, the relationship of place and time in virtuality is, however, well described by his idea of a heterotopia of space and time. A virtual space is located in the world and still outside it, the same way heterotopias are. In cyberspace the physical location of the user does not impede communication as “some actions or activities can be done independent of time and space, within the virtual” (Emery, 2010) and the idea of a functionality of space is dramatically changed by the possibilities

¹⁰ The lecture was originally delivered in 1967, and translated into English as “Of Other Spaces” and “Different Spaces” in 1986 and 1998, respectively.

offered by these environments. Cyberspace is a contemporary heterotopia of time and space (Warschauer, 1995; Sherman, 1998; Emery, 2010). It harbours everything and its opposite, it limits access and is parallel to and within the physical world (Emery, 2010). When users are in a virtual space, they are in their own physical world at the same time; the connection and communication between the users is as real as if they were sharing the same physical space but they are also experiencing two separate physical spaces. As in a computer game, where the gamers are both in the game and in their physical reality, cyberspace users find themselves in both worlds. Furthermore, cyberspace should not be seen as a single space: it is varied and amorphous; it is a parallel world, another universe with its specific time and its space next to our reality and with degrees of intersection with our reality that occur in many situations. Søraker (2012) distinguishes between intravirtual and extravirtual effects. The former are determined by actions that have consequences only within a VW and should not be seen as really occurring such as, for instance, a character killing another in a computer game; extravirtual effects, however, have an effect on the world outside it. If we buy something in a VW, the virtual currency will be exchanged and will come out of our own bank account. Also, virtual action can cause both physical and mental and physiological responses to the user in the physical world.

If VWs are heterotopias of space and time, containers of different places and times, in part parallel to and partly intersectioning our physical reality, they also move between the virtual and that physical reality. This constant inhabitation of two different spaces at the same time and shifting between the two realities is a peculiarity of using virtual spaces. The concept of heterotopia can help identify these occurrences when we analyse activities that take place in VWs and can provide the researcher with a clearer view of the space/time collocation of the subject's actions and its consequences for the activity.

Lucke and Zender (2011, p.1) write:

The media architecture connects people, space, and data by interleaving physical and virtual reality creating an extended sphere of (inter)action.

In these environments the tangibility of an object extends into the virtual, which can be of benefit for learning. It is therefore paramount to remember that when we analyse activities in VWs, the participants are operating both in the virtual environment and in their physical world. Some of the activities share time with our physical reality and, if the degree of immersion in the virtual world is not high, the two spaces can interfere with each other. This may affect the degree of immersion, presence and social presence in environment (Ritella, 2010). The constructs of presence and immersion are pivotal to the study of VWs, as it will be explained in the next sections.

2.4 Presence and immersion in Virtual Worlds

Svensson (2003a, p. 125) writes that:

being social or thinking online is just as valuable as carrying out the corresponding activities in the real world. In particular, we need to realise that online experiences are not necessarily secondary to real-world experiences or just non-real.

There are indeed plenty of anecdotes among virtual worlds' residents that show how real the virtual environment is to its users. Stories of couples divorcing after discovering the partner's SL® affairs have often been in the media and weddings and divorces are as common in SL® as outside it; also, divorcing someone you married in-world has a cost (L\$25), as it has in the physical world. Thus, the feeling of being immersed and present in the VW has a strong influence in shaping the experience of its users. In a study of health issues and online technology Gorini et al (2008, p.2) suggested that:

the interaction between real and 3-D virtual worlds may convey greater feelings of presence, [...] positively influence group processes and cohesiveness in group-based therapies, and foster higher levels of interpersonal trust between therapists and patients.

Furthermore, studies in the sense of presence have shown that the stronger the presence, the more the participant's experience is felt as meaningful. With the disappearance of a feel of mediation, users feel they can actively change the environment and through the social interaction afforded by a strong sense of social presence, they may share empathy and receive emotional support (Riva, 2004).

The constructs of presence, social presence and immersion can also be useful in understanding learning in VWs. De Lucia et al (2009) claim that one of the advantages that VWs have over other virtual environments is in fact presence; the authors built a SL® virtual campus and evaluated lectures that took place in that environment. They found that VWs showed advantages in terms of presence, individual and social awareness, communication and sense of community. Certain VWs features can indeed facilitate immersion and presence and, while evidence points to a strong sense of presence to learning is not conclusive, authors like Witmer and Singer (1998, 239) argue that “manipulating factors that increase presence will increase learning and performance”, as those factors affect positively both presence and performance. The following sections will examine these constructs in more depth.

2.4.1 How real is the virtual? Sense of presence in Virtual Worlds

The way presence is defined is a result of the adopted ontological stance; the approach taken in this study views reality as being constructed and experienced through a social and cultural dimension and thus recognises the culturally and historically mediated nature of every experience (Vygotsky, 1962, 1978; Engeström, 2015). Given this prerequisite, the sense of presence itself is viewed as affected by the social and cultural history of the person and of the particular environment the person is operating in (Mantovani & Riva, 1999). There are no unmediated, precultural objects in our lives and virtual environments are no exception: they are spaces in which experience is mediated by physical and intellectual tools as happens in our physical world. As our reality is co-constructed by

means of our relationship with the environment and it is mediated by artefacts, presence is also culturally mediated, as there are “no natural unmediated experiences of presence in an environment” (Mantovani & Riva, 1999, p. 543). Thus, the sense of presence is not just a product of an extremely realistic environment; in fact, each environment offers a different experience to each individual user, depending on the user’s own experience and history (Riva, 2004; 2009).

The cyberpsychologist Riva sees presence in a computer mediated environment as a broad psychological phenomenon, not just linked to the development of technology and to our experience of its mediation (Riva & Waterworth, 2014). Presence is related to human action and to how it is enacted and organised in the environment and defined as “the intuitive perception of successfully transforming intentions into action” (Riva et al, 2011, p.25). As the sense of presence “differs in relation to the characteristics of the physical, social, and cultural space the subject is in” (Riva & Waterworth, 2014, p. 206), those users interacting in a computer mediated environment feel present in that environment when they feel that they ‘are there’ as if no mediation was taking place and that they can be an active agent, able to act in the virtual environment as they would in the physical world. Riva and Waterworth (2014, p. 211) state that:

We are present during an action, direct or mediated, when the simulation of the intended action (the intention of taking an apple) corresponds to the data perceived during the action (I got the apple).

If a heightened sense of presence is attained, both the technology and the external physical environment disappear from the users’ phenomenal awareness. The users experience an impression of non-mediation, fail to perceive or acknowledge the existence of a medium in their environment and respond as if the medium were not there.

In the field of cyberpsychology research on the sense of presence in virtual reality environments and in VWs has shed light on the powerful interaction between presence

and the emotions of the user (Riva, 2007; Riva et al, 2007; Ikegami & Hut, 2008; Riva, 2009). A study by Riva et al (2007) on three different VW environments found that the feeling of presence was indeed greater in emotional environments and that the users' emotional state was influenced by the level of presence. These results confirm the efficacy of VWs as an affective medium and show "a circular interaction between presence and emotions" (Riva et al, 2007, p. 45). As VWs are social environments, the experience of social presence is also central. Social presence is defined by Riva (2009, p. 160), as the:

non-mediated perception of an enacting other [...] within an external world.

This is attained when users in a computer-mediated environment perceive the other users' actions as non-mediated. Presence in such instances becomes relational and interactive, as action is essentially social (Mantovani & Riva, 2009). Both sense of presence and social presence in computer-mediated environments have been studied in connection to the level of immersion provided by those environments. The interaction between immersion and presence will be discussed in the following section.

2.4.2 Sense of presence and immersion in a Virtual World

Being immersed in a Virtual Environment (VE) has been described in various ways, with a focus on the technology or with an attention on the users. Slater (2003; Slater et al, 1996; Slater & Wilbur, 1997) is one representative of the former approach; he looks at immersion as the "quantifiable description of a technology" (Slater et al, 1996, p.165), that is to say, the practical description of how extensive and surrounding the computer displays can be and of what the "technology delivers from an objective point of view" (Slater, 2003, p. 1). For others immersion "has more than the physical dimension to it" (Hedberg & Alexander, 1994). Thus, Witmer and Singer (1998, p. 227) define it as it is perceived by the user, as "a psychological state in which we perceive ourselves to be enveloped by and interacting with an environment". Immersion has been correlated by

both views to a heightened sense of presence (Slater & Wilbur, 1997; Witmer & Singer, 1998; Riva et al, 2011). Further, Witmer and Singer (1998, p. 238) write:

Factors believed to increase immersion, [...] may also enhance learning and performance. Because many of the factors involved in learning and performance also increase presence, it would be very surprising indeed if positive relationships between presence and performance were not found.

With this, the two authors claim that interacting with the environment in a natural manner should increase immersion, and, possibly, learning and presence. Lucke and Zender (2011), as well, link immersion to learning; they describe VWs as environments that are more similar to our own physical environment and state that virtual worlds:

are perceived to be more simple, natural, and intensive than traditional computer-based interaction patterns. As a consequence, a particular suitability of virtual 3D worlds for teaching and learning can be seen. (Lucke & Zender, 2011, p.4)

One of the key elements that make immersion in a VW more easily attainable is, according to Waterworth and Waterworth (2014) the possibility to use and modify an avatar. We have now gone beyond distributed cognition, which sees the propagation of cognitive phenomena and knowledge as taking place not only in the individual's head but also in the world around the individual, in a continuous interaction between the individual and the artefact being used (Nardi, 1995b). Waterworth and Waterworth talk of 'distributed embodiment' as, once we represent ourselves and act through an avatar, we observe ourselves from the outside and, at the same time, feel present in that observed person. As Damer and Hinricks state (2014, p. 33) "the more immersion, the more identity, the more believability, the more change to the user".

As a result of a project on learning in VWs, Mount, et al (2009) aimed at clarifying the relationship between immersion, presence and engagement in those environments. Immersion is described as tightly correlated to the extent in which a user feels engaged, and engagement is seen as the essential factor that motivates learners to take active part in

a learning activity and therefore a precursor to a deeper immersion in the learning environment, and connected to presence. The three factors are considered by the authors as interplaying in the VW experience; at the same time, though, they find that learners can experience engagement, presence and immersion in a highly individual way, as “two learners that are equally engaged may be responding to very different factors that are acting to promote their engagement” (Mount et al, 2009, p. 53).

While a strong sense of presence increases with higher immersion in the environment, high-end immersive technology does not, however, necessarily bring a heightened sense of presence (Waterworth & Waterworth, 2014). As mentioned earlier, presence is the result of each individual’s experience and history and varies in different users and, as yet, a correlation between sense of presence and performance has not been clearly proved. This is not a real issue for research in Virtual Environments as Slater et al (1997) claim. Presence is, according to them:

important because the greater the degree of presence, the greater the chance that participants will behave in a VE in a manner similar to their behaviour in similar circumstances in everyday reality. (Slater et al, p.166).

This can deeply affect the users’ experience in the VE and how certain tasks are carried out. If immersion fails to be attained and/or the sense of presence and its feel of unmediated action are not achieved, the user’s attention will instead shift from the virtual to the surrounding physical world, causing an effect termed ‘virtual corpsing’, as will be seen in the following section.

2.4.3 Virtual Corpsing in Virtual Worlds

Research in VEs has borrowed the British theatrical term *corpsing* (unintentionally breaking character by laughing) and use Virtual Corpsing, to refer to a “shift in user’s focus of attention from the mediated to the real world” (Marsh, 2001, p. 2). Virtual corpsing is seen as a breakdown in the flow of the activity that is taking place in the VE

and as a threat to the completion of that activity and, if the activity is a learning task, to possible learning. Studies have been conducted to highlight best ways to counteract episodes of Virtual Corpsing and inform the design of interactive mediate environments (Marsh, 2001, 2003).

As Damer and Hinrichs state (2014, p. 27), learning in a virtual world will require:

a natural understanding of how to be a resident in a virtual world and how to learn, not only content effectively, but culture as well. [...] we need seamless flow between the virtual and the physical so that we do not differentiate between them.

Also, the condition of Virtual Corpsing is not totally exclusive of immersion in the virtual world. There are varying degrees of presence, and the virtual world resident can feel like s/he is in the virtual world, in the physical world and, at times, in between the two worlds. Even though Virtual Corpsing can be placed at the opposite side of a total sense of presence in the VW, it can still coincide with a partial presence for the user. When we deal with VWs we need to add the virtual environment to the research equation, but will have to make sure that the physical environment in which the subject is placed is not overlooked, be it a computer lab in the educational institution or the subject's home.

2.5 Virtual Worlds and their use in education

VWs have been, and are being, used for a wide variety of disciplines, ranging from health to military training (Smith, 2014). They are used for health care, health awareness and training (Cooper, 2007; Swicegood, & Haque, 2015; Olle & Zsolt, 2013), or for mental health (Gorini, Gaggioli, & Riva, 2007; Gorini et al, 2008). In mental health they have been shown to effectively combat anxiety disorders and “allow subjects to develop real-world skills starting from a virtual experience” (Gorini et al, 2008, p.1549), and for working with and helping with disabilities (Smith, 2010). Also, a number of social experiments have taken place in VWs, such as researching new modes for sociability (Ikegami & Hut, 2008) and real world training (Morgado et al, 2010).

Educators and instructors are finding that this technology can offer a wide range of social, participatory, and creative opportunities for students and that it provides a unique set of features that can be exploited for educational purposes. VWs are thus used in various teaching practices and approaches, such as experiential education (Mason, 2007; White & Le Cornu, 2010), situated learning (Vasileiou & Paraskeva, 2010; Falconer, 2013), task-based learning (Bellotti et al, 2010), problem based learning (Esteves, 2009), teacher training and professional development (Sparrow et al, 2011; Kozlova & Priven, 2015). Virtual worlds are also used in creative practices (Doyle, 2010) and in different courses, from animation (Geigel, 2010) or psychiatry in problem based learning (Bignell & Parson, 2010) to architecture, physics, engineering, law, science and space, computer science and engineering (Calogne & Hiles, 2007), science (Crosier, Cobb, & Wilson, 2002), and media studies (Herold, 2009). In foreign languages a significant body of work has emerged (Henderson et al, 2009, 2012; Jauregi & Canto, 2012; Kim et al, 2012; Milton et al, 2012; Alessandri, Paciaroni, & Agodi, 2011; Nocchi & Dell'Aria, 2010; Nocchi, 2011, 2012, 2013, 2014; Panichi & Deutschmann, 2012; Sadler, 2012; Blin, Fowley, & Nocchi, 2013).

Studies have shown that 3D interactive environments support constructivist-based learning activities with learners interacting on a first-person perspective, which makes it closer to experiential learning (Dickey, 2005a; Fournier et al, 2005; Mason, 2007; Lee, 2009). Much of the educational research on VWs has undeniably been based on a similar constructivist paradigm as research on MOOs¹¹ (Dede, 1995; Bruckman, 1997; Furness, Winn, & Yu, 1998; Fällman, Backman, & Holmlund, 1999; Dickey, 2005a, 2005c; Inman et al, 2010; Dalgarno & Lee, 2010; Scopes, 2011; Sparrow et al, 2011). VWs have features that are apt for the design of constructivist learning environments, with their use of collaborative tools, scaffolding and opportunities for interacting within and upon the environment. The use of avatars and the possibility to interact and create objects offer the

¹¹ See Chapter Two for a description of MOOs as a text-based precursor of VWs.

means for distant learners to construct and converse in collaborative environments.

Already in 1995 Dede had stated that virtual environments offer many benefits, such as opportunities for experimentation without real-world repercussions, opportunities to “learn by doing,” and the ability to personalise the environment. The last decade has also seen a number of research publications in this field, which acknowledge these worlds’ educational potential in terms of communication (Schiller, 2002; Yee et al, 2007; Hislope, 2008; Tapsis & Tsolakidis, 2013), experiential learning (Schiller, 2002; Dickey, 2003, 2005a, 2005b; Kluge & Riley, 2008), cooperative learning and social interaction (Gronstedt, 2007; De Lucia et al, 2009; Russell, 2010), and collaborative learning (Lee, 2009; Dalgarno & Lee, 2010). The following sections will provide an overview of research in the area of education, summarising positive findings and critical issues.

2.5.1 Research on virtual worlds for education: positive findings

Much of the early accounts by researchers and practitioners working in VWs are enthusiastic and, as Bowers, Davis and Neely (2010, p.158) put it, they read “much like a frontier journal”. In the course of the past decade VW research studies have changed in their focus and approach. Some of the published articles cover specific geographical areas, with Kluge and Reily (2008) for the US, De Freitas and Neumann (2009) and Kirriemuir (2010) for the UK, Dalgarno et al (2011) and Thomassen and Rive (2010) for Australia and New Zealand. However, reviews of studies in the field can be found in Hew and Cheung (2010), Inman et al (2010), Kim et al (2012) and, more recently, Beck and Perkins (2014). This section reports on the positive aspects mentioned in the reviews by Hew and Cheung (2010), Inman et al (2010), and adds observations from studies not included in these reviews.

Already in 2003, Svensson (2003a) wrote that researchers had only just started to explore the possibilities of VWs for language learning and stated that these virtual arenas have “a great deal to offer” (p.140) and could supply a space where language, immersion

in other cultures, communication, media, intercultural meetings and role-play can all come together. Since then, most of the research on the use of VVs for education reports positive findings and conclusions. This is further corroborated in a study of the use of SL® in academia by Bowers, Davis and Neely (2010), who noted that most research articles described this environment in a positive light and found it a powerful learning tool, rich with potential for teaching and learning. In their review of VVs research up to 2008, Hew & Cheung (2010) listed the two most significant positive conclusions from the studies they took into consideration, which were: (i) the possibility to move around the 3D space and (ii) the opportunity to socialise and have simulated experiences. Also, most studies found that VVs can help students learn and that the anonymity and playfulness inherent to those environments helped interaction. In this respect, one of the learning tasks that seems to fit in perfectly in a VV, given the playful and ‘make-believe’ nature of these environments, is collaborative role-play (Vasileiou & Paraskeva, 2010). Role-play can be used with the aim of encouraging learners to “lose themselves” in the willing suspension of disbelief as they adopt their role and identify with their avatars (Dickey, 2005b). Similar conclusions were reached by Crosier et al (2002), who list the attributes of VVs for learning as: presence, real-time interaction, learning style, flexible teaching tool, and motivation.

Inman et al’s (2010) review adds to Hew and Cheung (2010) and includes studies up to 2009. The positive aspects of VVs for education that they reported are: the environment’s easiness for role-playing and for devising and putting into action group work and projects; its suitability for exploring gender roles; the possibility it gives users to create simulations that reflect real world situations and themes; and the VV potential for constructivist student-centred teaching and learning. One further consideration that came out of research was the convenience of using VVs for distance education. A similar

point had been made by the ANGEL Learning¹² Isle Steering Committee in their 2008 White Paper.

Warburton (2009) contributes to this positive perspective by listing a number of features of VWs that can support education. Warburton's list supports the findings reported by Heung and Chan (2010) and Inman et al (2010) stating that VWs (i) offer the possibility to have extended or rich interactions (between users and also between artefacts); (ii) offer the possibility to contextualise and visualise, by producing and reproducing inaccessible content; (iii) provide exposure to authentic content and culture; (iv) provide the chance to embark in individual and collective identity play; (v) offer immersion in a 3D environment, through the use of avatars and facilitated by extensive modes of communication; (vi) provide simulation in contexts that would otherwise be too costly to reproduce in real life; (vii) offer access to communities that promote a sense of belonging; (viii) afford content production (p. 421).

On the positive effects of VWs for learning, some interesting conclusions were also drawn by Molka-Danielsen (2009), in the wake of the 2007 SL® experience with Kamimo Education Island¹³. Molka-Danielsen (2009, p. 13) claims that the VW of SL® “motivates learners to research events and locations, to interact and receive feedback with other learners, and to increase understanding of the real world relationships through activities in SL”. She also notices that:

MUVEs support an empathic factor in the teacher and learner relationship. Through understanding of the experiences and sharing the perspective of others through emotion MUVEs offer the opportunity for all participants to step into the shoes of others; thus contributing to immersive experiences. (p. 15).

¹² ANGEL Learning, Inc. was an educational software company specializing in eLearning and with an active community of educators operating in Second Life®. In May 2009 it was acquired by Blackboard Inc.

¹³ The Kamimo Education Island is a SL® based island, which was used for a one year project sponsored by The Norwegian University Programme (comprising Molde University College (Norway), Kalmar University College (Sweden) and the University of Central Missouri (USA)). The aim of the project was to test and evaluate how good this environment could be as a learning platform in a lifelong learning perspective.

Hunsinger and Krotoski's work (2010) adds the collaborative dimension of VWs to this list of positive features. The authors find that VWs are ideal for group projects, shared exploration, and shared knowledge-building and that their possibility to generate custom-built tasks can provide a full situated learning experience (p. 95). Finally, looking at the potential of virtual worlds for intercultural awareness, Diehl and Prins (2008) find that the potential for cross-cultural exchanges in the virtual world of SL®, despite not guaranteeing intercultural literacy, can provide residents with opportunities to move in that direction, as 'SL residents are able to move freely in and out of virtual regions [...] and this freedom of movement creates rich opportunities for cross-cultural contact', (p. 104). In their study some participants indicated they had gained deeper cultural understanding from insider perspectives; most of them believed they had learned something about different cultures. Responses also suggested that in some cases participation in SL enhanced residents' capacity to be open towards differing viewpoints. The authors state that the students' participation in language activities in SL® had provided opportunities to "enhance second language proficiencies, competencies, understandings, attitudes, cross-cultural friendships and transcultural identities" (p.114). The potential for the development of intercultural awareness is also stressed by Ikegami and Hut (2008), who looked at the abundance of new public spheres being available in settings such as SL®, which make for a varied and variable nature of communication and increase access to all sorts of different groups and landscapes.

Later, in a study that looked at SL® as a language learning environment that could be exploited to develop intercultural awareness, Dell'Aria and Nocchi (2010) and Nocchi (2011, 2012) found that one of the VW's affordances is the possibility of exposing learners to authentic spoken language. In their study, the experience in the virtual environment had increased the learners' confidence, supported collaborative learning, and promoted the development of Intercultural Competence. A similar point is made by Sadler (2012) in his book on the use of VW for language learning. Sadler describes the

advantages that these environments can have over traditional CMC telecollaboration, especially when it comes to promoting intercultural exchanges, as they can facilitate group interaction and the performing of collaborative tasks.

2.5.2 Research on VWs for education: critical issues

Studies on teaching and learning in VWs have also highlighted some critical issues pertaining to these environments. These issues are mostly related to the technology itself; Hew and Cheung (2010) mention the inability to access the VW with older hardware, the difficulty of using it on public computers, the need for fast typing skills for text chat, and the frustration caused by unfamiliarity with the software. Similar issues were observed in Inman et al's (2010) review, combined with a lack of staff support which was lamented by many researchers. Inmam et al's (2010) recommendation for support and scaffolding for staff, when they start working in VWs, is also echoed in Moore and Pflugfelder (2010), who express their point of view as tutors and, at the same time, students in SL®. The authors stress the importance of additional pedagogical and technological scaffolding for learners and teachers in these novel spaces and suggest that "virtual spaces require a heightened awareness of scaffolding techniques", (p. 250). The peculiar position of a teacher in a VW, supporting students through the experience while being at the same moment in the same virtual space, is well described by Moore and Pflugfelder (2010), who call for careful consideration of the pedagogical adaptations that are needed when integrating virtual learning into curricula. The authors mention, for instance, the lack of proper cues available to VW teachers to the students' response to their instruction, as avatars can be a barrier that allows confused or bored students to go unnoticed.

Constant guidance and support for students is also solicited by other researchers (Schiller, 2002; Sparrow et al, 2011), while others have highlighted issues of institutional receptivity and readiness (Vogel et al, 2008; Wood, 2010). This issue has been mentioned by Wood (2010) in her doctoral thesis on the faculty perception of VW technology in 21

design colleges in North America. Wood (2010) found that major concerns were accessibility to the software due to lack of institutional support and the steep learning curve. Similar problems were noted again amongst educational institutions in Australia and New Zealand (Dalgarno et al, 2011) that reported technical issues and where staff felt the need for management support and provision of resources as well as the need for ongoing technological support. A related issue that emerged was the need for funding for virtual environment development and additional time allocation for teaching staff. A comparable situation is recorded by Özen, Atab, & Uysal (2014) among Turkey's educators working with VWs, who have a positive view of the use of these environments in teaching, but also feel that insufficient infrastructure and hardware, educators' awareness and institutional restrictions could be barriers to their use. On the other hand, a survey of SL® use by academics in the UK (Kirriemuir, 2010) found a number of technical barriers that varied extensively between different institutions, but did not hinder research and showed improvement with time.

Adding to issues due to the steep learning curve, the need for technical support and the difficulty to obtain institutional support is Damer's (Damer & Hinricks, 2014, p. 24) term: "capture of gaze". For users to properly work and interact in a VW, Damer writes, it requires constant attention and gaze on the environment. This, in an era of multitasking, may prove difficult and may have worked against the common adoption of in-world meetings, as workers prefer or need to be able to do other things at the same time. Another issue is due to the still unrefined graphics of some of the VWs. De Freitas et al (2010), for instance, mention the possible negative influence of the user's previous experience of gameplay, as "game players are used to much higher levels of fidelity and interactivity than are presently available in virtual worlds" (p. 80). Thomassen and Rive (2010), after observing students collaborating during a 14 week machinima project, reported that students found it harder to share ideas in the virtual environment, due to the

lack of complex facial expressions of their avatars. As regards media perception, in a study on the use of SL® in academia, Bowers, Davis and Neely (2010, p. 138) state:

Even though universities have been making use of Second Life since 2004 as an educational platform, this fact has received very little notice among the major media.

Finally, Warburton (2009) saw the following eight issues as barriers to the potential use of VWs for education. The obstacles he identifies in a survey of blog posts, newsgroups and the literature are: (i) Technical; (ii) Identity: Identity construction in a VW can be disconcerting and confusing for learners; (iii) Culture: Not all communities are always easy to find or to participate in, which can foster isolation; (iv) Collaboration: Cooperation and co-construction need to be scaffolded. This requires constant support in-world and use of social networking tools, like wikis and such, to support interaction between avatars; (v) Time: The learning curve of VWs and the time needed to successfully operate within them can prove time consuming; (vi) Economic issues: some VWs and some VW features require spending; (vii) Standards: the lack of open standards and interoperability between virtual world platforms makes it impossible to transfer products between VWs; (8) Scaffolding persistence and social discovery: The in-world profiles associated with each avatar provide a limited mechanism for the social discovery of others. (p. 423)

Virtual Worlds have come a long way since Warburton's article, and some of these issues have been partially solved. However, some of the more recent literature that was reported in this section is still highlighting similar problematic areas. Gregory et al (2014) write of the difficulty experienced by educational VWs that can't compete in graphics and immersive experience with game based commercial products.

They also add that most educators do not use the work done by other educators and start from scratch, with 'lacking or absent' institutional level support (p. 286). Gregory et al (2014) argue that the great amount of knowledge resulting from all the experimentation

conducted in earlier years has not brought about much sustainable activity. The factors still include “limited usability, complexity and inappropriate applications of virtual worlds that fail to maximise their affordances (p. 287).

Table 2-1 Educational potential and critical issues of VWs in the literature

Virtual Worlds	
Educational Potential	Critical Issues
<ul style="list-style-type: none"> Possibility to move around and shared exploration Opportunity to socialise and to have simulated experiences Anonymity Playful interaction Easiness for role-playing, group work and projects Possibility for shared knowledge building Suitability for exploring gender roles Potential for distance education and for constructivist student-centred teaching and learning Exposure to authentic spoken language Increase in learners' confidence Support for collaborative learning Suitability for the development of Intercultural awareness 	<ul style="list-style-type: none"> Technical problems Steep learning curve for the software Time consuming Need for constant scaffolding and support by educators Need for support of social networking tools Lack of staff support Need for pedagogical adaptations Issues with institutional receptivity and readiness Lack of management support and provision of resources Need for additional time allocation Costs Unrefined graphics Lack of visual expressions

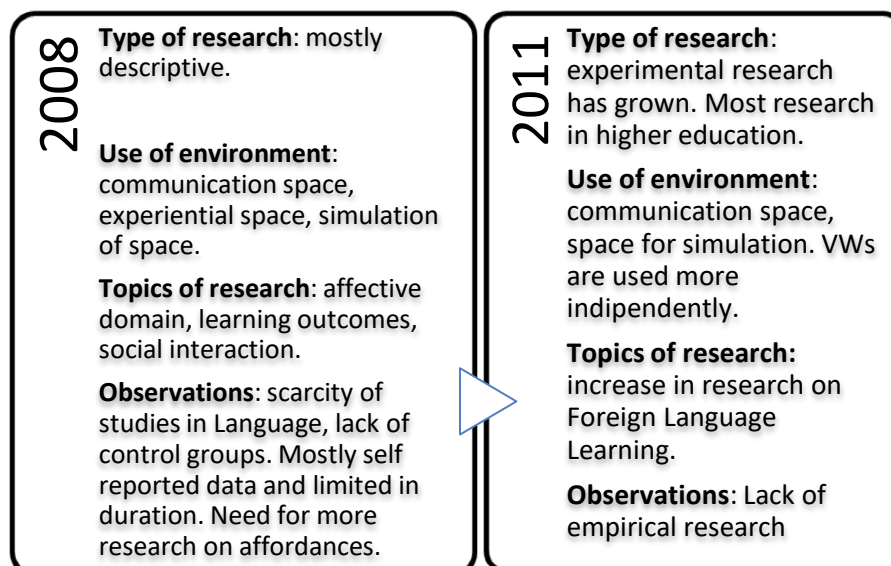
This range of arguments is summarised in Table 2-1, which also shows the potential of VWs use in education, despite critical issues which remain to be resolved. While much of the research on VWs was initially concerned with describing and observing the potential and issues related to using these environments for education, a change in the scope of research can be noticed more recently.

The following section will present these new trends in research in virtual worlds for education.

2.6 Trends of research on Virtual Worlds for education

This section identifies trends in VW research by further interrogating the literature reviews by Hew and Cheung (2010), Kim et al (2012) and, more recently, Beck and Perkins (2014). Part of Hew and Cheung's (2010) review looked at the way VWs were used, the research method and the research topic of the observed research studies. The authors found that most of the early studies had been descriptive and that the VWs had largely been used as communication spaces, as experiential spaces or for simulation of space. The main topics of earlier research were the participants' affective domain, their learning outcomes or their social interaction. As a weakness in the early studies, the authors noticed that many studies did not have a control group, were based on self-report data and were limited in duration. The amount of research in foreign language learning was one of the lowest and Hew and Cheung also noted the need for more research on the unique attributes or affordances of VWs (p. 46/47). Table 2-2 exemplifies the most notable changes in research studies on education in VWs from 2008 to 2011.

Table 2-2 Trends in research on VWs for education (2008 to 2011)



In a more recent review, Kim et al (2012) report on studies up to 2011. The authors find that recent research has used VWs more as a space for simulation than as an experiential space. Another trend shows that VWs have been used more independently and that experimental research had grown compared to descriptive research. Kim et al (2012) also found that the number of papers on foreign language learning had increased. Research on FL teaching and learning in VWs was indeed the most featured, with a high percentage of papers showing the use of VWs as spaces for communication, and suggesting that the users are naturally exposed to the target language through those environments. Research on FL teaching and learning in VWs has also increased in more recent years. Again, most of the research was conducted in the field of higher education, as was noticed in the previous review by Inman et al (2010). A considerable amount of studies, for instance, has come out as a result of national or EU transnational funded projects such as the NIFLAR project (Networked Interaction in Foreign Language Acquisition and Research, 2011-2013). The NIFLAR project researched the added values of introducing the use SL® and of video web communication in language learning (Canto, Jauregi & Van den Bergh, 2013). Other projects that have recently come to their conclusion are: TILA (Telecollaboration for Intercultural Language Acquisition), which experiments with Open Sim¹⁴, video telecollaboration and Moodle¹⁵ to foster language learning and intercultural awareness through telecollaboration (Jauregi, 2015; Jauregi et al, 2015), and the CAMELOT project (CreAting Machinima Empowers Live Online language Teaching and learning) aimed at language educators who want to learn how to create videos (machinima) in virtual worlds.

It can be useful here to add the observations coming from Inman et al (2010) in a review that included studies up to 2009. They noticed an increase of the use of VWs (SL® in particular) over the years, with the highest amount of research coming out of

¹⁴ Open Sim stands for Open Simulator. It is an open source server that hosts virtual worlds.

¹⁵ Moodle is a free, open-source software learning management system.

higher level institutions and focusing on students' engagement in learning. Over time, however, the interest of researchers has moved more toward finding an apt pedagogy for VWs and to the need for establishing valid research approaches for these new environments. This is clearly noticeable in Beck and Perkins' review (2014). The two authors provide an extensive (127 peer reviewed papers) review of research in the field with an aim to establish the research methodologies used in the literature. The results of their review show a clear new trend in the literature, as recent leading research aims seem to have focused more on the affordances of VWs, something that had been declared lacking by Hew and Cheung (2010). Two other strong research foci that Beck and Perkins (2014) note are: an interest in learning outcomes in VWs and in the instructional strategies used in those environments. The more recent study groups are larger (20 to 50 participants) than those that participated in previous studies, with the highest number of studies taking place in commercially available VWs such as Second Life® (47) and Active Worlds (31). As previously mentioned, Beck and Perkins (2014) notice a strong presence of theory building research in the field and advocate for more empirical research, which will lead to research studies on if and how the environment can be successfully used for learning, a point of relevance for this empirical study, which aims at identifying aspects of VWs that can best be exploited for language learning.

A similar consideration is put forward by Hunsinger and Krotoski (2010) who ask for a deeper understanding of VWs as places for engagement and learning and research and call for the need to step out of the simple replication of physical environments so as to really learn what these unique spaces can offer (p. 94). Savin-Baden et al (2010) as well claim that there is a need to look beyond the VWs obvious social affordances and consider their pedagogical opportunities. They see that "critical analysis and in-depth research are arising now as part of a second phase of development, in this case arguably riding in the slipstream of the first wave of technology-driven experimentation" (p. 131).

The interest for a structured and theoretically supported pedagogy for VWs is thus becoming more prominent. Panichi and Deutschmann (2012) have also argued for the importance of having more research in VWs based on a valid theoretical framework. In parallel to this, Wimpenny et al (2012) stress the importance of considering the users' frames of reference that would impact on their experience of VW learning, and claim that the "multiple perspectives that individuals bring to the learning encounter based upon prior experience, knowledge, and the influence of culture and world view" can help design a pedagogically viable learning experience (Wimpenny et al, 2012, p. 523-524). Also, they advocate the need for "sound pedagogical decisions and careful consideration about the reasons for using virtual worlds" (Wimpenny et al, 2012, p. 539). The shift in the focus of research in Virtual Worlds shows that these environments are now recognised as complex environments that need to be better understood if educational researchers want to tap into their educational potential, and this requires a drastic change of approach, as the most powerful affordances of these spaces are not being exploited (Zheng & Newgarden, 2012). Following this, Blin, Fowley, & Nocchi (2013) have proposed that the concepts of presence and affordance, as well as the spatial and temporal dimensions of VWs can be useful tools for making sense of these heavily mediated spaces as learning environments. The trend is therefore quite clear: researchers in Virtual Worlds are now showing an interest in looking at these environments using a different lens, which can incorporate the complexity of learning in VWs (Boelstorff, 2015). Consequently, there is a need for studies supported by a valid theoretical framework and for tools that can lead to a clearer understanding of these environments. This point is of direct relevance to this study, which applies an activity theoretical research framework to the analysis of what happens in VWs during the language learning experience by means of the construct of affordance.

2.7 Summary

In this chapter Virtual Worlds have been defined following Bell's (2008) description as computer-based, synchronous, persistent networks of people, represented as avatars, and adding generative capability as an important feature of these environments. VWs have been described as contemporary heterotopias of space and time that give their users the possibility to be and be active in different places and different times while, at the same time, being in their own physical world as well. This feature of VWs, and the intravirtual and extravirtual effects of the actions that take place within them, bring to the fore the importance of the constructs of immersion, presence and social presence, which become essential to research on VWs.

Immersion and presence have been described in the chapter as social and cultural psychological constructs. Immersion is construed, following Witmer and Singer (1998, p. 227) as a psychological state in which "we perceive ourselves to be enveloped by and interacting with an environment". Presence is tightly related to immersion and the sense of presence varies for each individual as it is the result of each individual's experience and history and is influenced by human action and by the environment the individual is in. Presence has been defined as "the intuitive perception of successfully transforming intentions into action" (Riva et al, 2011, p.25) and social presence as the "perception of an enacting other" (Riva, 2009, p. 160). At the opposite of a total presence we situated the concept of Virtual Corpsing, the condition derived from a breakdown in the feel of immersion and the sense of presence. This conceptualisation of immersion and presence highlights the key role of the physical environment and of our actions, for our perception. As residents in a VW "we need seamless flow between the virtual and the physical so that we do not differentiate between them" (Damer & Hinrichs, 2014, p. 27). A deep sense of immersion is connected to a high sense of presence, which, despite not being clearly linked to better performance, can change the user's experience greatly.

In the second part, the chapter provided a literature review of educational research in VWs, summarising its positive findings and critical issues. The literature was also investigated for trends in the course of the past decade and showed an increase in studies on FL learning and teaching in VWs and more studies looking into the affordances of these environments for education. The focus of research has also changed over the years, with more recent research studies advocating for valid theoretical frameworks.

Chapter Three follows on this call from the research community by presenting the construct of affordance as a useful concept for understanding what happens during the language learning activity in a virtual world. The concept of affordance will be conceptualised by means an activity theoretical approach, which is argued to be an effective theoretical lens for the investigation of complex and multi-layered learning activities in computer-mediated environments, such as the one analysed in this study.

Chapter 3 Affordances of virtual worlds for language learning in an activity theoretical framework

Chapter Two described Virtual Worlds and gave an overview of VW research and its development in the past decade. VWs have been depicted as complex online environments that, by virtue of their specific features (synchronicity, persistency, use of avatars, high fidelity and generative capability) offer the possibility of immersion, of extended and rich interactions between users and with artefacts, and a strong potential for learning. Researchers seem to agree that these features “make virtual worlds desirable virtual spaces for collaborative play, learning and work” (Messinger, Stroulia, & Lyons, 2008, p. 5) and that the possibility to interact with objects and events during the VW simulation makes the tasks more real and may foster collaboration (Cobb & Fraser, 2005). In order to understand what these unique spaces can offer and properly exploit them for learning, a conceptual lens is required that can incorporate the complexity of learning in 3D virtual environments (Zheng & Newgarden, 2012; Blin, Fowley, & Nocchi, 2013; Boelstorff, 2015). The purpose of this study is to examine what happens while students are engaged in language learning in virtual worlds and to identify the affordances offered by these environments for language learning. Consequently, this chapter presents the concept of affordance, from its introduction by the perceptual psychologist Gibson (1977, 1979), through its adoption in the field of Human Computer Interaction (HCI) and by the Information and Communication Technology (ICT) community of educators. It then presents a literature review of research studies on the affordances of virtual worlds followed by a critique as to how the concept of affordance has been formulated in this field of study. Finally, this chapter proceeds to present activity theory as a theoretical framework by which affordances can be conceptualised

and investigated by means of an analysis of the actions that learners of a Foreign Language (FL) undertake while working at FL tasks in a virtual world learning environment.

3.1 The concept of affordance: from perceptual psychology to Human Computer Interaction

James J. Gibson first introduced the idea of affordance in his 1977 article “The theory of affordances” and then explained it in more detail in his book *The Ecological Approach to Visual Perception* (1979). Gibson developed an ecological approach to psychology; he considered the ecosystem where the animal is placed critical to the accomplishment of practical and cognitive actions and his idea of affordance is grounded in the animal’s direct perception. An affordance is, for Gibson, an emergent property of the environment with respect to an organism in that environment. Such property, if and when perceived by the animal, can lead to action. Action and perception are in this view linked through objects that afford certain action possibilities for particular species and are unique for that species. In Gibson’s words:

The affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill. [...] something that refers to both the environment and the animal in a way that no existing term does. It implies the complementarity of the animal and the environment. [...]. They are unique for that animal (Gibson, 2015 edition, p. 119)

An example of an affordance in Gibsonian terms is offered by a chair. As the author explains, some cultures of the human species have the habit of sitting down, which is distinguished from squatting or kneeling down. For those cultures, a surface that offers support at a knee-high height above the ground can be used for sitting on. If this surface is perceived as *sit-on-able* it will be called a *seat* and it will be sat on. This same surface, however, does not offer this affordance to a child, for whom a knee-high height is not the

same as for an adult and who will not perceive the *seat-on-ability* of that surface. Hence, the same environment may offer varying affordances to different animals and to the same species at different stages of its evolution (Gibson, 2015, p. 120) and affordances are relative to the action capabilities of the particular animal. Affordances can also carry a potential for “good or ill” (Gibson, 2015 p. 119), for positive or negative action, as, for instance, a simple object like a stone, which can be used to perform positive and/or negative actions. All the affordances of an object are consistent with one another and do not exclude one another (Gibson, 2015, p. 126). Also, affordances rely on visual perception, in an ecosystem where the animal must perceive the affordance directly, by discriminating all the information arriving to its senses, on a two-way mode: “An affordance points both ways, to the environment and to the observer”, (Gibson, 1979, p. 121).

Gibson’s formulation of affordance introduced the innovative notion that every object has potential(s) and made it possible to step out of the idea of the existence in our world of ‘thingless properties’ or ‘propertyless things’ (Turvey, 1992, p.176), which extended the limits of previous research paradigms. In his introduction to the latest edition of Gibson’s *The Ecological Approach to Visual Perception* (2015) Mace writes that “Gibson’s work has stirred the pot in many scholarly disciplines” (Gibson, 2015). Notwithstanding this, Gibson’s views have been interpreted differently and the concept of affordance has been so widely adopted both by the HCI community and in many studies of ICT in education that, according to Rambush and Susi (2008), the popularisation of its use has led to the “devaluation” of the term (Rambush & Susi, 2008, p. 84) and of its meaning. Also, a number of researchers in HCI and in ICT in education have highlighted Gibson’s lack of consideration of the personal and cultural component of the human ecosystem and for the significance of high cognitive issues, such as culture, language, or knowledge (Albrechtsen et al, 2001; Kennewell, 2001; Bærentsen & Trettvik, 2002;

Kirschner, 2002; Brown et al, 2004). This critique, particularly relevant to educational settings such as the one investigated in this study, is, therefore, addressed in this chapter.

The cognitive scientist Donald Norman (1988, 2013) introduced Gibson's concept of affordance into the area of Human Computer Interaction, specifically with reference to object design. Norman recognised Gibson's brilliance in the fact that he "[focused] attention on the rich amount of information present in the world" (Norman, 2013, p. 12) and in *The Psychology of Everyday Things*¹⁶, he stated the value of affordances, as they "represent the possibilities in the world for how an agent can interact with something" (Norman, 2013, p. 18). Norman's view on affordances was clarified and modified over time since the first edition of his seminal work and he has contributed to promoting this concept, highlighting its importance for design. Differently from Gibson, Norman's focus is on perceived affordances. Any other affordance of the object, if not perceived, is not relevant to the usability of that object. Norman (1988, p. 9) states:

the term affordance refers to the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used.

In a later article, Norman clarified his position and reiterated his interest in perceived affordances by writing:

Alas, yes, the concept has caught on, but not always with complete understanding. My fault: I was really talking about perceived affordances, which are not at all the same as real (Norman, 1999, p. 39).

For Norman, a perceived property may or may not be an actual property, but it can be an affordance, as long as it is perceived as an affordance by the user. In this Norman deviates from Gibson, as the individual's perception becomes what may characterise the existence of the affordance (McGrenere & Ho, 2000, p. 2). The focus on perception

¹⁶ *The Psychology of Everyday Things* was first published in 1988. It was then revised and published in 2013 with the title *The Design of Everyday Things*.

brings to the fore the user's past knowledge and experiences, an aspect that had not been considered in Gibson's theory, for whom:

the theory of information pickup does not need memory. It does not have to have as a basic postulate the effect of past experience on present experience by way of memory (Gibson, 2015, p. 243).

For Norman, on the other hand, affordances result “from the mental interpretation of things, based on our past knowledge and experience applied to our perception of the things about us” (Norman, 1988, p. 219).

Since Norman's introduction, affordances have been regarded as a handy parameter in a field of most relevance for this study, that of designing and assessing software and software applications in HCI, albeit with a diversity of explicit definitions and implied meanings (Brown et al, 2004), which have contributed to an ambiguity that needs to be clarified (McGrenere & Ho, 2000; Kaptelinin & Nardi, 2012). The following section gives an overview of the re-conceptualisation of affordance by HCI researchers who take an activity theory standpoint. Their position is of interest in this study, as it grounds the concept of affordance in the cultural, social and historical context of the technological tool and of the technology-mediated environment.

3.2 Human Computer Interaction: affordances of computer mediated environments

Activity theorists in HCI consider Gibson's conceptualisation of affordances as limiting. Gibson had seen affordances as clues in the environment that indicate possibilities for action and are perceived in a direct, immediate way by the animal. Activity theorists find that Gibson's exclusive focus on the animal's perceptive relationship with its ecosystem ignores the human environment, which is rich with the mediation of high-level representations (such as language or symbols) and where the user's actions are not only

products of perception but also of cognition, intentions and values (Albrechtsen et al, 2001; Bærentsen & Trettvik, 2002; Kaptelinin & Nardi, 2006, 2012). Norman's focus on usability is also criticised as being too restrictive by these researchers, who are, overall, likely to favour Gibson's original idea, although advocating the need for an expansion of Gibson's construct of affordance (Albrechtsen et al, 2001; Bærentsen & Trettvik, 2002). Following this line of argument, Albrechtsen et al (2001) propose a conceptualisation of affordance that recognises the significance of high level cognitive issues, such as culture, language or knowledge. The authors associate Gibson's idea of affordance, based on direct perception, with the lowest operational level in a human activity and criticise Gibson for not taking into consideration the interconnection between the social-historical and the evolutionary-biological aspects of these operations. Gibson is also criticised for not considering the variability of human actions, which can be influenced by motivation, by physical and psychical differences between individuals, and also by the likelihood of discovering new action possibilities during use. On the other hand, Albrechtsen et al (2001) regard Norman's attention to cultural knowledge and previous experience of the user as significant, but still too reductive. This view is shared by Bærentsen and Trettvik (2002), for whom HCI has "substantial cultural, symbolic and technological components of cultural-historical origin." (p. 54). Thus, according to Bærentsen and Trettvik (2002) cultural-historical affordances originate from an environment adapting to human needs and are "nested in cultural-historical forms of societal praxis" (p. 58). Bærentsen and Trettvik introduce the idea of *learning affordances*, where learning to perceive an affordance in a tool is immersed in a social context; "[...] learning to perceive affordances of artefacts [...] takes place in a social setting and a culturally-historically modified environment [...]" (p. 58). Learning is no longer just a matter of the animal adapting to the environment, as it was for Gibson; for these scientists it has a cultural-historical and educational dimension, which is also reflected in how affordances are construed.

These positions are echoed by Kaptelinin & Nardi (2006, 2012), who also argue for a stronger stand and a redefinition of the concept of affordance in HCI. Kaptelinin & Nardi (2006) state that Gibson's idea of affordance does not have the necessary theoretical conditions to be extended beyond its original scope, as it was not developed to describe technologies or to deal with the social aspect connected with the use and production of tools. The authors find that, even if Gibson's assumption that "natural environments and cultural environments should not be separated from one another" (Gibson, 1979, p. 968) suits an activity theoretical approach, it is still limited to low-level manipulation with physical artefacts and needs to be enriched. Consequently, Kaptelinin & Nardi (2006, p. 82) state:

From an activity theory standpoint, the notion of affordances needs to be extended to human activity as a whole, not just the level of operations.

This definition stands in contrast to Gibson's definition of affordances as independent of the needs of the perceiver and of Gibson's disregard for a distinction between humans and animals that leaves out all cultural, symbolic and technological components of human cultural-historical origin. Kaptelinin and Nardi (2012) feel that expanding Gibson's view will not be enough because "the notion has its own inherent contours, and cannot be 'upgraded' without being transformed into something it is not" (p. 971). Conversely, they advocate a redefinition of the term, based on a 'non-Gibsonian' concept of *affordances of technology*; where affordances are seen as "action possibilities offered by the environment to the actor" (Kaptelinin & Nardi, 2012, p. 971).

This mediated action perspective is 're-grounded' in a Vygotskian sociocultural approach, in which technology is viewed as a culturally developed tool mediating activity of human beings and handled to interact with objects in the environment. The dynamic nature of tools and their connection with the user and the context are now accounted for and in this perspective tools can change during mediation and, importantly, so do their

affordances. Also, a user who recognises and understands the affordance of a tool will recognise the tool's predefined purpose, which can influence how this user experiences his or her needs. In general, the mediated action perspective takes into consideration the intricacy of technological mediation and argues that affordances “emerge in a three-way interaction between actors, their mediational means, and the environments” (Kaptelinin & Nardi, 2012, p. 974).

The mediated action perspective makes the taxonomy of affordances much more varied, as it comes to include different types of indirect, auxiliary affordances, emerging through the relations within “webs of mediation”¹⁷. The activity theory conceptualisation of affordances for HCI shows similarities to views expressed by some researcher in ICT in education. Researchers in the field of ICT in education used the concept of affordance with a diversity of explicit definitions and implied meanings (Torenvliet, 2003; Brown et al 2004). The next section provides an overview of voices from researchers in this field, who have discussed and recalibrated the concept of affordance for an analysis of these complex learning environments. The overview sets the backdrop against which studies in the affordances of virtual worlds for education have been conducted and shows the need for a clear conceptualisation of this construct in the field this research study is conducted.

3.3 ICT in education: affordances in the learning environment

As Gunawardena and Mc Isaac (2004) write, the question that should be posed when considering learning in an ICT environment is not which of the different media work best but “how best to incorporate media attributes into the design of effective instruction for learning” (Gunawardena & McIsaac, 2004, p. 378). The variables that work together at

¹⁷ The idea of a web of mediation was introduced by Bødker and Andersen (2005) who argue for the need to extend the concept of mediation to deal with the complexity of multiple mediations that surrounds us. They see mediation as heterogeneous (comprising also of conversations and entire activities); dynamic (changing in time) and consisting of “webs of mediators, either used simultaneously, connected in chains, or organized in levels, either due to different levels of automation or to different purposes of the activity. [...] most activities involve instrumental (tools, machinery) as well as semiotic mediation (displays, conversation).” (Bødker & Andersen, 2005, p. 354).

creating a positive learning experience are many and each medium comes with different attributes that may affect its instructional impact (Lockee, Moore, & Burton, 2001, p. 61); it becomes, therefore, important to look at such attributes, instead of generalising the impact of the medium as a whole. In this respect, the concept of affordance can be useful and it has also been recognised as important in the field of new media psychology (Riva, 2004; Shyam Sundar & Limperos, 2013), where Riva (2004) views affordances as the possibility to put into action one's intentions and sees them as one of the conceptual tools that allow a deep psychological analysis of new media, together with presence and social presence (Riva, 2004).

The concept of affordance crossed over from HCI into the application of ICT in education and in the analysis of educational tasks (Laurillard et al, 2000; Dickey, 2003; Brown, Stillman, & Herbert, 2004; Conole & Dyke, 2004; van Lier, 2004, 2010; Kennewell, 2001; Hollins & Robbins, 2008; Bower, 2008; Kennewell, et al, 2008; Dalgarno & Lee, 2010; Hammond, 2010; Orwin, 2011; Blin et al, 2013). There is indeed an agreement in the research community that the concept of affordance can assist in clarifying aspects of the intricacies of teaching and learning in ICT environments. Thus, affordances have been effectively used in studies of ICT in education to relate attributes of different technologies to their potential value in the learning process and for evaluating the impact of ICT on teaching and learning. Laurillard et al (2000), for one, argue that educators should ask themselves what the affordances of the educational medium are for the learner and whether the learner would perceive them. Laurillard et al (2000) follow Gibson in considering that an affordance relates to the relationship between the learner, in this case the learner/perceiver, and what is being perceived, and state that:

Affordances describe how the interaction between perceiver and perceived works – and that is exactly what we need to understand in educational research. (Laurillard et al, 2000, p.3)

There is however no complete agreement on the definition of what an affordance is and the research community in ICT in education shows a lack of unity in the definition of this concept (Hammond, 2010). Some researchers have proposed a re-elaboration of Gibson's theory, adapting it to the field of education (Kennewell, 2001; Brown et al, 2004; Viezzer & Nieuwenhuis, 2005; Hammond, 2010). Others, like Kirschner (2002), have adopted Norman's stance or have provided a variety of different definitions (Salomon, 1993; Watson, 2003; Wijekumar et al, 2006). Some have looked at affordances of ICT in education through the lens of activity theory (Conole & Dyke, 2004; Day & Lloyd, 2007; Morgan, 2007) or the ecological view of learning (van Lier, 2004; Darhower, 2008). All, however, agree on the context-sensitivity of learning and on the complexity of learning environments, where many different variables coexist and impact on the learning process (Kennewell, 2001; van Lier, 2004; Day & Lloyd, 2007). This position leads to the view that the original Gibsonian conceptualisation of affordance needs to be recalibrated, as it may not be sophisticated enough for an analysis of culturally determined responses, such as those taking place in educational settings (Kennewell, 2001; Kirschner, 2002; Wijekumar et al, 2006; Day & Lloyd, 2007; Hammond, 2010). If, indeed, in Gibson's theory, learning is viewed in an evolutionary sense, then, when considering learning in human society there is a need to account for a much richer view, as explained by Brown et al (2004, p. 125):

The learning process is much more complicated than directly perceiving an object by its affordances. We need to perceive the affordances of technological learning environments but we cannot do this merely by looking.

Affordances in an educational environment, therefore, cannot be isolated from the features of that environment, like the resources available to the educator, the role, previous experiences, and motivation of the students and the role of the educators themselves (Kennewell et al, 2008). All of these considerations are of direct relevance to

this study as any use of ICT in an educational environment does not act independently of all these factors.

Kirschner (2002) and Kirschner et al (2004) address the issue of conceptualising affordances in an educational environment following Norman's approach. For Kirschner, like Norman, the focus are 'perceived affordances'; in a learning environment it is important to take into consideration *how* and *if* affordances are perceived and to be aware of their relationship with the user. However, Kirschner expands on Norman's perspective and argues for the importance of considering the cultural constraints that can act upon the affordances of a medium, such as the conventions regarding that particular affordance and its use by different groups, together with the cultural and material context in which that behaviour takes place (Kirschner, 2002). Consequently, for Kirschner affordances are:

the perceived and actual fundamental properties of a thing that determine how the thing could possibly be used (Kirschner et al, 2004, p. 49).

Kirschner also provides a definition of educational (Kirschner, 2002) and social affordances (Kirschner et al, 2004) which have been accepted by others in the ICT in education research community (McLoughlin & Lee, 2007; Girvan & Savage, 2010; Tan et al, 2012). Educational affordances for Kirschner must support or anticipate the learning intentions of the users. They are:

the relationships between the properties of an educational intervention and the characteristics of the learner [...] that enable particular kinds of learning by him/her (Kirschner, 2002, p. 19).

Social affordances in an educational environment are defined by Kirschner as:

aspects of the online learning environment that provide social-contextual facilitation relevant to the learner's social interaction (Kirschner et al, 2004, p. 51).

Social interaction is indeed viewed in as a key element in FL learning (Mackey, 1999; Swain, 2000). Thus, affordances that facilitate social interaction are essential (Kirschner, 2002; Kirschner et al, 2004, Kreijns et al, 2002). Namely, when writing about the theory of online learning, Anderson (2004) states that the greatest affordance of the web for educational use is “the profound and multifaceted increase in communication and interaction capability” (Anderson, 2004, p. 42). Also, after reporting a body of research in Computer Supported Collaborative Learning (CLCS) evidencing low learning performances, poor learner satisfaction and, sometimes, disappointing collaboration, Kreijns et al (2002) felt that the results could sometimes be blamed on unachieved or only partially achieved social interaction; analysing the social affordances of the educational environment, they claim, can help in finding solutions to such problems. This is a point of relevance to this study, which investigates language learning in a social environment and through social interaction.

Social interaction can also create access to different affordances. In this respect, in a study of affordances in ICT in science learning, Webb (2005) relates that the same educational environments can enable different affordances for different learners and that the perception of an affordance may depend not only on the information available, but also on the person’s disposition and behaviour:

the other resources, teachers and other students in the learning environment can provide affordances, increase the degree of ICT-based affordances and provide more or clearer information about affordances that are provided by ICT (Webb, 2005, p. 707-708).

Day and Lloyd (2007) corroborate this, indicating that affordances of ICT do not emerge for all learners, but seem to relate to different student characteristics, such as prior knowledge and skills, learning styles and motivation, or to the physical environment and the attitudes of the teacher. They state:

affordances are [...] products of a whole learning context, of which online technologies are an integral part, rather than being inherent properties of the

technologies in isolation from the context in which they are used (Day & Lloyd, 2007, p. 19).

It is also important to bear in mind that some affordances may have possible negative effects on certain users. Wijekumar et al (2006), presenting the results of two studies on ICT in classes of children and undergraduates, postulated that some affordances of computers could be one of the causes for the minimal, or sometimes negative, effects of the use of technology-enhanced learning environments. The authors noticed that a primary affordance of computers for their sample population was that of a gaming and communication tool. During the course of the study they eventually found that this pre-existent idea of computer use led their participants to play games and engage in Instant Messaging during the learning task, sometimes at the expense of their learning. Wijekumar et al's (2006) results show the importance of taking into consideration the user's previous experience with a tool and the expectations that users have of the affordances of a particular tools.

Hammond (2010) comes to a similar conclusion when he states that physical and symbolic properties of technology can make affordances relevant in different ways to the way people use that technology. Hammond's view of affordances is based on a re-elaboration of Gibson's initial concept, and it is situated in a learning environment. Namely, for Hammond, like Gibson, (2010) affordances are there, whether they are perceived or not. Hammond (2010, p. 2016) defines an affordance as:

the perception of a possibility of action [...] provided by properties of, in this case, the computer plus software. These possibilities are shaped by past experience and context, may be conceptually sophisticated and may need to be signposted by peers and teachers. However, they may, drawing on intuition and deduction from user accounts, be 'perceived directly' [...]. Affordances are always relative to something and, in the context of ICT, relative to desirable goals or strategies for teaching and learning.

Hammond (2010) stresses how these physical and symbolic properties of the medium can have a strong impact on the user, who, in a learning situation, may need to be directed to

them. The interface of a certain kind of software, for example, being game-like, might not be recognised by someone who has never played a game before. Or, it could deter users who do not enjoy playing games. Hammond's definition seems to highlight well the social, cultural and historical aspects of the educational experience during learning.

Researchers following an activity theoretical framework add to Hammond's view by also highlighting the central role of the social, cultural and historical aspects of the mediating artefacts that are used in the learning experience and which, in an ICT educational environment, also comprise the technology used for learning. Morgan (2007, p. 14) states that affordances are bound to context, activity and actors and that:

the same tool in a different context, or used in a different activity, or used by a different individual, may have a radically different set of affordances.

Morgan argues that, in order to be able to fully exploit the tools we use, it is important to understand their historical nature and structure. The centrality of context during interaction is also highlighted by the ecological approach to certain disciplines, such as psychology (Young, 2001), social interaction (Gaver, 1996) and language learning (van Lier, 2004). The next section examines the ecological view of language affordances, which is particularly relevant for this study of language learning.

3.3.1 Language affordances in an ecological perspective

Ecological psychology sees the learner as a 'detector of information' (Young, 2001), who moves and interacts in the environment and dynamically perceives the information that is present in that environment and changes his/her behaviour accordingly. This interaction is dynamic and action is an important parameter. In this view, affordances are, to Young (2001, p. 171), "possibilities for action", but they are not there for all agents all the time, as their perception depends on the agent's skills and abilities to act. Also, in an ecological approach, social behaviour and interaction are embedded in and shaped by the material context in which they take place. In this sense, affordances exist for social interaction as well, not just for individual action (Gaver, 1996, p. 114). Language learning happens

through interaction and the ecological perspective sees the learning process “not in isolation, but within the broader context of students’ concerns, attitudes and perceptions” (Tudor, 2003, p.10). In this perspective, language affordances are defined by van Lier (2004, p. 95) as “relations of possibility between users” that emerge through interaction and are “action in potential” (van Lier, 2004, p. 92). Affordances have, according to van Lier (2004) three defining features:

- (i) they offer the learner a possibility for action;
- (ii) they are contingent to language and specified in language; that is, linguistic affordances are picked up if and when they are relevant to the learner at a particular time;
- (iii) when picked up, affordances serve to promote further action and lead to more successful levels of interaction.

In van Lier’s (2004) view the language learner who is participating in a linguistic event is exposed to a large variety of affordances. Indeed, the context in which the learner is immersed provides him/her with many ‘things to talk about’, that is, “semiotic resources” (2004, p. 81) that can stimulate further actions and can therefore stimulate the *emergence* of language. The concepts of emergence and affordance are seen as related in the ecological approach to language learning and the idea of *emergence* as a reorganisation of “simple organisms or elements [...] into more complex, more intelligent systems” (van Lier, 2004, p. 80) is relevant to this study into the affordances for language learning. Emergence can take place in language in many different ways, from the emergence of the use of certain phonemes in a foreign language, to the emergence, through trial and error, of more complex grammatical structures and it can be stimulated by the presence, and emergence, of linguistic affordances. Van Lier’s conceptualisation of linguistic affordances seems to answer the concerns coming from the field of ICT in education, as it considers the contingency of affordances to context and actors.

To conclude, the concept of affordance has been presented so far as central to ICT in education and foreign language learning. It is clear that there is an agreement on the importance of defining this construct in such a way that includes the richness of the context human interactions take place in and the complexity of the personal history of every person. The positions offered by Morgan (2007) for educational affordances and van Lier (2004) for language affordances (Section 3.3, p. 52) seem to reconcile well with the voices heard from the field of HCI by activity theory researchers. The next section will present an overview of studies in VWs that have adopted the construct of affordances. As has happened in other disciplines, VW researchers who have specifically looked at the educational affordances of VWs do not all clearly define this construct or adopt different approaches, as can be seen in this review of the literature in the field.

3.4 Affordances of virtual worlds for learning

Similarly to the field of ICT in education, studies in the educational affordances of virtual worlds adopt a varied approach to the conceptualisation of this construct. In some cases, the term affordance appears to have been employed as a synonym for a feature of the VW that can be used for pedagogical purposes. Henderson et al (2012) are an example of this approach. In a synthesis of research studies on language learning in VWs, the authors list eight key affordances that they identify from previous research and out of their own experience as teachers in VWs. These affordances are: (i) affective filter; (ii) persistent environments and records, (iii) physical and linguistic co-presence, (iv) avatar control and learner autonomy, (v) the value of text interactions, (vi) mediated environment, (vii) context sensitive interactions, and (viii) body language (Henderson et al, 2012, p. 402-403). Similarly, Panichi and Deutschmann (2012), in their chapter on language learning in virtual worlds, appear to use the term affordance as a synonym for a feature of the VW. The authors list voice chat and text chat as synchronous communicative affordances of

most virtual worlds (Panichi & Deutschmann, p. 213). Further, they identify multimodality and the possibility that virtual worlds offer to create digital objects and manipulate them while collaborating in the environment, or for exploring the environment together, as affordances for telecollaboration.

The verb *to afford* and the term *affordance* are also extensively used in the papers published in the proceedings of the Researching Learning in Virtual Environments conference in 2008 (RELIVE 2008); however, no clear definition of the concept is offered by the different authors. Amongst these, Hollins and Robbins (2008) propose a framework of educational affordances of Second Life®, as a basis for future studies on the educational potential of VWs. The authors list five educational affordances of SL®, but do not define the construct and appear to use the verb to afford as an equivalent to *to offer*. The five educational affordances of SL® identified by Hollins and Robbins are: (i) Identity: VWs allow learners to experiment with identity, to examine issues of identity and persona, and protect pseudonymity; (ii) Space: VWs afford the potential to explore and create a variety of spaces, which can offer immersive experiences; (iii) Activity: in VWs students are engaged in goal-oriented behaviour, and interact continuously, which affords the co-construction of spaces and shared texts and the ‘construction’ of the look of an avatar; (iv) Tools: tools like scripting, chat and audio facilities afford building, sharing accessing information; (v) Community: VWs can be used for community development activities (Hollins & Robbins, 2008). Identifying these affordances, the authors conclude, will form the basis for future studies on a pedagogy of VWs.

One of the first to provide a definition of affordance in a study of VWs is Dickey (2003, 2005a, 2005c), in her research on the use of Active Worlds¹⁸ for a constructivist pedagogical approach (2003, 2005a) and, later, in a comparison of Active Worlds and

¹⁸ActiveWorlds: one of the first VWs with avatars. It had text chat as the main communication tool.

Adobe Atmosphere as interactive learning environments (2005b). Dickey refers to both Gibson's and Norman's positions and conceptualises affordances as the relation between the user and the environment that "constructs the possibility for certain behaviour" (Dickey, 2003, p. 107). In her study Dickey examines a number of tools of the VWs she is investigating and uses the concept of affordance concurrently with the idea of constraint to better understand how these tools can be used for the design of educational tasks and the attainment of the educational goal. Her conclusions are that the discourse tools of Active Worlds afford peer support, role reversal and opportunities of meaningful discourse (Dickey, 2003, p. 117) albeit not at the same level as Virtual Reality environments. Also, she highlights an important social affordance of virtual worlds, writing:

Three-dimensional virtual worlds [...] do, however, afford multi-user discourse options for geographically distant learners (Dickey, 2003, p. 118).

While Dickey's view of affordance is a 'possibility for behaviour', McLoughlin and Lee (2007) describe it as an action that can be performed. Investigating the affordances of social software for learning the two authors define affordance as:

an action that an individual can potentially perform in their environment by using a particular tool [...] and refers to any application that enables a user to undertake tasks in their environment, whether known or unknown to him/her (McLoughlin & Lee, 2007, p. 666).

McLoughlin and Lee's position is however somewhat confusing, as they deny that actions such as typing or editing posts in a blog are affordances and state that these actions enable the affordances of idea sharing and interaction. Also, McLoughlin and Lee (2007, p. 666) borrow Kirschner's (2002) definition of educational affordances as "the relationships between the properties of an educational intervention and the characteristics of the learner that enable certain kinds of learning to take place" and list the VWs

affordances for pedagogy as: (i) connectivity and social rapport; (ii) collaborative information discovery and sharing; (iii) content creation; (iv) knowledge and information aggregation and (v) content modification (p. 667). Further, they argue that social software affords the ability to shape the learner's own personal learning style and explore his/her own identity.

Ramondt (2008) has a different position to those described above. In a study comparing SL® and the online multiplayer game World of Warcraft, Ramondt (2008) describes affordances as a series of *activities* that can take place in the virtual environment, and details their purpose and product in terms of educational objects or learning tasks. The author identifies the following activities in SL®: coming together, meetings, co-location, events; displays, exhibits, stylistic locations; performance; role play, scenarios, dramatisation; design, using the environment as a design tool; simulation and data visualisation; programming; and research. Dalgarno and Lee (2010), on the other hand, use the term *benefits*; affordances are “the theoretical learning benefits of 3-D VLEs” (Dalgarno & Lee, 2010, p. 19). The authors list five learning affordances of virtual worlds and propose that these environments show “the potential to be used to facilitate learning tasks that lead to the development of enhanced spatial knowledge representation of the explored domain” (p. 18). They “can be used to facilitate experiential learning tasks that would be impractical or impossible to undertake in the real world” (p.19); and to “facilitate learning tasks that lead to increased motivation and engagement” (p. 20). Also, VWs can be used for tasks “that lead to improved transfer of knowledge and skills to real situations through a contextualisation of learning” (p. 21). Finally, these environments can be used for tasks that produce “richer and/or more effective collaborative learning” (p. 23).

The ecological view on affordances has been adopted by Zheng et al (2009). The authors argue for the centrality of using this construct to examine interculturally mediated

communication in new technologies. Zheng et al (2009, p. 493) define affordances as “properties of the environment” that, together with the “properties of the individual” codetermine behaviour in an environment. The authors note that virtual conversation in a VW has the affordance of being persistent, as it leaves a useful trace for learners to “reread, recheck, and reflect upon their own language use” (p. 505). Also, they note the affordances offered by the use of avatars, which can provide a set of cues, compensating for the lack of visual cues in virtual interaction. In a later study of VWs from the point of view of distributed language, Zheng and Newgarden (2012) see that these environments provide plenty of affordances for language teaching and learning in situ, compared to the traditional classroom setting.

[...] in terms of affordances for engaging students in embodied, socioculturally diverse, and embedded activities with others using the L2, or in real time interaction with native speakers of the L2, many 3D avatar-based multiplayer virtual worlds have more to offer (Zheng & Newgarden, 2012, p. 15).

The authors argue that the avatar’s affordances allow for agency and access to multiple possibilities of participation in a way that other social media do not. This, together with affordances for co-presence and co-action, can push language learners to attune quickly and makes these virtual environments more similar to real life. According to Zheng and Newgarden (2012), a study of the affordances of VWs will also have to take into consideration the fact that in this type of online environment the boundaries between the tool (the technology or the avatar) and the body are blended. The VW user is placed between the physical and the real world, and “the traditional view of the separation of cognition and communication, mind and body, and body and world falls short in explaining how learning takes place in a 3D space” (Zheng & Newgarden, 2012, p. 19). It was argued in Chapter Two that the researcher working within a VW will have to make sure that the physical environment in which the subject is placed is not overlooked, as users immersed in the VW are also placed in their own physical world and can avail of the affordances for learning that are present in that environment. The context in which the

learning activity takes place is therefore crucial to the development of that activity and is a point of relevance for this study of what learners do in a virtual world.

Although providing a useful list of potentials, this section shows that the research discussed above does not present a unified approach to the definition of affordance and does not identify, beyond a handful of examples, the contexts in which the affordances for VWs might best be realised. Summarising the findings considered in this section, however, the educational affordances highlighted by research in this field, can be outlined as the possibility for:

- exploring domains and environments of different types;
- developing spatial knowledge and visualization of such domains (inaccessible or imaginary environments);
- simulating through role-play and experimenting situations that would be impractical or impossible otherwise. Role-play-ability can also lead to interesting educational tasks on identity, roles or genders;
- interacting, connecting and socialising;
- engaging in individual and collective identity play;
- co-constructing and collaborating;
- engaging in collaborative learning with the possibility to access and share information through synchronous discourse.
- engaging in cross-cultural exchange with different communities and being exposed to authentic language and culture and interactions;
- visualising and contextualising through immersion in the virtual environment.

It is agreed (van Lier, 2004; Morgan, 2007; Hammond, 2010) that the perception and emergence of the affordances required for the success of the educational activity depends on a variety of factors: the immersion of the subject, his/her sense of presence and the design clarity¹⁹ of the affordance. In order to investigate these affordances and to move beyond the mere listing of potentials and negative aspects of virtual worlds for learning it is paramount that the construct of affordance is clearly conceptualised. The following sections introduce, firstly, activity theory as a conceptual lens for the investigation of computer-mediated learning environments such as the virtual world investigated in this study. Finally, this chapter proceeds by revisiting the concept of affordance using an activity theoretical approach and by grounding it in a developmental process of the language learning activity.

3.5 A theory for understanding learning in computed mediated environments, cultural historical activity theory (CHAT)

Activity theory has been used as a valuable theory in many studies of learning in computer-mediated environments (see, among others, Roebuck, 2000; Lantolf & Pavlenko, 2001; Nelson & Kim, 2001; Engeström, Engeström, & Suntio, 2002; Issroff & Scanlon, 2002; Blin, 2004, 2010, 2012; Basharina, 2007; Maier, 2009; Guldborg, 2010) and in some studies of learning in VWs (Diehl & Prins, 2008; Childs, 2010). As Lantolf and Thorne (2006) state, activity theory has provided these studies with a theoretical apparatus that has made it possible to “begin the process of understanding second and foreign language learning as inextricably bound together with cultural, social, institutional, and discursive forces” (Lantolf & Thorne, 2006, 260). The object of this study, FL learning in virtual worlds, combines the complexity of foreign language learning with the particular mediational features of virtual worlds as computer-mediated

¹⁹ With design clarity the perceptibility of the required affordance by the user is meant.

educational environments. This unique combination can benefit from a theoretical approach that takes into account its complexity and provides a framework that helps structure the analysis.

Activity theory has its roots first and foremost in the works of the philosopher Karl Marx, who, in his *Thesen Über Feuerbach* (1845), refuted the philosophical dualism of his times that juxtaposed materialism and idealism and elaborated the concept of *Tätigkeit* (Activity)²⁰ as an alternative practice that transcends both views of reality. In Marx's philosophy, practical-critical activity carries a revolutionary role; only through praxis "man must prove the truth, that is, the reality and power, the being here and now of his thinking"²¹ (Marx, 2015, my translation). Marx insisted on the importance of recognising the dialectical relationship between the person and their environment, which consists of nature, social connections and exchanges in which an activity is conceptualised as the praxis through which we shape our reality.

In the 1920's the Russian psychologist Lev Semyonovich Vygotsky applied the Marxian ontological approach to his model of the relationship between the individual and his/her social environment, which is at the core of what is now called sociocultural theory in Second Language Acquisition²² (SLA) and is considered as the precursor of activity theory, more precisely "first generation Activity Theory" (Yagamata-Lynch, 2010). The evolution of activity theory is in fact usually outlined over 3 stages or *generations* (Engeström, 1987, 2015; Thorne, 2005), with CHAT being known as the third generation approach. The following sections provide an overview of the three generations of activity theory.

²⁰ The translation of *Tätigkeit* as Activity is seen as reductive by some. For a critique see Schurig (1988) and Roma (2004). This critique has been dismissed by Engeström, 2005.

²¹ Original: "muß der Mensch die Wahrheit, i.e. die Wirklichkeit und Macht, Diesseitigkeit seines Denkens beweisen"

²² Following Lantolf (2004), Thorne (2005) and Lantolf & Thorne (2006) the term sociocultural is used to refer to the works of L.S.Vygotsky and the Russian cultural-historical school of psychology.

3.5.1 First and second generation activity theory, the cultural-historical school of psychology

As a reaction to the main theories on cognition of the time, the Russian school of psychology led by Vygotsky emphasised the significance of examining human cognitive development within its social and cultural context and the environment in which it takes place. Adopting Marx's idea that the unit of analysis of any theory should be holistic, Vygotsky studied mental functions as the result of both human history and human ontogenetic development. Also, he adopted Marx's sixth thesis on Feuerbach: "The human being is, in its reality, the mixture of social relations²³" (Marx, 2015, my translation). Finally, the third main influence on Vygotsky's work came from Engels' writings on the importance of tools and sign mediation in human communication and life.

These core tenets, together with the observation of child development, shaped Vygotsky's theory on mental functioning, in which cognitive development is seen as activated by social interaction and rooted in the use of culturally and socially developed cognitive or practical tools. "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first between people [...], and then inside the child [...]" (Vygotsky, 1978, p.57). A central position in this theory is given to language, the most important among the cognitive tools; in Vygotsky's view, speech has a dual organising function: it facilitates tool use and, through it, it empowers the transformation into new and higher forms of intelligent behaviour. Thought is restructured and transformed into speech and does not completely develop until people attempt to speak or write it. Speech becomes, therefore, one of the most important cognitive tools used by humans. This makes the social organisation of behaviour and individual organisation of thought strongly interdependent, as higher forms of mental activity in humans are mediated by symbolic artefacts. As language becomes more

²³ Original: "Aber das menschliche Wesen ist [...] in seiner Wirklichkeit [...] das Ensemble der gesellschaftlichen Verhältnisse".

structured and organised with the growth of the child, Vygotsky argues that the child's thought becomes more organised and structured by being expressed in words. "Thought is not merely expressed in words; it comes into existence through them" (Vygotsky, 1962, p.125). Along with his collaborators A. N. Leon'tev and A. R. Luria, Vygotsky laid the foundation for a theory of mind in which the individual is observed from a historical and hermeneutic standpoint (Lantolf & Pavlenko, 2001). His model of human activity places a strong emphasis on tool mediation as a necessary step to carry out cognitive and material functions and sees action, mediated by cultural tools and signs, and object-oriented, at the centre of the analysis of human cognition.

Figure 3-1 Vygotsky's model of mediated action (adapted from Cole & Engeström, 1993, p. 5)

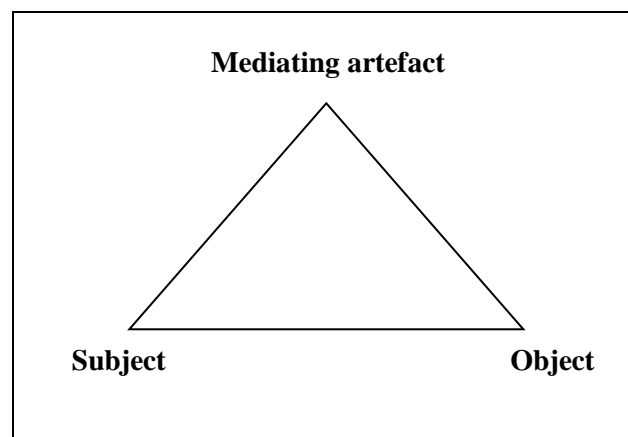


Figure 3-1 is a representation of Vygotsky's conceptualisation of mediated action, where the individual subject acts towards an object, through the mediation of tools and signs. For the Russian school of psychology "objects became cultural entities and the object-orientedness of action became the key to understanding human psyche" (Engeström, 2001b, p.134) and this introduction of the central role of artefacts into human actions was revolutionary. The limitation of this view was that Vygotsky had not considered mediation by other human beings and other social relations into his conceptualisation of the genesis and mediation of mind: the unit of analysis had remained focused on the

individual. This was regarded as problematic by some within his group, particularly by A. N. Leont'ev, who contested Vygotsky's focus on cultural mediation to the disadvantage of the weight of social relations. Leont'ev (1978, 1981a, 1981b) insisted on the importance of the collective activity on an individual's behaviour, taking into consideration the weight of social relations and rules of conduct (governed by cultural, political, and economic institutions) in human development. Leont'ev's vision of human activity encompasses, similarly to Vygotsky's, three elements: subject, object and mediating tools; these constituents, however, operate on three different levels: collective activity, individual or group actions and routine operations and the distinction between the three levels (Table 3-1) is the basis of his model of activity.

Table 3-1 Leont'ev's levels of an activity system (adapted from Lantolf & Thorne, 2006, p. 217)

Higher level	Collective activity	Object-related Motives
Middle level	Individual or group action	Goals
Bottom level	Operations	Conditions and tools of action

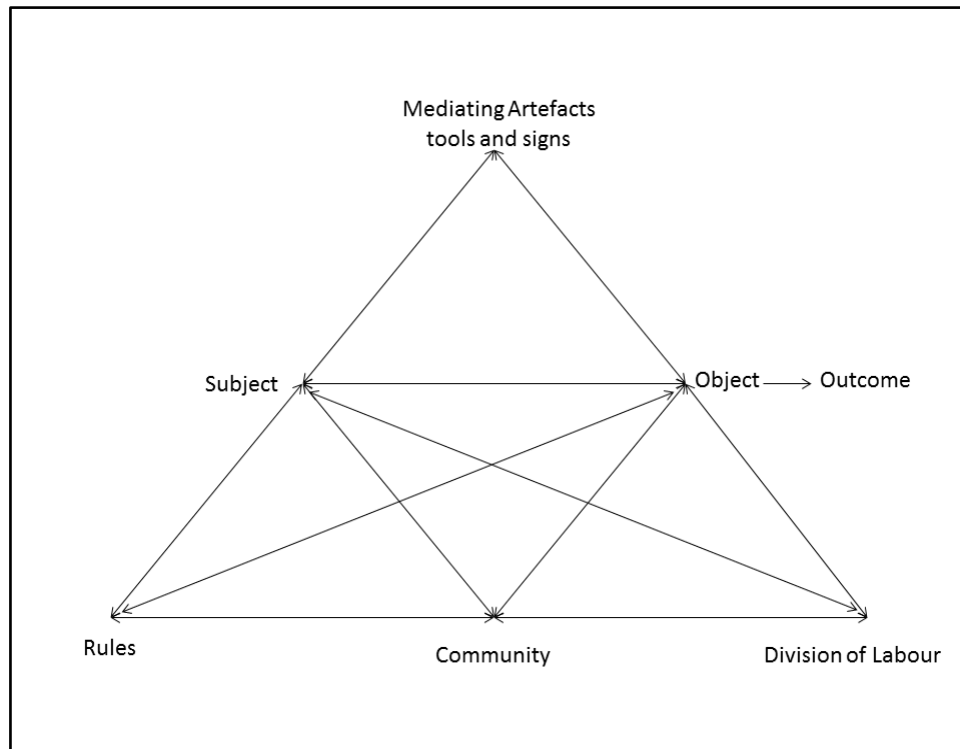
In Leont'ev's view, collective activities are motivated by the need to transform the object into the desired outcomes of the subject. A collective activity is not an extension of individual activity but it "presupposes a goal that is common for all participants and cannot be achieved by them separately" (Lektorsky, 1999, p. 110). The ways for achieving the outcome can be different for different individuals, so that the collective activity can also be distributed. Table 3-1 shows how people construct their activities (higher level). A collective activity is driven by an object-related motive. The activity is attained by means of individual (or group) actions that are driven by a goal, and that are constructed by means of automatic operations, driven by the conditions of the moment and the tools at hand.

Leont'ev's framework was originally mostly used for the observation of children, but his approach was later recontextualised and expanded to various research areas in the West, where his theory of activity was taken up in the 70's and has been expanded and modified more recently, mainly through the work and interpretation of Yrjö Engeström (1987, 2015) and his team at the Centre for Activity Theory and Developmental Work Research at the University of Helsinki. Since then activity theory “has become a well-established approach to contemporary research in the fields of applied linguistics, [...] and education” (Lantolf & Thorne, 2006, p. 209) and has been reconceptualised into what has been called Third-Generation activity theory, or CHAT (Engeström, 1987).

3.5.2 Engeström's model: Third generation activity theory

Yrjö Engeström (1987, 1993, 1999a, 1999b, 2000, 2001a, 2001b, 2002, 2005, 2009, 2015) has extended Vygotsky's and Leont'ev's theories into a conceptual schemata designed for the representation and analysis of the societal and collaborative nature of our tool-mediated social activities. While the limitation of the first generation of activity theory consisted in Vygotsky placing only the individual at the centre of the analysis, Leont'ev's psychological model of activity had differentiated between the individual activity and the collective action. Leont'ev's theory, however, had never expanded to adopt the collective activity as the unit of analysis and had remained focused on the individual. Differently from Vygotsky and Leont'ev, the subject of Engeström's activity is the collective group, participating in the collective activity. In Engeström's model (Figure 3-2, based on Engeström, 2015, p. 62), the unit of analysis is the collective activity system, which is object-oriented and motivated by a need. Objects for Engeström are “generators and foci of attention, motivation, effort, and meaning” (Engeström, 2009, p. 304) and, as such, are the focus of the activity and are attained by means of goal-directed conscious actions, carried out by an individual or by a group and made up of operations, that is, non-conscious concrete ways of executing an action.

Figure 3-2 Activity system (based on Engeström's model, 2015)



The distinction between action and activity is fundamental in this model, as activities are realised by means of actions and actions can only be understood as parts of an activity. The upper part of the activity system in Figure 3-2 is based on Vygotsky's and Leont'ev's original ideas, with the individual as the subject of a mediated and object-oriented activity (Figure 3-1, p. 69). Activities are realised by means of individual and cooperative actions, linked by the same object. In the lower nodes of the activity system, however, Engeström expands on Leont'ev's conceptualisation of human activity and represents the context of which the subject and the activity are part. This context includes the rules that regulate actions and interactions within the activity system, the community and the division of labour within the activity system. The rules can be both implicit and explicit norms, or conventions and social relations within a community, related to the transformation process of the object into an outcome. The community that is part of the activity is comprised of one or more people, who share the same object as the subject of the activity and the division of labour indicates how tasks in the activity are divided between

community members, how the activity is distributed among the members of that community, the role each individual in the community plays in the activity, the power each wields, and the tasks each individual is held responsible for. The division of labour can be horizontal, when tasks are divided between the members, or vertical, if a distribution of power and status is in place. Rules, community and division of labour add further layers of mediation to the activity system. Thus, human activity is not only individual production; it is:

simultaneously and inseparably also social exchange and societal distribution. [...] human activity always takes place within a community governed by a certain division of labor and by certain rules (Engeström, 2015, p. 113).

In Engeström's formulation of activity theory the collective activity is seen as the primary unit of analysis, with an uninterrupted mediating connection between the constituents of that activity. It is the mediational relationship between all these elements that informs an activity theoretical analysis of the complexity of social practices, such as the one investigated in this study. The agency empowering the subject to fulfil the activity is enabled and, at the same time, constrained by material and semiotic tools, by the communities that are relevant to that activity, and by the historical and emergent rules and divisions of labour, in a relationship that is often unstable (Lantolf & Thorne, 2006).

Given the growing number of areas to which activity theory has been applied, activity theoretical approaches are eclectic and varied, the framework is not monolithic and there are divergences between authors and schools (Roma, 2004, Roth, 2007a, Williams, Davis, & Black, 2007). Notwithstanding this heterogeneity of approaches, some basic common principles that identify an activity theory methodology and which show the fundamental difference between this and other theories of mind, have been identified (Kaptelinin & Nardi, 1997).

The following section outlines the idea of mediation and those tenets of activity theory which have particularly informed this thesis with respect to the definition of the construct of affordance and to the examination of what is happening during a language learning activity that takes place in a virtual world environment.

3.5.3 The role of mediation and the core tenets of cultural historical activity theory

The centrality of mediation in any human activity was first postulated by Vygotsky (Wertsch, 2007) and refined by Leont'ev (Roth, 2007b). The key role of mediation, and the idea that concepts, tools, and techniques are non-neutral and interact with the subject and the object of the activity broke with the notion of human beings controlled either from the outside by society or from the inside by themselves. The Vygotskian conceptualisation of mediation shifted the locus of humans controlling their behaviour from the inside, to the outside, through the use and creation of artefacts (Engeström, 1999, p.29). For Vygotsky an activity is the result of two processes, internalisation and externalisation, which are continuously operating at every level of human activities. Internalisation is seen as an internal reproduction of culture, whereas externalisation is the creation of new artefacts that make a transformation of culture possible. These new artefacts shape the way human beings interact with reality and, according to the internalisation/externalisation principle, the shaping of external activities ultimately results in the shaping of internal ones (Vygotsky, 1978).

CHAT extends the Vygotskian concept of mediation by adding a social dimension to it. The source of mediation can be not only a material tool, or a system of symbols, but also another human being in social interaction (Basharina, 2007, p. 84) or the rules that govern the activity. In the case of language learning in a computer-mediated environment such as the one investigated in this study, for instance, the material tools can comprise, amongst others: textbook(s), notes, and the hardware and software used during the

language learning activity. The symbolic tools can be the language/s used, the different literacies involved in that language activity and/or the pedagogies enacted during it (Lantolf & Thorne, 2006). Mediation from other human beings can be offered by the teachers, the other students in the class and by other participants in the language activity. The rules mediating the activity can be, amongst others, (i) the rules of the language learning task, (ii) the rules that govern the particular cultural situation that the language learning task is depicting, (iii) the rules of the course that the language learning task is part of and (iv) the rules that govern the VW the language learning task is taking place in. All these play a mediating role between the different elements of the activity and every tool and artefact has its history and carries with it the historical and cultural remnants of its development, reflecting previous experiences of its use. In an activity theoretical approach, the mediation of tools becomes a means for the accumulation and transmission of social knowledge and it influences the nature, not only of the external behaviour, but also of the mental functioning of individuals. Thus:

The distinctive feature of human activity is that it is continuous creation of new instruments which in turn complicate and change qualitatively the very structure of the activity itself (Engeström, 2015, p. 114).

Also, as previous experiences are accumulated in the structural properties of that very tool or artefact and in the knowledge of how it should be used, each tool may be experienced differently by users from different societies, due to its cultural significance, which may lead to tensions when these users collaborate in an activity using the same tools.

Engeström (2001a, 2015) also formulated five main principles that illustrate the main tenets of cultural historical activity theory, namely: (i) the role of the activity system as primary unit of analysis, (ii) its multi-voicedness, (iii) its historicity, (iv) the key role of

contradictions as a source of development in the activity system, and (v) the possibility of expansive transformation. These five tenets are explained in greater detail as follows:

- i. **The centrality of the activity system as the prime unit of analysis:** “the object-oriented and artefact-mediated collective activity system is the prime unit of analysis” (Engeström, 2015, p. xvi) and it is always viewed and analysed “in its network relations to other activity systems” (Engeström, 2001a, p.136). This entails that activity theoretical researchers have to “delineate” the personal and geographical limits of the activity system they investigate and define their unit of analysis, as an identifiable “real” activity (Engeström, 2015, p. 253). This can only happen after they have gained an understanding of who the participants in the activity system are and of their needs and their object.
- ii. **The multi-voicedness** of any activity system. Activity systems carry the different voices of the different participants, their points of views, traditions, interests and histories. Activity systems also “carry multiple layers and strands of history [...] in their artifacts, rules and conventions” (Engeström, 2001a, p. 136). This multi-voicedness is multiplied when activity systems relate to other activity systems, which may create disturbances, and require negotiation and possible changes in the activity.
- iii. **The importance of historicity.** Due to their multi-voicedness and the mediational relations between the different elements, activity systems are not static; they change and develop continuously, over time. Each activity has a history of its own and Engeström defines historicity as the identification of “the past cycles of the activity system” (Engeström, 2015, p. xxiv), which contributes to an understanding of the activity system’s problems and potentials.
- iv. **The central role of contradictions** within and between the activity systems. Contradictions are “historically accumulating structural tensions within and

between activity systems” (Engeström, 2001a, p. 7), which generate conflict and disturbances which may bring about innovative attempts to change the activity and become a possible source of development. The concept of contradictions will be further detailed in the following section.

- v. Contradictions bring about a possibility of an **expansive transformation** of the activity. If the contradictions in an activity system cause tensions and/or breakdowns in the activity, the participants may decide to deviate from the norms governing that activity. This can result in a collective change in the activity and in an expansive transformation, which takes place when the activity’s object is “reconceptualised to embrace a radically wider horizon of possibilities than in the previous mode of the activity” (Engeström, 2001a, p.7).

By means of these tenets, the conceptual framework of activity theory enables researchers who study ICT based learning environments, such as the one investigated in this study, to include in their analysis the role of the cultural and historical mediation of the tools used during the learning activity and of the context in which the learning activities take place. In this way, activity theory makes it possible to “capture knowledge creation (e.g. the formation of new practices through the construction of new mediating artefacts) in learning communities operating in digital environments” (Blin, 2010, p.181) and can therefore be helpful in the analysis of language learning in computer-mediated environments like virtual worlds.

3.6 The role of contradictions in the activity system as a possible source of learning

The concept of contradiction has proved useful in many studies informed by an activity theoretical approach. Researchers have investigated contradictions in activity systems in an effort to pinpoint critical issues in work or educational activity systems (Bødker, 1996;

Brown & Cole, 2002; Lim & Hang, 2003; Brine & Franken, 2006; Murphy & Manzanarez, 2008), or to highlight problematic areas in multicultural learning scenarios (Basharina, 2007). The aim of these studies was often either to pre-empt these issues if they were to arise in similar settings, or to study episodes of change and innovation in activity systems (Hardman, 2005; Murphy & Manzanarez, 2008). Given that the focus of this study is what language learners do in a virtual world, it is argued that the investigation of the tensions caused by possible contradictions in the language learning activity system can provide insight into both the affordances of virtual worlds for language learning, and into the constraints that can be experienced in a virtual world during a language learning experience.

It has been argued (Kuutti, 1996; Engeström, 2000; Engeström, 2015) that activity systems are affected by the context they function in and that they are constantly changing and moving. The mediation of the elements within the activity system, the multi-voicedness of the activity system, and the creation of networks of interacting activity systems can bring about contradictions, which emerge “within and between interacting activity systems as the activity unfolds” (Blin, 2012, p. 88). These contradictions manifest themselves as problems, tensions or disruptions in the activity, which may cause the activity and its object to change, so that what begins as one activity may reshape itself in the course of its unfolding. Engeström (2015) identifies four different types of contradictions:

(1) primary inner contradictions occur within each component of the central activity. In a computer-mediated learning activity system a primary contradiction could be identified in the reluctance of some students, as subjects of that activity system, to use technology for learning;

(2) secondary contradictions happen between the different constituents of the activity. A secondary contradiction between the object of a computer-mediated learning activity system and the software used for that activity, as one of the mediating artefacts, could result in a breakdown of that learning activity, for instance;

(3) tertiary contradictions, occur between the object/motive of the dominant form of the central activity and the object/motive of a culturally more advanced form of the central activity. With regard to the afore-mentioned computer-mediated learning activity, a tertiary contradiction could occur if, in order to solve the problem caused by the secondary contradiction experienced with the software, the teacher of that course decided to enrol the help of an expert colleague. That colleague, however, might introduce the students and the teacher to alternative ways to reach the same object by using a different artefact, thus, creating a contradiction in the activity system;

(4) quaternary contradictions are external and happen between the central activity system and its neighbouring activities. Resuming the previous example, we can assume that the teacher decides to follow her colleague's advice and restructure the learning activity with the use of a different type of software. At this point, as the computer-mediated learning activity is to be conducted using the school's computers, the school might decide against the use of that new software, for a variety of reasons. This contradiction would bring the activity to a halt.

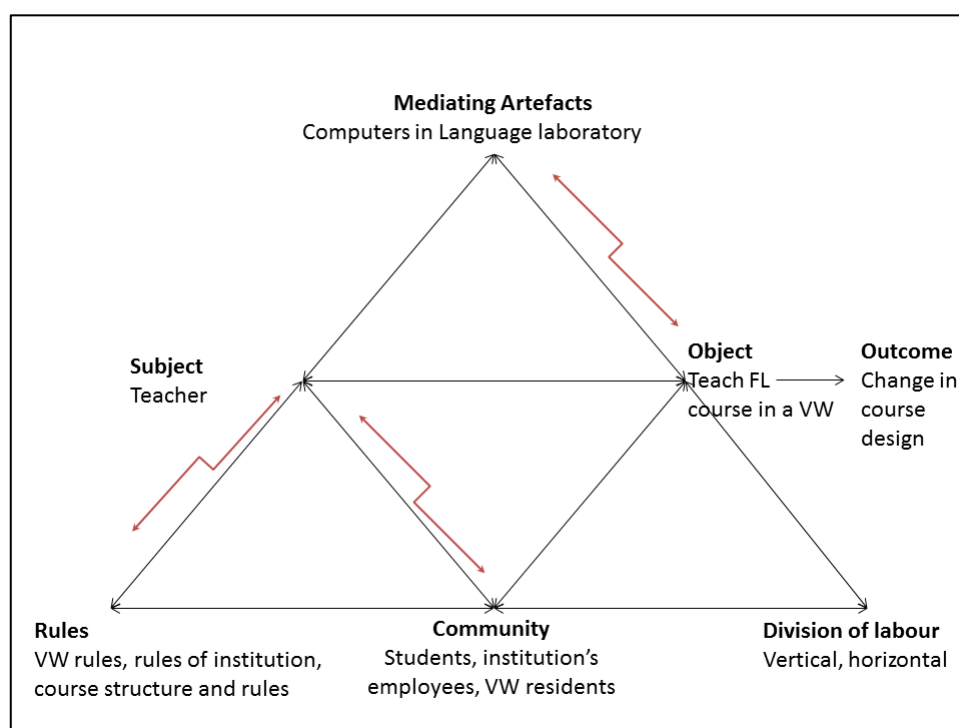
It is important to note that, even when attempts to resolve other levels of contradictions are successful, primary contradictions remain. In this case, the students who are reluctant to use technology for learning will carry this primary contradiction with them, even after all the other contradictions have been resolved.

The following illustrates the activity system of the set-up of a possible FL university course in a virtual world. This hypothetical language course has been designed to run in a

VW and to be offered to a full class of FL students. The course has been set up by the teacher to take place in the computer lab of that institution at a certain day and time, timetabled for that particular class. In this case, the unit of analysis is the FL course activity system, with the teacher as the subject, whose object is to successfully run the language course in the VW, using the facilities provided by the institution's language laboratory. As the teacher is an employee of that institution and the course is part of one of the institution's degrees and is held in one of the institution's facilities, the activity system of the FL course is mediated by the rules of that particular institution (academic calendar, employment rules, teaching days and times, running of the computer labs) and of that particular degree (teaching days and times, students' availability) as well as by the VW organisational rules. The community within which the language course takes place is, accordingly, not only the class community, but also the community made by other employees in that institution and by the residents of the VW who take part in the FL course. The division of labour in the activity system is vertical with the students in the course and horizontal or vertical in respect to the other employees in the institution and the residents of the VW. During the initial days of the course it may happen, however, that recurring technical problems with the hardware in the computer lab and the unwillingness of the institution's technicians to solve them, force the teacher to reorganise the course and decide to run it during students' personal time, while they are in their own home, using their own computer. In this case, a problem caused by the obsolete computers refocuses the course activity on the reorganisation of the language course, with consequences on the running of the course itself. The new way of conducting the course may reduce the number of students who can take part in it, as their presence depends on their availability and their access to hardware that can support the running of the VW. This also changes the rules governing the course activity and, drastically, the mediational artefacts available to students. In this example, a secondary contradiction in the activity system affects the activity in such a way that may bring to the fore eventual problems

related to each student's access to suitable hardware, which may result in fewer students being able to participate in the course. A depiction of the initial activity system for the FL can be seen in Figure 3-3.

Figure 3-3 Secondary contradictions in the set-up of the FL course activity system



The red zigzag arrows indicate the secondary contradictions, which created tensions that resulted in a change in the activity system. The identified contradictions are between the mediating artefact (the computers in the laboratory) and the object of the activity (teaching the course in the VW), between the subject (teacher) and the rules pertaining to the use of software in the institute's computer laboratories, and between the subject and some of the components of the community (the technicians).

According to Engeström (2001), "when individuals acting in a social context are repeatedly exposed to contradictions, or double bind situations, that seem unsolvable" (Engeström, 2001, p.3) they will engage in trying to resolve these situations. The resolution of disturbances and of contradictions in the activity system results in a change

and development of that activity, which is viewed by Engeström as result of a socially based dialectical change. Engeström (1999, 2015) describes the stages of the expansive cycle in an activity system as follows:

- (1) questioning: individual subjects start questioning, criticising or some of the accepted practices or existing wisdom;
- (2) analysing: the participants analyse the situation in order to find causes or explanatory mechanisms;
- (3) modelling: the participants construct a simplified model of the new idea that offers a solution to the identified problem;
- (4) examining: the new model is run and experimented on, to see how it works and what potentialities and limitations it has;
- (5) implementing: the participants implement the new model;
- (6) reflecting: the new process is evaluated
- (7) and its outcomes are consolidated in a form of practice.

This process is at the core of Engeström 's theory of expansive learning, where expansive learning can be recognised if a new concept appears as part of the activity and eventually changes into new forms of practice and, possibly, new activity structures that take the form of an expansive cycle in the activity. Expansive learning, however, does not necessarily occur all the time, as contradictions are not always resolved and the expansive transformation in the activity system does not always occur.

When contradictions are resolved there may be a development which brings a change in the activity system, with the construction of a new object and motive(s). Then,

situations such as the one presented in the example of the FL university course may lead to the reshaping and development of the pre-existing activity and, in some cases, to a learning experience that will be put into effect in the design of a future second activity of the same type. Problems in this sense are seen as resources. These situations, however, may also bring the activity to a halt and contradictions may disable learning to progress, if they remain unresolved (Russel & Schneiderheinze , 2005; Basharina, 2007; Murpy & Manzanarez, 2008). In the case of the FL university course exemplified above, this would result in the course not taking place, as the computer laboratory cannot be used.

It can be argued that investigating contradictions can prove useful in understanding how best to leverage the features of computer-mediated environments such as the one in this study, in order to affect learning. It can also be argued that highlighting the language learning affordances of the educational environment can help language educators design language tasks that leverage these affordances for effective language learning. The aim of this study is indeed to analyse what happens during a language learning experience in a virtual world and to investigate the language learning affordances emerging during this experience. In order to do so, the construct of affordance is conceptualised anchored in an activity theoretical approach, as is presented in the following section.

3.7 A definition of affordances for language learning in an ICT learning environment, grounded on an activity theoretical framework

Given that the activity theoretical framework chosen for this study highlights the role of the cultural and historical aspect of a learning activity as well as its mediating tools, and sees every human activity as socially and historically constructed, affordances will be conceptualised in this study as: *actions in potential and relations of possibilities between users*. This definition is based on the concept of affordance provided by the mediated action perspective (Kaptelinin & Nardi, 2012) and expanded for language affordances by

van Lier (2004). Affordances emerge for the subject, here the language learner, if and when they are relevant to that particular subject's activity.

In this view, technological affordances are defined as: *actions in potential offered by a technology*, where the technology mediates a collective activity and is a culturally and historically developed tool. The view of educational affordances develops from the definition of affordances, and educational affordances are defined in this study as: *actions in potential that allow the opportunity of an educational development to take place*. Consequently, social affordances in a computer-mediated environment are conceptualised in this study as: *actions in potential that can facilitate social interaction*. Affordances for language learning, it follows, are defined as: *actions in potential that allow the opportunity of language learning*.

It is argued that an investigation of the affordances for language learning of a learning environment can find that the activity theoretical idea of contradictions as a driving force of change and development helps structure the analysis. Namely, the idea of contradictions can provide a deeper insight into the conflicts that need to be solved for the smooth and successful performance of what language learners do when engaged in learning. Examining episodes of tension or disruption in the language learning activity system can point to the strengths and weaknesses of that learning environment and help in identifying the emergence of language affordances, as argued in the next section.

3.7.1 Investigating affordances for language learning

The activity theoretical model of expansive cycles can be applied to the analysis of language learning activities such as the ones investigated in this study. Learning is conceptualised as an activity, and, as any other activity, it has to be observed in its entirety and in the “complexity and integratedness with the context and community that surround and support it” (Jonassen, 2000, p.12). Indeed, activity theory puts an emphasis

on the social and cultural situatedness of the learner's activity and Engeström (2004) sees learning as distributed among individuals, their colleagues and co-workers, the materials they use, the artefacts and the practical and semiotic tools they make use of. In his words: "It is not just the individual but a functioning activity system, which learns" (Engeström, 2002²⁴). One of the key features of a learning activity is that the subjects and objects can be the same, as the object of learning is the learning activity being undertaken (Childs, 2010), and, if successful, it implies a change in the subject of the learning activity. Furthermore, it is argued in this study that in a FL learning activity conducted in the foreign language, the foreign language is the object of the learning activity and, also, one of the psychological tools mediating that learning activity. This implies that secondary contradictions between the subject(s) of the FL learning activity system (the students) and the FL as a mediating tool are bound to emerge, as the students, the language learners, are not fully competent in the foreign language they are studying. Also, in a learning activity system, tensions and disturbances are not only consequences of contradictions. They can be more deliberate than that, as, for instance, in cases when an expert consciously directs the learners' attention to certain details in the learning activity, thus "trying to articulate the ``otherwise unarticulated``." (Bødker, 1996, p.149), favouring a temporary shift in the focus of the language learning activity towards a specific linguistic or intercultural object and the creation of a new and different activity system.

Activity theory can help focus the investigation of episodes caused by tensions and disruptions in the enactment of the language learning activity in the virtual world. It is argued in this study that the analysis of the actions performed by the participants in order to iron-out the problematic issues that emerge during the activity and to resolve the contradictions behind them, can point to the emergence of language learning affordances

²⁴ Video interview recorded at Lancaster University, UK.

of the virtual world, by means of actions that leverage on the technological and social affordances of the virtual world.

Thus, this research study adopts the activity theoretical framework to explore what happens during language learning in a virtual world environment and to identify the language learning affordances latent in that environment.

3.8 Summary

This chapter has introduced the construct of affordance, by giving an account of its use and conceptualisation, from its introduction by Gibson to its adoption in the field of ICT educational research. A literature review and critique of studies on the educational affordances of VWs has shown that the VW research community has not come to a unified conceptualisation of affordance. Thus, activity theory has been introduced as a theoretical framework that makes it possible to examine a learning activity in computer-mediated environments and can assist in defining the concept of affordance. Activity theory has been described as a theoretical approach that investigates historically evolving collective activity systems (Engeström, 2000), where the human activity is object-oriented, and physically and culturally mediated. The construct of affordance has then been conceptualised following an activity theoretical approach and working definitions of social and educational affordances and affordances for language learning have been offered. Subsequently, the main tenets of activity theory have been introduced, giving special consideration to the principle of contradictions in this theory. Contradictions have been presented as central to the expansive cycle of the activity system and as a useful tool for this research study in the emergence of the language learning affordances of virtual worlds.

Chapter Four presents the epistemological and methodological questions raised by conducting research in a virtual world and by using an activity theoretical lens.

Chapter 4 Epistemological, methodological and operationalisational considerations on research in virtual worlds

There has been a significant amount of methodological considerations on conducting research on participants online, but little has been said regarding the peculiarities of doing it in virtual worlds (Banks & Martey, 2016). Researchers in 3D online environments are dealing with circumstances unencountered before. These require taking account of methodological considerations and decisions before and during the course of the research, all of which have to acknowledge the specificity of these environments. Chapter Four outlines the epistemological, methodological and operationalisational considerations related to undertaking research in virtual worlds, framed in activity theory. The chapter starts presenting the research questions around which this study is designed and conducted and the justification for these questions, built on the arguments presented in Chapter Two and Chapter Three. The chapter then proceeds to highlight some of the necessary methodological considerations that researchers are faced with when conducting research in virtual worlds.

Further, the operationalisation of activity theory is discussed, as regards the methodological choices relevant to this study: the choice of the unit of analysis and the investigation and analysis of episodes of tension and disruption caused by contradictions in the activity system. The second part of the chapter continues by outlining the implications of the considerations put forward in the previous sections. The four phases of the research design are presented and the design choices made for this study of language learning virtual worlds are outlined. Finally, the chapter explains how the activity theoretical framework was applied to this study for the analysis of what happens

during language learning in virtual worlds and for the identification of the language learning affordances of these environments.

4.1 Reasons for this study and research questions

Chapter Two noted that research in language learning in virtual worlds and in the educational affordances of these environments has increased. Furthermore, Chapter Two presented the argument, put forward by many researchers in the field of virtual worlds for education (Hunsiger & Krotosky, 2010; Savin-Baden et al, 2010; Panichi & Deutschmann, 2012; Wimpenny et al 2012), for the need for studies founded on a sound theoretical perspective that can incorporate the complexity of learning in these environments. This study follows in the steps of such previous studies, as it proposes to examine what happens while students are engaged in language learning in virtual worlds through the investigation of the language learning affordances of these environments. However, this study also aims to heed the call for theoretically grounded virtual world research. It was argued in Chapter Three of this thesis that, despite recognising its usefulness in investigating learning in virtual worlds, research on the educational affordances of these 3D environments has not always presented a clear definition of this construct. Chapter Three made the argument for a study of language learning affordances in virtual worlds aided by an activity theoretical schemata and conceptualisation of the construct of affordance. The chapter presented Cultural Historical Activity Theory as an apt theoretical lens for the examination of learning activities in computer-mediated environments and for identifying the affordances of virtual worlds for language learning.

The three research questions at the core of this study thus structure a research study that wants to respond to a need in research in the field of language learning in virtual worlds. The research questions are the following:

Question 1: What do learners ‘do’ while performing different language tasks set to them in a virtual world? How do learners use the virtual world’s potential to fulfil the language tasks and how does the virtual world environment affect task performance?

Question 2: Which affordances for language learning emerge while performing the language tasks, and what happens when certain affordances fail to emerge and be noticed by the learners?

Question 3: Through the identification of the affordances for language learning, can we draw ideas of best practice for foreign language educators in VWs, in terms of course design?

In order to answer the research questions I designed and implemented two language courses that took place in the virtual world of Second Life®, a preliminary course (*Italiano in gioco: Italian at play*) and a second language course (*SLitaliano*). Research in virtual worlds needs to take into consideration the peculiarities of these online virtual environments, as is detailed in the next section.

4.2 Conducting research in virtual worlds

Virtual worlds present new challenges to online researchers (McKee & Porter, 2009; Deutschmann & Panichi, 2009; Hunsiger & Krotosky, 2010; Minocha 2010; Girvan & Savage, 2012; Banks & Martey, 2016) to the point that, as Hunsiger and Krotoski (2010, p.94) state: “There need to be strategies [...] that will allow researchers to learn what these unique spaces offer to both researchers and learners.” The characteristics of these 3D environments are indeed quite different from those of two-dimensional online spaces, such as fora or blogs, as virtual worlds are ‘in a constant state of flux’ (Minocha et al, 2010), changing and developing all the time, as was presented in Chapter Two. Thus,

research studies in virtual worlds cannot be conducted as if they were taking place in off-line, “real-world” spaces (Deutschmann & Panichi, 2009); neither should they follow the same approach as with other online virtual environments, as virtual worlds offer experiences to their users that blend both real and cyber-experiences (Lucke & Zender, 2011).

The main issues that researchers in VWs have to consider when they undertake research in these environments are: (1) issues concerning the logistics of the research design and its organisation, such as: how to deal with avatar’s appearance and identity, both the researcher’s and the participants’ avatars; where to conduct the research and how to recruit participants; how to design research documents; how to collect the data; how to transcribe the VW data; the researcher’s status and credibility in the virtual world; (2) ethical issues concerning identity protection in these environments. Similar issues were encountered in the carrying out of this research and will be presented in further detail in the following sections.

4.2.1 Conducting research with and on avatars: appearance and identity

VW users are represented by avatars and users are free to choose any form (animal, human, vegetal, object or other), shape and gender they like. Users can also morph their voice, thus making their identity and/or gender unrecognisable. They can dramatically change their appearance, look completely different at any new meeting, and wear any type of attire they wish. It was argued in Chapter Two that the avatar and its appearance will not only add additional dimensions to the user’s identity, it will also impact on his/her interaction with other users and on their sense of immersion and presence in the environment (Minocha et al, 2010). Also, the use of avatars in virtual worlds “creates a new dimension of communication within online communities” (Williams et al, 2007, p. 9), in which text and oral communication are enriched by the avatar’s proxemics and kinaesthetics. All these considerations require the researcher to make precise choices

regarding her avatar and, if needed, the avatar of the research participants. As regards a personal avatar, the researcher will have to carefully choose name, appearance and demeanour, as the way users control their avatars can influence how they are perceived by other users. Depending on the type of study, the researcher may also decide to implement an ‘avatar code’ or a specific ‘dress code’ for the duration of the study and instruct the participants accordingly. It may be decided, for instance, that only human avatars are accepted in the study. In any case, the researcher’s decisions may affect the number of participants in the study and have to be included in the research specifications and the informed consent form given to each participant.

Further, participants in a research study that takes place in a virtual world can have varying degrees of relation to the researcher. As can happen in ethnographic research in the physical world, the researcher may decide to be an observer, studying a group of avatars and having no interaction with them, or she could be interacting with the group of avatars and establishing a relationship with them. However, the avatars’ real-life identities can be added to the research equation, and the researcher could be dealing with avatars whose real-life identities are known to her, with avatars whose real-life identity is unknown, or with mixed groups of participants. Research studies on learning in VWs can include all these types of participation, which all require different decisions on the part of the researcher, both in terms of the practicalities of the research design and in terms of ethical conduct, (as discussed later in this chapter). It is, however, important to note that “the gap between social networks and virtual worlds is diminishing” (Fairfield, 2012, p. 701), and that even unknown avatars are now more personally identifiable than they used to be, so that research with real-life participants or with avatars should not be seen as two opposite situations, but as two sides of the same coin.

4.2.2 Recruitment and types of participants

Participants in research that takes place in a virtual world can be approached directly in-world, via their avatar. In this case, the participants might be residents of a particular sim, or part of one of the VW communities approached by the researcher and their real-life identity might never be known to the researcher, who would only know them in their virtual world representation. On the other hand, participants can also be recruited on a personal basis, in the physical world and be known to the researcher. Research participants can also be a group consisting of both types, as is the case in this study.

The choice of research participants has an impact on the design of the research documents and the researcher will have to follow different procedures for the development of the research study documents such as the consent form, depending on the type of participant in the study. If, indeed, the researcher has no access to the person behind the avatar, it is important to develop acceptable consent forms and other research material that can be distributed, read and agreed upon within the VW.

4.2.3 Choice and set-up of research space

Virtual worlds can be immense spaces to navigate and offer a vast amount of diverse research fields. This makes the choice of a suitable research space for a study one of the key decisions in the research design. Some virtual worlds offer public access areas and private areas where access is restricted to specific groups or users. The researcher can decide whether to conduct her study in a private or a public space. Nevertheless, McKee and Porter (2009) advise that not many locations in a VW can be clearly labelled public or private. Girvan and Savage (2012) agree with McKee and Porter's statement and recognise that public vs. private space boundaries are often quite blurred in VWs, as some areas may provide both public and private spaces, which are not often easily recognisable for users who have open access to both. It is thus important to clearly identify the type of space needed for the research study, before making a choice. Some researchers may find

it important to restrict access to the research space to the participants in their study.

Others may find that in an educational experience a public space can provide access to more participants, objects and interaction and will thus choose accordingly. This can, however, also open the study to the participation of unexpected (and sometimes disruptive) avatars, so that there may be a risk of contamination of the data. All this should be carefully considered before choosing the research space.

Once this choice is made, it has a clear impact on the design of the study. If the researcher decides to conduct research in a public space, she will probably not be involved in the design and set-up of that space and will use the space as it is. If, on the other hand, the researcher chooses a private and enclosed research space, she might need to design, build and set-up the space according to her specifications, so as to make it viable for her research. This may need the researcher to acquire building skills in the VW and, if she is not using her own space, to obtain the VW space administrator's permission to build and rez objects in it. Further, if the research study involves the observation of a large group of avatars or different separate groups, there may be a need to set-up a few clearly defined parcels in the research space so that there is no sound contamination coming from other areas which filter into the data. Finally, research in VWs can be structured in a variety of ways. Some research studies will take place fully in the VW and some may take a blended approach, with the researcher also meeting the participants (or some of them) in off-line settings. The VW researcher will thus have to be able to conduct research in both types of spaces.

4.2.4 Recording and transcribing virtual world data

Avatars have much more freedom of movement than physical bodies: they can walk, run and sit, as in a real life situation, but they may also decide to fly, hover, or teleport to another place. Their modes of communication are also varied, as avatars can

communicate using gestures, they can speak using the Voice Over Internet Protocol (VOIP) software, they can write using the text chat of the virtual world and they can also use private written Instant Messages (IMs) to other avatars, or private voice-chat. All these characteristics of the VW that have been presented in Chapter Two as the features that make them an exciting venue for educational research are, at the same time, something that VW researchers must take into consideration before embarking on a research study in these environments. The environmental features of the virtual world can indeed offer both opportunities and restrictions for observation, as they make for a “visually and geographically complex field-site” (Williams et al, 2007, p. 17). In order to harness the complexity of the virtual world research space, the researcher will have to make an informed choice when it comes to the use of appropriate software. Moreover, the researcher may have to make a decision as regards who records the VW visual data, as all data will be recorded from the specific camera point of view of the person in charge of the recording. This choice may be important, if the visual data is central to the study. The choice of camera person will also have to be made taking into consideration that visual in-world recordings can result in heavy files saved on the hard drive, which might make it difficult to run the VW software at the same time. Further, if the researcher is working with a group of participants and decides to split the group into smaller groups, she will have to organise one camera person per group, so that every sub-group can be recorded.

Finally, given the multimodality of the VW environment and depending on the mode(s) of interaction that the study is set out to investigate, the researcher will have to find reliable software that can aid recording, transcription and encoding of multimodal data (including video, spoken and written chat). Recordings of virtual world activities show similarities to a filmic scene, with actions and oral communication against the backdrop of a landscape. They, however, also contain written text (allowed by the use of text chat), instant messages (written and received by the person who is recording the

scene), links to web pages and, sometimes, videos shown in the VW. The problems related to transcribing multimodal data have been stressed in many studies in social research and applied linguistics (Flewitt et al, 2009; Bezemer & Mavers, 2011) and it has been clear that adopting a simple transcription code such as the ones used for voice recordings is not satisfactory. Again, the choice of the transcription code or of the software used for transcription will have to be pondered considering all implications.

4.2.5 Researcher training, credibility and roles

Virtual worlds have the characteristics of online and of face-to-face interaction, so that conducting research within a 3D virtual environment will need real-world and virtual world research skills (Minocha et al., 2010). At the same time, it is also important for the researcher to have gained status and credibility in the VW community where the research study is taking place. In this regard, McKee and Porter (2009, p.19) write:

In virtual worlds, researcher credibility has less to do with one's academic credentials and prior publications and much more to do with one's standing in the communities.

McKee and Porter (2009, p. 21) advise VW researchers to become part of the community of their research for an extended period before introducing the research, so as to increase their credibility by earning the 'trust' of the residents of that environment. This can imply that the research includes a participatory role, whereby the researcher has to navigate multiple roles. Looking at the shifting and interacting roles of the researcher in the VW, McKee and Porter (2009) argue that, in such situations, ethical principles and priorities may shift and will have to consider all roles of the researcher. In the case of research studies on education in VWs, for instance, it may happen that the researcher investigating the learners is also their teacher. Again, ethical considerations come to the fore. The ethical implications of conducting research in virtual worlds are indeed significant and will be examined in detail later in this chapter.

After choosing the research space and the participants, the researcher will have to familiarise herself with the code of conduct that governs behaviour in the virtual world where the research study is going to be conducted, as every VW has a set of rules and standards of practice that are required from all participants. The following section presents some of the Second Life® rules of conduct.

4.2.6 Standards of Practice in the virtual world

When undertaking a research study in Second Life®, researchers must be aware of the SL® Standards of Practice²⁵. Linden Lab, the company running SL®, lists six behaviours that must be attained to by all residents. Rules one, two, and three ban the use of intolerant, harassing or violent behaviour in the Second Life® public areas. Rule five defines the terms of use of “adult” behaviour in the virtual world. The two rules which are especially important for academic research are, however, rule number four and rule number six. Rule number four deals with the avatar’s privacy and the rules governing disclosure of the avatar’s personal identity and information. It states:

Residents are entitled to a reasonable level of privacy with regard to their Second Life experience. Sharing personal information about your fellow Residents without their consent -- [...] beyond what is provided by them in their Resident profile -- is not allowed. Remotely monitoring conversations in Second Life, posting conversation logs, or sharing conversation logs without the participants' consent are all prohibited.

Rule number six provides rules for the communal sharing of the VW as a public space and urges residents not to disturb the peace of other residents. The rule states:

Disrupting scheduled events, repeated transmission of undesired advertising content, the use of repetitive sounds, following or self-spawning items, or other objects that intentionally slow server performance or inhibit another Resident's ability to enjoy Second Life are examples of Disturbing the Peace.

²⁵ The complete SL® Community Standards document can be found at <https://secondlife.com/corporate/cs.php>. In the past SL® used to have researchers sign a research agreement form.

Researchers should be aware of these rules in order to minimise the potential disturbing effects of their presence in-world. The rules of practice of the virtual world of Second Life®, particularly rule number four, bring this discussion to the ethical consideration that have to be taken into account when conducting research in virtual worlds.

4.2.7 Ethical considerations when conducting a research study in virtual worlds

Hendaoui, Limayem, & Thompson (2008) made a first attempt at raising awareness in the research community for the need of a revised research approach for studying and researching VWs (p. 92) but, despite the broad-scale guide developed by the Association of Internet Researchers in the U.S.²⁶, which is quickly becoming standard in that part of the world, and has included VWs and the ethics of conducting research on avatars, there is to date no overarching ethics protocol for internet scholars who specifically work in virtual worlds²⁷. Nevertheless, each study has to go through the ethics processes required by the university with which it is allied and make its own case. Girvan and Savage's (2012) advice is to use informed consent for all research conducted in private spaces and, possibly, to use it for other types of virtual world spaces. Also, the researcher will have to find an effective way to present the information to the participants in the study. Girvan and Savage (2012) list a variety of ways: posters at the research site, notecards passed to the participants, either directly from the researcher or through bots dispersed on the research site. Bots might also provide the information in Text Chat, or participants could be reading it when they enter the research site. In all these cases, however, the researcher will have to make sure that each participant is aware of the information and agrees with it.

Agreement in traditional educational research requires the participant's name and signature. However, as mentioned earlier, a participant's real life name may not be known

²⁶ The guide can be found at <http://aoir.org/reports/ethics2.pdf>

²⁷ With the exception of ethnographic studies: see Boelstorff, Nardi & Pierce (2012) or Fairfield's (2012) article on the legal consequences of human subject research in virtual worlds.

to the researcher, in a VW study. This has to be taken into consideration, as well as the fact that VW residents may not want to provide their real-life name. Fairfield (2012, p. 698) states that it is vital to protect the avatars' identity, but also their "very real interests [...] in their property, community, privacy, and reputations", especially, as mentioned earlier, as it is now easier to link an avatar to a real-life name. Also, participants in a VW research study may often be on a virtual space that is on U.S. soil, but coming from all parts of the world, for research that is probably conducted in an entirely different part of the world. In this case, the safest approach is, according to Girvan and Savage (2012, p. 248) to apply "the most conservative protection to all participant information".

It is thus clear that the identity rights of the avatar have to be protected in the same way as the identity rights of the person behind the avatar, so that the code of research conduct for anonymity and privacy of the participants in offline and online spaces are also applicable to the avatars. This implies that the researcher may have to follow different procedures for the development of the research study documents such as the consent form, depending on the type of participant in the study. When, for instance, the researcher has no access to the person behind the avatar, it is important to develop ethically acceptable consent forms and other research material that can be distributed, read and agreed upon within the VW and that will also address the possible concerns of an institution's Ethics Committee, who might not be familiar with in-world research. Dealing with research studies including avatar subjects can indeed be something new to the Ethics Committee of the institution the researcher is working for. If that is the case, the researcher will need to take particular care in presenting his/her study and its implications.

A further consideration needs to be made in the case of educational research, if the participants (whether virtual or not) are also the researcher's students. Hammack (1997) stresses the conflict posed by the dual-role of a teacher who uses her own students for

research. In such cases the researcher role is expanded by the researcher's role as educator of the research participants. Moreover, the teacher's role moves to a different dimension, as the teacher's work, teaching material production and conduct have to face a much larger audience, which comprises the readers of the research. Also, for the students in the research classrooms the choice whether to take part in the research or not may become problematic, as it may be influenced by teacher/student power relations. As "the ethical obligations teachers have as teachers in serving the needs of their students seem paramount" (Hammack, 1997, p. 257) the researcher will have to seriously consider this and make it very clear in her research specifications and her consent form, informing the student/participant on the right to withdraw from the study at any point.

The issues discussed in these sections were part of the operationalisational considerations informing the research design for this study of language learning in virtual worlds. The next section of the chapter presents how the theoretical framework of activity theory was operationalised in this study, detailing the choice of the unit and level of analysis and the approach to the investigation of language learning affordances by means of the activity theoretical lens.

4.3 Operationalising the activity theoretical framework to identify affordances for language learning

Chapter Three argued that cultural historical activity theory can be effectively used to understand and frame complex activities, particularly, learning activities that take place in computer-mediated, multimodal environments like Virtual Worlds. It was also argued that an activity theoretical lens can help identify the language learning affordances of these virtual environments. It was seen that the collective activity system is the unit of analysis of an activity theoretical methodology (Engeström, 2015) and each activity is viewed as taking place in a social and historical context, enabled and affected by the roles

of the subjects in the community, by the rules regulating the activity and by the mediating artefacts accessed during the activity.

Operationalising the activity theoretical research framework implies, therefore, some methodological choices on the part of the researcher. The next sections examine the methodological considerations that were relevant to this study on the affordances for language learning in virtual worlds. These considerations are: (a) choosing the minimum unit of analysis, which makes it possible to adjust the focus of the analysis on the collected data and observe what happened while the language tasks were performed by the students, during the language course; (b) operationalising the activity theoretical idea of contradictions within and between activity systems, to identify emerging language learning affordances during the completion of the language tasks.

4.3.1 Choosing the unit of analysis and the level of analysis

The first step in an activity theoretical analysis is the decision of what constitutes an activity system and which level of activity to focus on. As Rogoff (1995) observes, Cultural Historical Activity Theoretical researchers may feel overwhelmed when they embark in their data analysis and they are faced with the richness and variability of the collected data, which are affected by different strata of mediation. Activity theory does not provide precise guidelines on what the unit of analysis can be (Blin, 2004), except for stipulating that it is the “object-oriented and artefact mediated activity system” (Engeström, 2015, p.xvi). Thus, each researcher will choose the unit of analysis and level of analysis appropriate to the research questions at the core of their study.

Blin (2005, p. 71) argues that the range of perspectives drawn upon by different researchers in delineating the unit of analysis in activity theoretical educational studies is quite broad. Following Blin’s (2005) approach, I present examples of the different choices made by theorists in two studies on language learning, framed in activity theory.

In an activity theoretical study of project-based language learning (PBL) in a university course, Gibbes and Carson (2014) aim to evaluate the potentials and critical issues of PBL. In order to do so, the authors analyse the activity system associated to the single language learning projects that the students were involved in investigating the contradictions that emerged in the PBL activity system.

Basharina (2007), on the other hand, adopts a different approach and zooms in and out of different levels of investigation. Basharina's study has an intercultural focus and investigates the emergence of contradictions in international telecollaboration among English learners from Japan, Russian and Mexico. The data for the study are provided by the collaborative written exchanges on a WebCT²⁸ bulletin board shared by the learners. In this study, Basharina (2007) takes the bulletin board telecollaboration as a minimum unit of analysis and models an activity system on that. The author, however, proceeds to expand that model and create her own model of Intercultural Context-Embedded Telecollaborative Activity (Basharina, 2007, p. 86). In this model the bulletin board telecollaboration activity system of each group of students interacts with the activity systems of the other groups, all with their context-specific tools, rules, objects, communities and division of labour. These activity systems are then situated within a broader level, comprising the different geopolitical structures.

These examples show how identifying the appropriate unit of analysis for each study and clearly delineating the boundaries of the activity system is central to any activity theoretical study. As Yagamata-Lynch (2010) states, researchers "need to carefully examine the critical activities related to the study questions" and may need to draft and redraft their activity systems as they proceed with their data analysis. Rogoff's (1995) advice is to zoom into one plane of analysis and blur others, albeit still considering the features of those other planes that are still relevant to the study. Similarly, Yagamata-

²⁸ WebCT is now owned by Blackboard. It is an online virtual learning environment system that is licensed to educational institutions and used for e-learning.

Lynch (2010) argues that this methodological approach is particularly needed when activity theoretical researchers investigate systemic tensions and contradictions, as is done in this study.

4.3.2 Identifying tensions and contradictions in the activity system

Chapter Three argued that through the identification of tensions and systemic contradictions in an activity system, researchers can investigate contextual changes in that activity system and discuss how these changes can drive transformation and development in future activities (Yagamata-Lynch, 2010). It was also argued that research on the contradictions underlying the activity system has provided useful data that highlight areas that may need change or improvement. Data analysis with a focus on tensions and contradictions in the activity system involves a phase in which the researcher needs to zoom in on the analysis (Murphy & Rodriguez-Manzanarez, 2008) and investigate in detail what happens during episodes of disturbance in the activity.

The methodological considerations regarding research in virtual worlds and the operationalisation of the activity theoretical framework presented in the sections above have informed the design of the research study and how the data analysis was conducted. The next part of the chapter presents the practical implications of these considerations for this thesis and for the data analysis, through an outline of the context and stages of the research study, a description of the research choices made for the conduction of this study in a virtual world, and a presentation of the chosen unit of analysis.

4.4 Implications for this study: research design

This research study was conducted in the Dublin Institute of Technology (DIT) and the Italian language courses were offered to students enrolled in a degree course run by that institutions, as detailed in the following section.

4.4.1 Context of the research study

The students participating in the research study were enrolled in an International Business and Languages (IBL) degree course and studied Italian as a Foreign Language (FL).

Currently, DIT is undergoing major changes as regards its organisation; at the time of this study, however, it had five campuses spread around the city of Dublin, and six faculties.

The IBL course is a four year degree course shared between two of the DIT faculties: the Faculty of Business and the Faculty of Arts (more specifically, one of the schools in that faculty: the School of Languages). Students enrolled in the IBL degree attend a course with 50% business content and 50% foreign language content. Those who already have a Leaving Certificate²⁹ in one of the foreign languages offered by the School of Languages can opt for the option to continue that language as a major language of study in the degree and take a second FL, which they can start as absolute beginners. As Italian is only offered as an *ab initio* language, all students who take it as a major language of study are expected to study only Italian and do not take any other FL module.

As per European standards, every student is required to obtain 60 European Credit Transfer System (ECTS) credits to complete each year of the degree. The third year of the IBL degree is spent in the country of the student's language of study, under the aegis of the Erasmus European programme. During their stay abroad, IBL students attend a foreign university and, at the time of this study, they were expected to complete a total of 40 ECTS credits, by taking a variety of exams, mostly in Business subjects, in the foreign university. The rest of the third year credits (20 ECTS) were attained by means of two exams held in DIT, on the students' return from their year abroad.

The Second Life® Italian language course was offered to IBL students as part of their linguistic and intercultural preparation for their Erasmus year in Italy.

²⁹ The Leaving Certificate is the final exam each Irish student has to sit when completing secondary school.

4.4.2 Research design: stages

The research design is described in four phases:

- **Phase One** comprises the design and implementation of *Italiano in gioco* (Italian at play), a pilot course part of a preliminary study. *Italiano in gioco* was designed in 2009 and run in 2010 for a total of six in-world sessions. The Italian language course was offered to Year Two IBL students of Italian and run in the virtual world of Second Life®. The course learning objectives were: (1) to design and put into action a language learning experience in a VW, which would provide students with access to authentic foreign language material and Italian native speakers, and (2) to improve the students' FL competence and intercultural awareness of their own and the FL culture. *Italiano in gioco* provided useful experience and was taken into account when *SLitaliano* was designed.
- During **Phase Two**, in 2010 and 2011, the pilot course was evaluated and the experience acquired was utilised in the design of a second language course, *SLitaliano*. The evaluation of *Italiano in gioco* informed *SLitaliano* in terms of: (i) time spent on supporting students meet the software and hardware requirement for a SL® course; (ii) time spent on training students to navigate the VW; (iii) designing the language tasks to be taken before the course in-world sessions; (iv) supporting students' reflection on their experience of the VW language course.
- **Phase Three** comprises the implementation of the second course, *SLitaliano*, and the data collection. *SLitaliano* was designed in 2011 and run in Second Life® during the 2011/2012 academic year, for a total of nine in-world sessions. In 2011 the IBL degree course programme was modified and some of the language modules were changed slightly and merged. This particular change did not however alter the pedagogical approach behind the SL® course and its structure. The learning objectives of *SLitaliano* were the same as those of *Italiano in gioco*, namely: (1) to

design and put into action language a learning experience in a Virtual World, which would provide students with access to authentic Italian material and Italian native speakers, and improve the students' FL competence and intercultural awareness of their own and the FL culture. The researcher's intent was to collect data that would answer the research questions and serve to derive a deeper understanding of the medium and useful information for future experiences and future course design. The data was collected during the academic year.

- Finally, in the subsequent years (2012-2015), during **Phase Four** of the research design, the collected data was encoded and analysed, operationalising the activity theoretical framework in order identify what language learners do while learning in a virtual world and the language learning affordances of these 3D online environments.

4.4.3 Design choices made for this study in a virtual world

Given the particular considerations to be taken into account when conducting research in virtual worlds, specific design choices were made for this study, in terms of avatar appearance, choice and set-up of the research space, recording and transcription of the data, recruitment of participants, and ethical conduct. These design choices are presented in the following points:

- **Avatar:** the researcher used her Second Life® avatar, Su Nacht, to conduct the research in the virtual world. No major specifications were made as regards the participants' avatars, except for a request for the avatars to be in human form, as most language tasks required human participation.
- **Choice of research space:** the research was conducted on two public Second Life® sims: the Edunation Islands and Imparafacile Island. The Edunation Islands are two SL® lands maintained by a community of educators who contribute towards paying for their rent in the virtual world. The researcher's avatar, Su Nacht, rents a space on Edunation

and used this space as a meeting area with the students. Imparafacile Island is the land where the Italian project, Imparafacile³⁰, has its virtual representation in SL®.

Imparafacile Island is used by the Imparafacile community as a platform to experiment with new technologies and distance learning and training. The Imparafacile project promotes cultural and intercultural events on the island and its co-ordinator offered his premises, his help and the help and support of his SL® collaborators to this study.

Imparafacile Island was set-up and landscaped before each session by one of the Imparafacile participants, to provide authentic looking Italian spaces for the language learning tasks.

- **Recording of the data in the virtual world:** The software chosen for recording the multimodal data is Camtasia³¹, a software for recording and creating video footage. The researcher was in charge of recording the language sessions and a second participant was asked to provide a backup recording. All data for this study has thus been recorded from the researcher's position. This means that the communication that took place using the SL® instant messaging (IM) option, which is private to the people using it, did not show on the recorder's screen and could not be captured.
- **Transcription:** it was decided to treat the recorded data as a film. A main difference between a virtual world recording and a filmic one is the limited use of face expressions and gestures in VW communication, compared to a video or a film. The filmic transcription tradition seems, however, to be better suited for this type of data as long as it takes care of clearly transcribing written as well as oral communication. The transcription rules were adapted from Bonsignori's (2009) rules for audio-visual transcription.
- **Recruitment of participants and ethical conduct:** some of the participants' real-life identities were known to the researcher but other participants were only known

³⁰ <http://www.imparafacile.it/>

³¹ <https://www.techsmith.com/camtasia.html>

through their avatar. Two types of consent forms were thus developed, one to be signed by the physical person and the other to be accepted in-world, by the avatar. The two Ethic Committees contacted for this study (one in DCU, the university where this PhD is registered; the other in DIT, the institution where the research was conducted), were provided a detailed explanation of the research study which stated that both the avatars' and the real-life participants' identities would be protected. One more ethical concern had to be addressed, as the researcher was also the teacher of the student participants in the study. Her teacher role simplified the process of looking for suitable participants but added pedagogical and ethical responsibilities, which were clearly stated in the ethical forms provided to the two Ethic Committees.

4.4.4 Role of the researcher, implications for this study

It was argued that researchers in a virtual world may cover a multiplicity of roles. Table 4-1 shows the multiplicity of roles the researcher had in this study and how the researcher

Table 4-1 Multiplicity of roles for researcher, implications for this study

	Offline	In-world
Teacher	Designing the course, each session and the language learning tasks Providing offline support to students Co-ordinating the course	Co-ordinating the sessions Providing support to students and other participants during the language tasks
Researcher	Co-ordinating the research study Providing offline support to students and other participants during the course	Recording the sessions Conducting research

was operating in-world, conducting the research and recording the data, while at the same time co-ordinating the teaching session and supporting the students in her role as a teacher.

In her role as a teacher in the institution, the researcher/teacher designed the in-world course, each session and each language learning tasks co-ordinating the students. The Italian participants would also be contacted and given directions regarding the future session and their role during it. During each session the researcher/teacher would orchestrate and coordinate participation, welcome the students and spend some time with them, iron out technical problems and introduce each session. Afterwards, she would help them to teleport to the set for each session, coordinate the meeting with the other participants, introduce each task and participate in some of them. Also, she would communicate with the Italian participants in IM, advising and directing them when needed.

In her role as a researcher, she would observe the sessions, writing down notes and recording each session. During this study, therefore, the researcher was not just a silent observer, as she was actively involved in each step of the sessions.

4.4.5 Operationalising the activity theoretical framework: choosing the language task as a unit of analysis and modelling the language task as an activity system

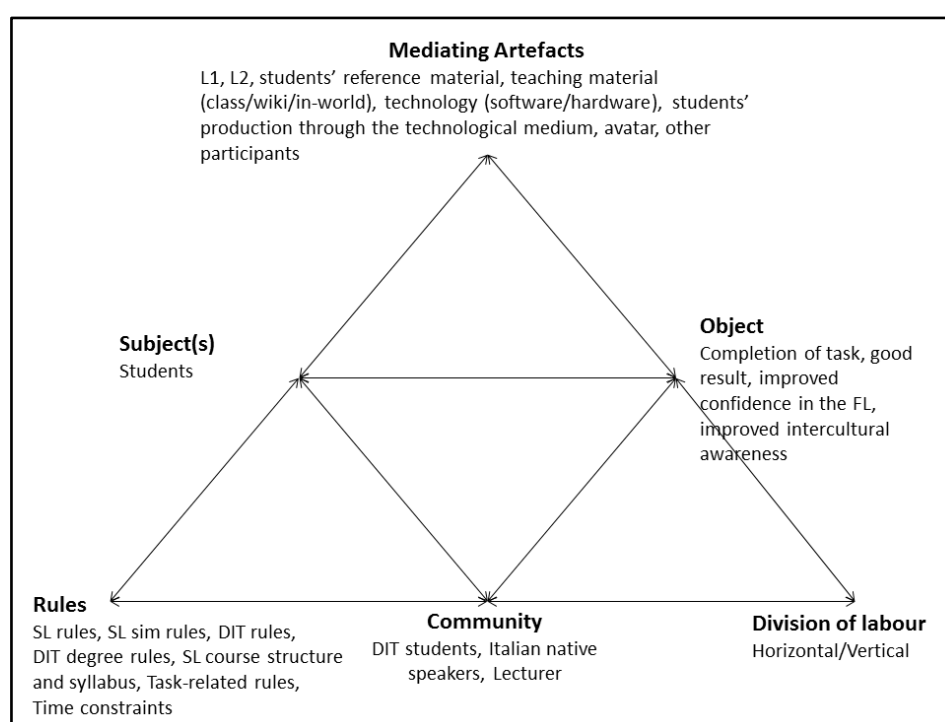
In order to investigate what happens when students learn a language in a virtual world, I chose the language task as the smallest unit of analysis for this study.

Coughlan and Duff (1994, p. 175) have described the task in research as a “behavioural blue print” used to elicit data. The view adopted in this study is to consider a language task as a didactic tool designed and used by the teacher to elicit a certain behaviour and language response in her students. This view is based on the definition by Ellis (2003, p. 5) of a language task as a “workplan”, designed to get learners to process

language in a way that can be evaluated. The analysis was thus conducted on each language task activity system.

The following language task activity system (Figure 4-1) modelled on one particular language task performed during *SLitaliano* is presented as an exemplification of how each language task activity system was modelled for data analysis in this study.

Figure 4-1 Activity theory model of the *Easter language learning* task activity



The *Easter language task* took place during Session Six of *SLitaliano* (Feste in Italia, Holidays in Italy). Session Six was designed around holidays and festivals in Italy. This particular task was an exploratory, listening comprehension and conversation task. The participants were on the *Imparafacile* Island and the students were first asked to go and search for an area on the island that could be associated to the Easter holiday period. Different areas on the island had been set up with images and objects connected to different Italian holidays. Once the place was found, the group of participants stood in the area and commented on the objects on display there. One of the Italian participants talked

about what Easter meant for her and encouraged the other participants to exchange their own experience and talk about how Easter is celebrated in their own area or country.

Each node in the activity system in Figure 4-1 represents a constituent of that language task activity and shows how the task activity in the VW is part of and influenced by the larger context. Here follows a description of each node.

Subjects: the subjects of this language task are the individual students, who are part of a collective activity. The students are working with the other students and the other participants at the completion of the language task.

Object: the object orienting this activity for the student is to reach a successful completion of the task. In the case of this language task, first the students have to find the ‘Easter space’ then they are invited to take part in the conversation about the different ways of celebrating Easter in the different parts of Italy and the different countries. It is important to note that, while the object of the collective activity is the completion of the task, there may be an ‘invisible curriculum’, constituted by the pedagogical object of the teacher, who designed the task in order to improve the students’ language competence and intercultural awareness. This object, however, can also be shared by the students.

Mediating artefacts: the activity around each task is mediated by a wide variety of physical and psychological mediating tools and artefacts such as, the hardware and software used by the students, the students’ native language (L1) and foreign language production in the VW (in writing and oral), the avatars used to move in the virtual world and interact with the different objects and with the other participants; the reference material at the student’s disposal (online or off-line), the in-world props (objects representing Italian Easter traditions) and the teaching material accessible to the students. All these tools and artefacts mediate and shape the activity.

The lower nodes of the language task activity system add further layers of mediation to the collective activity. They are as follows:

Community: the community includes the DIT students, the Italian native speakers who took part in the language course, and the Italian researcher/teacher. Each participant in the community is actively involved in the language task activity and collaborates to its completion.

Division of labour: the division of labour during this language task is mainly horizontal as the participants talk about their experiences and traditions. The division of labour however may change to vertical, if the Italian participants take the role of experts in the task, when asked by the students for support on specific linguistic or intercultural issues.

Rules: the rules during the completion of the language task activity are many. They comprise the rules governing the language class, the organisational rules relating to conduct and timetables of the educational institute in which the course is taught, the rules relating to the syllabus of the module the language course is part of and those of the SL® course structure, the virtual world rules of conduct, and the rules to be followed in order to successfully complete that specific task.

Framing the language task activity in this way allowed the researcher to capture multi-mediational processes in the activity system and gain an insight in the development of that activity. This first step in the analysis brought to the fore episodes of tensions and disruptions that occurred while the students were involved in the language tasks and that were analysed in further detail, as sub-activities of the language task activity system, as explained in the next section.

4.4.6 Investigating episodes of tension and disruption in the language task activity system

In order to highlight the emergence of virtual world affordances for language learning, each language task activity system was investigated, zooming in on episodes of tensions and disruptions arising during the performance of task. During these episodes, operations that would have usually been straightforward, such as hearing someone talking or being heard, or communicating at a basic level in the foreign language, became problematic. In some instances, the students had problems finding the word they needed in the foreign language or understanding words or phrases. In these cases, communicating in the foreign language turned into an action that required attention and time on the part of the participants, who shifted the focus of their attention from the object of the language task activity to a new object: solving the linguistic problem. Episodes of disturbances were common. It was argued in Chapter Three that such episodes could be caused by underlying contradictions in the activity system or within activity systems and that the actions performed by the subjects during these episodes could highlight instances of emerging language learning affordances of the virtual world. Thus, each of these episodes was analysed as a sub-activity of the language task activity system, embarked upon by the subjects, with the aim of solving the problematic issue and reverting to the task at hand. The analysis of these sub-activities allowed the researcher to highlight a number of actions that were enacted by the participants as a way to iron out or to make sense of the problematic issue. The highlighted actions were then analysed as the enactment of emerging language learning affordances of the virtual world.

4.5 Summary

This chapter has outlined the methodological and operational choices that have informed this research study on language learning in virtual worlds. Firstly, the chapter presented the research questions, grounding them in the arguments presented in Chapter Two and

Chapter Three. Secondly, this chapter has highlighted some of the necessary methodological considerations that researchers are faced with when conducting research in virtual worlds. Organisational and ethical issues pertaining to these environments have been outlined and their implications for this study have been explained. Further, the operationalisation of activity theory has been discussed, as regards the methodological choices relevant to this study: the choice of the unit of analysis and the investigation and analysis of episodes of tension and disruption caused by contradictions in the activity system. The second part of the chapter continued by outlining the implications of the considerations put forward in the previous sections. The four phases of the research design have then been presented, followed by the particular design choices made for this study. Finally, the chapter has presented how the activity theoretical framework was applied to this study for the analysis of what happens when learning a language in a virtual world and for the identification of the language learning affordances of virtual worlds.

Chapter Five provides a detailed presentation of the content of the sessions in the study, the timeline and organisation, and the specific details of data collection and encoding.

Chapter 5 Context, methodology and data collection

Following on the description provided in Chapter Four and methodological choices made for the operationalisation of this research study in virtual worlds, Chapter Five presents the details of the design and methodology employed for this study. The chapter gives a description of the design and development of the two Italian courses that were run in SL®, namely, the pilot study and *SLitaliano*. Following the pilot study, the chapter then proceeds to detail the second course, *SLitaliano*, its structure, the structure of each of the sessions run in the VW, the structure of the language tasks, and the recruitment and description of the participants. Subsequently, the chapter presents the procedure and timeline of data collection, the type of data that were collected during the study and their encoding for analysis.

5.1 Design and implementation of the language courses

The two SL® courses, the pilot course and *SLitaliano*, were designed and implemented for a volunteering group of students of Italian who would spend the third year of their degree in an Italian university. The proposed learning outcomes for the courses were: (1) to improve the students' language competence in Italian and (2) to increase their intercultural awareness by offering them the opportunity to interact with native speakers in the FL and in an environment that had been designed to look like an authentic Italian space. Each course had language tasks that required the students to interact and collaborate. As a result, from this research perspective, it was possible to observe in detail what these learners actually did during the duration of the course.

5.1.1 The pilot course: *Italiano in gioco*

*Italiano in gioco*³² was offered during the academic year 2009-2010 to a group of year 2 IBL students as part of the Italian module designed to prepare them for their Erasmus experience in year 3. Out of a group of nine, six students volunteered to take part in the pilot. However, this number was reduced to three, as three students opted out of participating, mainly for technical reasons.

Italiano in Gioco was designed and held in collaboration with an Italian colleague from the University of Palermo, who was also going to use the recorded data for her own research for a Masters at the University of Venice. She has significant experience teaching Italian in SL® and is an expert at building, scripting and creating teaching material. Also, at the time, she was teaching a Master's degree, "Teaching through Technology" for the University of Palermo. Four students from that Master's degree helped with the scripting and setting up of the sessions and took part in the different tasks. Sessions and tasks were designed by the two collaborating teachers with the aim of (1) getting students acquainted with some of the situations they would have to deal with during their Erasmus stay in Italy, and (2) to immerse them in an Italian setting with Italian native speakers. The DIT students were invited to log into a wiki before each session as the wiki provided language tasks and introductory multimedia material for the session to come. The students had language sessions in-world once a week, for total of 6 sessions of about 90 minutes each.

5.1.2 *Italiano in gioco*: the data and how it influenced the second course

Different sets of data were collected during *Italiano in gioco* comprising:

- A pre-course questionnaire sent to each student by e-mail in which students were asked about their experience with the Internet and their expectations regarding the course.

³² *Italiano in gioco* can be translated as "Italian at play".

- Recordings of the sessions with each session recorded using FRAPS³³.
- Semi-structured interviews. At the end of the course students were individually interviewed on their experience during the course.
- Researcher's blog, where the researcher reported her observations and comments after each session. The blog was useful when going back to the data, as it brought back to memory many of the impressions triggered by the in-world experience.

Due to technical failures, some of the recordings of the sessions were faulty.

Nevertheless, the resulting data were analysed and highlighted useful affordances of the VW of SL® for language learning and the development of intercultural awareness (Dell'Aria & Nocchi, 2010; Nocchi, 2012). *Italiano in gioco* was useful as it helped identify points that could be improved in a further course. Also, the experience provided this researcher with an indication of how to most effectively design VW language tasks and run a VW course, as it accentuated aspects that needed to be changed and/or improved when developing a second course. The points noted after the experience with the pilot study were the following:

1. Technical issues with the hardware: these were mostly due to the participants' hardware that was either faulty or not up to SL® requirements and were quite common.
2. Technical issues with the software: the students were not always confident using the different features of the SL® software.
3. Use of the wiki: it was noted that the students seldom visited the wiki, which had been set up to provide them with lexical items, visual clues and an introduction to the material they would be working with during each session.
4. Final interviews: it was noticed that, during the final interviews, some of the students' memories of the in-world sessions were not as clear as desired.

³³ FRAPS is a real-time screen and video capture software. The researchers used the FRAPS free downloadable version. www.fraps.com

These considerations informed the course design of *SLitaliano*, the Italian language course that provided the data for this study. The design for this language course is presented in the following section.

5.1.3 *SLitaliano* course structure

The second course, *SLitaliano*, was designed for the academic year 2011/2012 and took into account the experience with *Italiano in gioco*. Considering that experience, the main decisions taken in term of course design, were the following:

1. To devote more time to check on participants' hardware, so as to minimise hardware problems during the course.
2. To spend more time training students in-world, so as to best prepare them to fully take part in the course.
3. It was hypothesised that the inconsistency in students visiting the wiki may have impacted on the students' tackling of the in-world language tasks. It was therefore decided to assess the tasks on the wiki, to make sure that students would complete them and get a suitable introduction to the in-world sessions.
4. It was decided to ask future students to keep a reflective journal during the SL® course and, subsequently, hand it in.
5. Also, in order to focus the students' attention on their work and the difficulties encountered during the session, it was decided to spend some time at the end of each session on a brief an in-world post-session "wind down time", where researcher and students would meet at the researchers' SL® residence and discuss what had happened during the session by talking through its good points and difficulties.

Finally, the researcher's blog was not used during the second course as it was felt that, as the researcher was also teaching and co-ordinating each session, keeping an exact record of what she noticed during the sessions would have been difficult.

The general structure of the two language courses is exemplified in Figure 5-1, which shows how the experience of *Italiano in gioco* affected both the design of *SLitaliano* and the study.

Figure 5-1 Set up of the two language courses

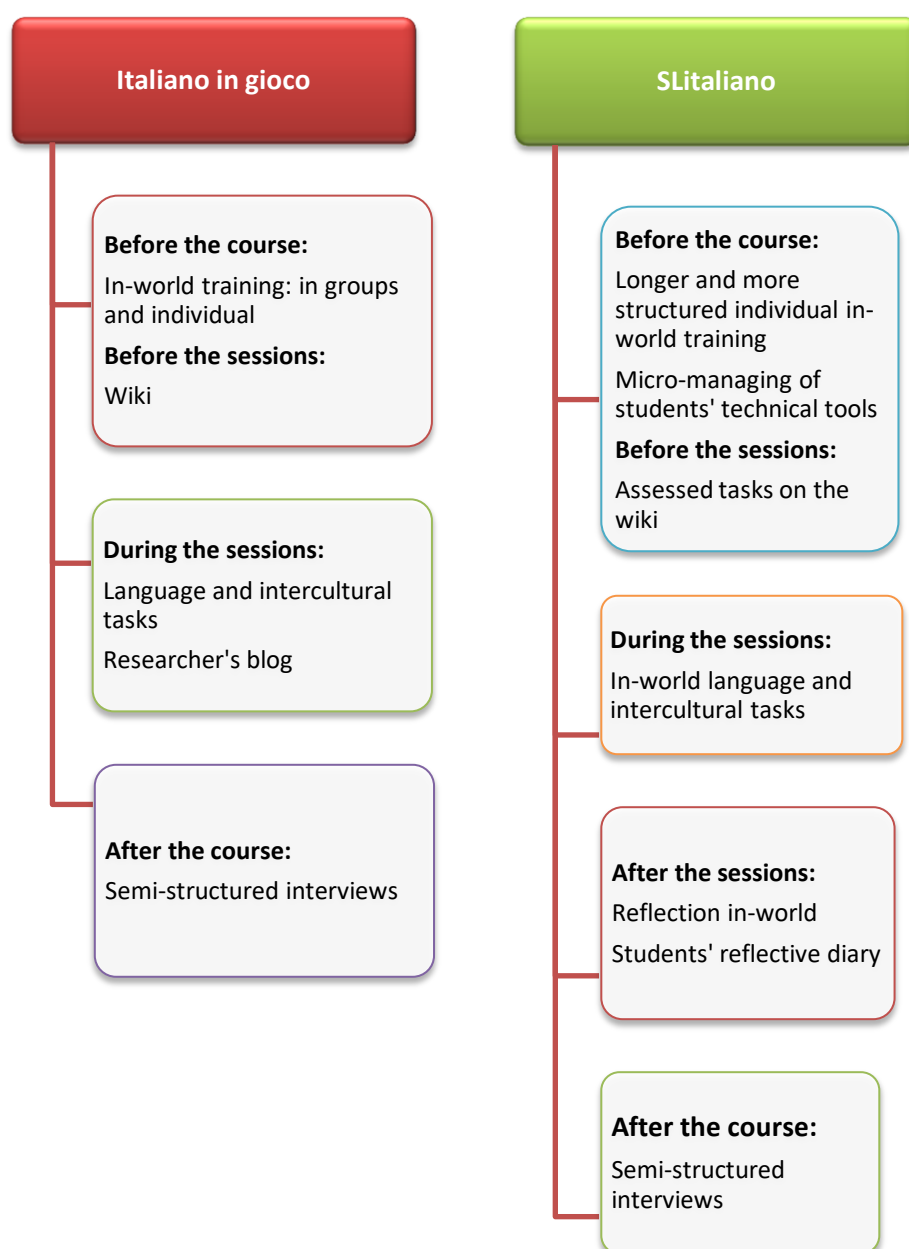
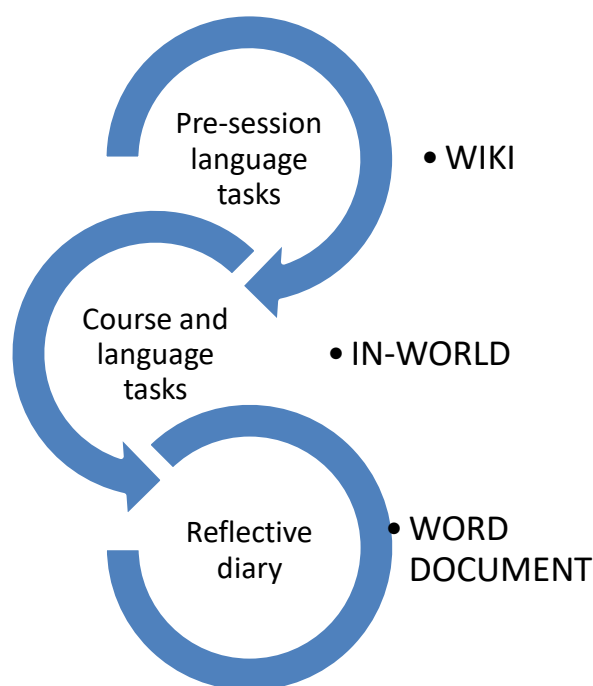


Figure 5-2 shows what taking part in *SLitaliano* meant for the students who chose it in terms of work load, and accounts for the different spaces in which that work took place. Students in the SL® course were required to visit a wiki, designed to introduce them to

the theme of the session for the week to come. The wiki provided them with multimedia authentic materials and tasks to fulfil before the in-world session. While the wiki was useful as a pre-session task and as a way for the teacher to formally assess the students on their work, it was not included as part of the collected data for data analysis, as it falls outside the focus of this study, which is what students do when learning a language in-world.

Figure 5-2 Students' work for *SLitaliano*, spaces and related tasks



After their pre-session tasks, the students attended the language course in-world and were asked to write a reflective diary reporting their thoughts and opinions about their experience during the course. The In-World space was Second Life®, where all *SLitaliano* sessions were held.

The two in-world premises utilised for *SLitaliano* can be seen in Snapshot 5-1 and they are the Edunation and Imparafacile Island sims. The Edunation Islands are two SL® lands maintained by a community of educators who contribute towards paying for their rent in the virtual world. Imparafacile Island is the land where the Italian project,

Imparafacile, has its virtual representation in SL®. The Imparafacile project promotes cultural and intercultural events on its Second Life® island.

Snapshot 5-1 Edunation and Imparafacile Island



Session's wind down at Su Nacht's (Edunation)



Participants in front of Police station (Imparafacile Island)

A detailed description of the SL® Italian language course *SLitaliano* is provided in the following section.

5.2 Course structure, session themes and task types

The *SLitaliano* language course consisted of nine sessions that took place on Thursday evenings, from 7.30pm to 9.00/9.30pm with students who were preparing for their Erasmus year at an Italian university. As socially and professionally relevant ‘strong purpose activities’ tend to be more productive and engaging for participants (Warschauer, 1999), I decided to involve the group in a discussion on the different linguistic situations they felt might be useful to that purpose and decide what should be included in the course. Consequently, each session revolved around a particular theme that had previously been agreed with the second year students before the course was designed.

Table 5-1 shows a list of the nine sessions, the dates in which they took place, and the title and the theme for each session. Each in-world session was usually divided into three main parts. (i) The first was an introductory warm-up meeting at the teacher's residence in SL®, where the teacher would iron out any technical issue before the start of the session and chat with the students, introducing the session to come. (ii) Then, the group would teleport to Imparafacile Island, where they would meet the Italian native speakers and start working on their language tasks. This part of each session consisted of three language tasks, which the students undertook either individually or in a group. (iii) Finally, before the end of the session, there would be a wind-down moment, either back at the teacher's residence in the VW, or in Imparafacile. This time was used to reflect on the session.

Table 5-1 Sessions in SLitaliano, title and theme

Session	Date	Title	Theme
1	10.11.2011	Cominciamo a conoscerci (Let's get to know one another)	Getting acquainted. Talking about oneself, likes and dislikes and one's habits and country. Asking about other people's life, likes and dislikes, habits and country.
2	17.11.2011	Cerco casa I (I'm looking for accommodation)	Looking for accommodation through accommodation ads and an estate agent.
3	24.11.2011	Cerco casa II (I'm looking for accommodation)	Finding accommodation. Making changes in the house and dealing with the landlady.
4	01.12.2011	Si mangia! (Let's eat!)	Talking about food and food habits. Cooking together.
5	08.12.2011	Esperienze (Experiences)	Talking about one's own life and experiences.
6	16.02.2012	Feste in Italia (Holidays in Italy)	Talking about holidays and festivals in one's country.
7	23.02.2012	C'è un problema! (There's some trouble)	Dealing with a crime. Reporting a crime to the police.
8	08.03.2012	Mamma mia, che dolore! (Damn, it hurts!)	Visiting a sick friend, making appointments with a doctor/consultant.
9	15.03.2012	Un saluto agli amici di SL. Arrivederci! (Good-bye to our SL friends)	Chatting with friends, revising the past sessions.

As stated, the main body of a session was usually made up of three language tasks. The tasks were engineered in such a way so that the technological, social, and educational affordances of the VW would provide a potential for language learning affordances to emerge, that is, actions in potential that facilitate foreign language interaction. The different types of language tasks are presented in Table 5-2.

Table 5-2 Types of language tasks in *SLitaliano*

Task type	Example
Exploration task	Session 1 PLACE: Imparafacile Island. Beach area TASK: The area is set up as a treasure hunt. Each station has intercultural and lexical riddles which students must solve in order to arrive to the final station and win a prize.
Role-play	Session 2 PLACE: Imparafacile Island. In an estate agency office TASK: the student has to go to an estate agent's and rent a room or apartment for their Erasmus stay in Italy. The student has a notecard with the instruction re his/her role.
Reading comprehension task	Session 2 PLACE: Imparafacile Island. Open space area. TASK: Students are given a notecard describing people looking for accommodation. They are then shown placards with ads for renting apartments and rooms. They have to find the best accommodation for the people in the notecards.
Collaborative task	Session 4 PLACE: Imparafacile Island. In a restaurant. TASK: Students are asked to collaborate and devise a recipe using the ingredients and tools they see on a table in the restaurant.
Games	Session 5 PLACE: Su Nacht's place TASK: Students click on an object similar to the Mouth of Truth (Rome), which asks questions about Italy. The student with the most correct questions gets a prize.
Guided interaction task	Session 5 PLACE: Imparafacile Island. Informal seating area. TASK: Participants show and talk about two pictures that are of particular importance to them. Everyone participates in the conversation.
Listening comprehension and conversation	Session 6 PLACE: Imparafacile Island. Different corners. TASK: Students hear some Italians describe their favourite holiday, watch and interact with people and objects.

Each task was designed by the teacher in such a way that it would elicit a linguistic response on the part of the students; scripted realistic looking objects were used during the sessions in order to help focus the attention of the student on culturally meaningful

language information. Realia (those real, authentic material objects language teachers bring to class as part of the social, material and cultural life of the language of study), can be substituted in VWs by scripted objects the residents can interact with and each session and task offered students the possibility to interact with this type of object in-world. On the basis of the experience of *Italiano in gioco*, the task types prepared for the sessions were role-plays, games, listening comprehension tasks, collaborative tasks, exploration tasks, and reading comprehension tasks. These tasks required active involvement and language production and took place in Italian looking settings populated with native speakers.

5.3 Participants, recruitment and profile

The study was conducted with a group of DIT students and Italian participants. The total number of participants who were contacted for the SL® course was 19 and consisted of: 8 students, 10 Italian participants and the researcher/teacher. The number of participants who actively took part in the course was 14, as detailed in the following sections.

5.3.1 Recruitment of students and students' profile

SLitaliano was offered to IBL students of Italian. Although IBL with Italian is only offered as an ab-initio language, the year one group composition in 2012 showed a wide range of language competence, as some of the students had been in contact with the FL before. This allowed the researcher/teacher to offer access to SLitaliano to year two and year one students with a minimum A2 level of competence in Italian (as described by the CEFR for languages). *SLitaliano* was designed and offered as part of the Language in Context module in year 1 and in year 2, as both modules have similar learning objectives³⁴.

³⁴ In 2011 the IBL degree course programme was modified and some of the language modules were changed slightly and merged. This particular change did not however alter the pedagogical approach behind the SL® course and its structure.

An initial group of eight students signed in for the course. Each student was given an informed consent form and a plain language statement (see Appendix A) to sign, one copy was for the Dublin Institute of Technology Ethics Committee and one for the Dublin City University Ethics Committee, as required by both Ethics Committees.

The students were given a general introduction to SL®, a description of the previous course, *Italiano in Gioco*, an outline of the reasons for running a course in SL®, and a detailed description of what choosing *SLitaliano* as a part of their Language in Context module would entail in terms of work load and assessment. Six students signed up for the course but in the end, the core group in the course consisted of four students, whose names for this study are Bea and Mia (Year one) and Ita and Dub (Year two) and whose attendance to the nine session can be seen in Table 5-3.

Table 5-3 Students attendance at *SLanguages*

Participant	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 9
Bea	X	X	X	X	X	X	X	X	X
Dub	X	X	X	X	X	X	X	X	X
Ita	X	X	X	X	X	X	X	X	X
Mia	X	X	X		X	X	X	X	X
Fab	X								
Lua	X								

Students were in their home during the sessions and used their own hardware equipment.

5.3.2 Recruitment of Italian participants and their profile

The Italian participants were recruited in-world. Some of them were contacted by the researcher among her educator colleagues in SL®. Others were recruited from the habitual participants to the events organised at Imparafacile Island, where the in-world sessions were hosted. Each participant was given a consent form in-world and asked in-

world whether they accepted to take part in the study, as described in the consent forms (see Appendix A). Also, each participant was met in-world and given a brief description of the previous course, *Italiano in gioco*, an outline of the reasons for running a course in SL®, and a description of *SLitaliano* and of what their role in the course would be. Some Italian volunteers helped with the building and setting up of the different spaces used for each session. Each Italian participant was asked to be present at the language sessions, if available, be friendly and behave as they would in a physical environment, in a social situation. The native speakers were also asked to provide language support to the learners, if needed. When the Italian participants were to play an active role in one of the language tasks, they would be contacted in advance and be given specific detailed information about the language task. The Italian volunteers provided the ‘human material’ that contributed to make the experience more authentic and gave the foreign students a chance to be in contact with Italians with different accents, as would happen in a realistic situation in the foreign language country.

Table 5-4 Italian participants’ regional background

Participant	Regional background
Ann	Tuscan intonation and accent, sharing traditions from the Northern coast of Tuscany
Almo	Central Italian accent
Gea	Tuscan intonation and accent, sharing traditions from the centre area of Tuscany (Florence)
Kaj	Northern Italian accent, sharing traditions from her native region (Abruzzo, in the South), and the region she lives in, Val D’Aosta, in the North West.
Dax	Northern Italian accent, sharing traditions from Val D’Aosta
Cusa	Northern accent, sharing traditions from the north-east of Italy
Ciocco	Roman accent, sharing traditions from the centre/south of Italy
Marv	Centre-south accent
Impa	Northern accent, sharing traditions from the North-East of Italy
Hel	Light Tuscan accent, sharing traditions from the South of Italy
Lora	Sicilian accent, sharing traditions from Sicily

Not all participants were available for all sessions and one had to opt out due to problems with her hardware. Eleven Italian native speakers offered their help for *SLitaliano* (Ann, Almo, Gea, Kaj, Dax, Cusa, Ciocco, Marv, Impa, Hel, Lora). The native speakers came

from different regions of Italy and had a variety of accents, used specific regional words and portrayed the habits and traditions of their specific region, as seen in Table 5-4. The number of native speakers in-world varied for each session, depending on the tasks and the individuals' availability and can be seen in Table 5-5.

Table 5-5 Italian volunteers during each session

Participant	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 9
Ann	X	X	X	X	X	X	X	X	X
Gea	X		X	X	X	X		X	X
Kaj	X	X	X	X	X		X	X	
Dax	X	X	X	X	X				
Hel				X	X	X		X	X
Impa							X		X
Almo	X								
Cusa	X				X				
Lora						X			
Marv	X								
Ciocco	X				X				

The number of participants per session (including the teacher) varied between 8 and 12, depending on the participants' availability, though there was always a core number of at least four native speakers.

As can be seen in Table 5-5, not all Italian participants attended the language sessions regularly. Some of them, such as Almo and Marv, were only present at the first section, and Lora and Ciocco only helped in one session. It is important to note again that the Italian participants were available on a voluntary basis.

5.4 Data types

The data was produced at three different points in time: before the SL® course started, during the SL® course and after its completion. Each type of data contributed to provide

a more in-depth view of what happened during the course. The following section gives a detailed description of the data and of the mode of data collection.

5.4.1 Data before the course: the pre-course questionnaire

Each student was e-mailed a questionnaire, seen in Table 5-6, whose aim was to find out about their experience of use of computers and the Internet, their previous (if any) knowledge of VWs and their expectations regarding the course.

Table 5-6 Pre-course questionnaire

<p>Questionario Write a few lines in which you explain: What you use your computer for (e-mail, academic writing, research, social networks, games etc.) How much time you spend on your computer a week What you like about computers and using them What you dislike about computers and using them What you expect from an online course in Italian What you expect from this experience What you think is positive about it (if anything) What you think is negative about it (if anything) If you have been in virtual worlds before (if so talk about your experience, which virtual world you visited, what was the reason: fun, study, curiosity etc.)</p>

The questionnaire consisted of a series of general prompt sentences that the students were asked to write about and was a re-worked version of the questionnaire used for the pilot course. The students e-mailed their documents to the researcher/teacher before the start of the course and their answers were taken into consideration when planning the training for the course.

5.4.2 Data type during the course: recordings and reflective journals

Two types of data were produced during the sessions: video recordings of the sessions and the students' written journals. Each in-world session was recorded by this researcher and by an Italian volunteer, Ann, using: Camtasia³⁵, a screen and real time video capture software. Ann's recordings were available as a back-up, in case the researcher recordings

³⁵ Camtasia is a screen recording and video editing software. The lecturer used Camtasia Studio.
<http://www.techsmith.com/camtasia.html>

were faulty. The recordings of the nine in-world sessions amounted to a total of 13hrs, 31mins and 20secs. This comprises over 12 hours (12hrs 06mins 23secs) recorded by the researcher plus 1hr, 24mins and 57secs recorded by Ann.

Table 5-7 Instructions for the reflective diary

<p>Diario (istruzioni)</p> <p>The diary should be about your thoughts and impressions on your experience during the course. Highlight why you are doing it, if you think it is going to be useful for your language learning, or not. What you really feel about it and what being in a virtual world makes you feel. How does this course compare to your previous experience of learning to communicate in a foreign language? How do you feel about your partners in the course? What perception did you have of the people you did not know before? And what are your perceptions of the native speakers? Did the course in some way change your perception and ideas about the Italians and some practices in Italy?</p> <p>When it comes to each session, please express your thoughts and impression on that session.</p> <p>Highlight:</p> <p>What were the problems with the technology (if any)</p> <p>What difficulties you had in moving, interacting, dealing with the task and the other participants (if any)</p> <p>What were you required to do? Why do you think you were given that task.</p> <p>How do you feel about the tasks during the session? Have you got other ideas on how they could have been approached?</p> <p>How different would it have been if you had taken part in the task during your normal language class?</p> <p>What was easy and what was difficult.</p> <p>Was there anything around you, in the room you were sitting in, that distracted or helped you with the task (noise, other people, interruption, aid of a dictionary, of a friend etc.)</p> <p>Did you feel you learned anything, or nothing? What did you feel you learned?</p>

Students were asked to keep a reflective journal on their experience during the course and write their thoughts and comments after every session. General guidelines were given as to what to concentrate on when writing the journal. These guidelines were adapted from the diary entry prompts used by Brine and Franken (2006) in their study of a computer mediated programme. The students were invited to use the prompts, seen in

Table 5-7, as an inspiration to express their impressions every week and they were left free as to the language they preferred to use (either English or Italian). The reflective diaries were collected by the researcher at the end of the SL® language course.

5.4.3 Data type after the course: semi-structured interviews

After the end of the course a semi-structured interview was organised with each student, separately. A general outline of the questions available to the researcher for the

interviews can be seen in Table 5-8. Each interview lasted between 20 and 40 minutes and was conducted in English. The initial questionnaires, the contents of the reflective diaries and the result of the final interviews contributed useful information about the emotional state of the students, their physical setting during the SL® sessions and outlined the background against which to set the data analysis.

Table 5-8 Prompts for the interview

Questions:

Can you describe the environment you were in, most of the times? Who was around, what you did, if you managed to pay attention all the time or you got distracted, bored etc.
 Did you use any reference material, help? IMs?
 What did people say when you talked about the experience? Did this affect you?
 What did you feel when you were there? What was the difference with a normal class?
 How did you like it?
 What would you have done differently?
 Did it interfere with your life? Create problems? Time ...
 Was it too long/short
 What about the technology, did you find it problematic? Difficult to handle?
 What about the people in the course? What were your feelings towards them?
 Did you understand well? Was there someone you felt was taking the lead as a tutor?
 And your peers?
 Can you confirm that I can use every part of the recordings?

As the pilot study had highlighted that the students had not fully reflected on their pedagogical experience in the virtual world, the journals were introduced as a tool to focus the students' attention and support their language reflection during the course of the nine sessions. The semi-structured interviews, also, offered the students a possibility to reflect on their experience as a whole, in conversation with the teacher/researcher. The reflective journals and semi-structured interviews were not included in the data analysis as they were not relevant to the focus of this empirical study, which is to analyse how the language learners interact with the context they are immersed in when performing a language task in a virtual world and to highlight the language learning affordances of that environment. In contrast, the recordings of the nine in-world sessions provided the hard

data for the data analysis. The next sections deal with the details of the selection, preparation and encoding of the collected data.

5.5 Data selection: three sessions selected for analysis

After an initial view of the data, I chose three out of the nine sessions of the course. The choice was based on the following reasons: (1) quality and integrity of the recording; (2) diversity of language tasks, so providing an example for each task type; (3) the date the session took place, as one was closer to the start, one took place more or less midway during the course, and one session was closer to the end, in order to see the development of the course. The three chosen sessions are: Session 4 (Si mangia! Let's eat), Session 6 (Feste in Italia, Holidays in Italy), and Session 8 (Mamma mia, che dolore! Damn! It hurts!). These sessions are presented individually across the next three pages in Table 5-9, Table 5-10, and Table 5-11. Each table carries a detailed outline of the session, of each language task and lists the technical, social, and educational affordances engineered to emerge during the sessions. The recordings for these three sessions amount to a total of 4hrs 15mins 47secs. Each of the sessions was subsequently transcribed for data analysis.

Table 5-9 Session Four (Let's eat!), outline, tasks and engineered affordances

SESSION 4 - SI MANGIA (Let's eat!) – 1st December 2011	
Designed to experience, learn and revise food terminology, food habits, and food culture	
Session outline	Engineered affordances
Introduction: the session starts with a short meeting at the researcher's residence in SL and moves to Imparafacile Island where the students meet and greet the new Italian volunteers.	Social: meeting, connecting and communicating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing; exploring the environment. Educational: interacting, connecting and socialising; visualising and contextualising in an authentic environment; exploring the environment; engaging in cross-cultural exchanges.
First task: An easy recipe (<i>Listening comprehension</i>) the students move to an Italian restaurant/pizzeria and listen to an Italian native speaker telling them about one of her favourite recipes, explaining how she cooks it. Students ask questions and interact with the 'cook'.	Social: communicating with others; sharing and exchanging knowledge and information Technical: communicating in voice and writing; exploring the environment; observing objects. Educational: interacting; visualising and contextualising in an authentic environment; exploring the environment; engaging in collaborative learning; engaging in cross-cultural exchanges.
Second task: Cooking together (<i>Collaborative</i>). Students are asked to collaborate to devise a good recipe with the ingredients and kitchen tools available on a table in the restaurant, right in front of them.	Social: communicating and collaborating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing; observing objects in detail; exploring an authentic looking environment. Educational: interacting and connecting; visualising and contextualising in an authentic environment; exploring the environment; co-constructing and collaborating; engaging in collaborative learning; engaging in cross-cultural exchanges.
Third task: The Opinionator (<i>Game</i>). A scripted game object, which looks like a platform, (Opinionator) and a large screen were rezed in a field outside the restaurant. The teacher calls out names of food or drinks, and writes them in Local Chat. A picture of each item is displayed on the screen at the same time the food/drink is called out. Students are to run to the corner inside the Opinionator that represents the meal course that food/drink is associated to (i.e. spaghetti is a first course, etc.).	Social: communicating with others. Technical: communicating in voice and writing; moving in the environment; observing objects in detail; interact with objects; accessing multimodality. Educational: interacting and connecting; visualising and contextualising in an authentic environment; exploring the environment; engaging in cross-cultural exchanges.
Wind-down: the group stayed on Imparafacile Island and continued to chat about food habits in different countries and their personal experiences regarding food.	Social: communicating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing. Educational: reflecting on one's own learning.

Table 5-10 Session Six (Holidays in Italy): outline, tasks and engineered affordances

SESSION 6 - FESTE IN ITALIA (Holidays in Italy) – 16th February 2012 Designed to experience and learn about Italian national and traditional holidays	
Session outline	Engineered affordances
Introduction: the session starts with a short meeting at Imparafacile Island where the students meet and greet the new Italian volunteers.	Social: communicating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing; moving in the environment. Educational: interacting, connecting and socialising; visualising and contextualising in an authentic environment; engaging in cross-cultural exchanges.
First, Second, Third task: Walking around Italy through its holidays (<i>Exploring</i>). Different areas were set up on Imparafacile Island. Each area was devoted to a particular Italian holiday: Christmas and Epiphany; Carnival; Easter and Easter Monday; Liberation Day, First of May and Republic Day; All Saint's Day. The students were asked to look for 3 different areas, Easter; Carnival and All Saints, searching for images/objects that would be connected to that particular holiday. Once the right spot was found, the group stood and commented on the objects on display there. In each spot one Italian talked about what that holiday meant for her. The Italians and the students exchanged their own experiences and chatted about holidays in their own country. In some areas one could interact with objects and collect gifts.	Social: communicating with others; sharing and exchanging knowledge and information; collaborate with others. Technical: communicating in voice and writing; moving in the environment; observing objects in detail; using objects; exploring an authentic looking environment; accessing multimodality. Educational: interacting and connecting; visualising and contextualising in an authentic environment; engage in collaborative learning; exploring the environment; engaging in cross-cultural exchanges.
Wind-down: the group stayed on Imparafacile Island and continued to chat about traditions and holidays in different countries and their personal experiences regarding visiting Italy.	Social: communicating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing. Educational: reflecting on one's own learning.

Table 5-11 Session Eight (Damn, it hurts!): outline, tasks and engineered affordances

SESSION 8 - MAMMA MIA, CHE DOLORE! (Damn, it hurts!) – 8th March 2012 Designed to revise and learn vocabulary about body and physical health and to learn about the Italian health care system	
Session outline	Engineered affordances
Introduction: the session starts with a short meeting at the lecturer's residence where the session is being introduced. Students then teleport to Imparafacile Island where they meet the Italian volunteers.	Social: communicating with others. Technical: communicating in voice and writing; moving in the environment. Educational: interacting, connecting and socialising; visualising and contextualising in an authentic environment; exploring the environment; engaging in cross-cultural exchanges.
First task: Visiting a friend at the hospital (role-play). The students are at the hospital, visiting one of their Italian friends. They bring her presents and ask about her health. The injured Italian had been the victim of one of the crimes mentioned during the previous SL session, at the police station.	Social: communicating with others; sharing and exchanging information. Technical: communicating in voice and writing; moving in the environment; exploring an authentic looking environment. Educational: simulating through role-play; interacting, connecting and socialising; visualising and contextualising in an authentic environment; exploring the environment; engaging in cross-cultural exchanges.
Second task: Making an appointment with a consultant (Role-play). The students view some of the consultants' studios in the hospital, and then visit the reception of a medical centre to make an appointment with a consultant. Each student had already received a notecard describing his/her problem and situation.	Social: communicating and collaborate with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing; moving in the environment; observing objects in detail; exploring an authentic looking environment. Educational: simulating through role-play; interacting and connecting; visualising and contextualising in an authentic environment; exploring the environment; engaging in collaborative learning; engaging in cross-cultural exchanges.
Third task: Going to the chemist's (Exploring, role-play). The students visit a chemist's. One of them talks to the chemist.	Social: communicating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing; moving in the environment; observing objects in detail; exploring an authentic looking environment. Educational: simulating through role-play; interacting and connecting; visualising and contextualising in an authentic environment; exploring the environment; engaging in collaborative learning; engaging in cross-cultural exchanges.
Wind-down: the group stayed on Imparafacile Island and talked about the session and about the history of International Women's Day.	Social: communicating with others; sharing and exchanging knowledge and information. Technical: communicating in voice and writing. Educational: reflecting on one's own learning.

5.5.1 Choice of transcription mode and representation

The three sessions were transcribed adapting Bonsignori's (2009) transcription rules for audio-visual transcription. As argued in Chapter Four, a main difference between a virtual world recording and a filmic one is the limited use of face expressions and gestures in virtual world communication, compared to a video or a film. The researcher described the various avatars' movements and gestures when they were clearly visible. In cases when paralinguistic features, such as laughter, were heard or could be inferred from the avatars' tone, it was decided to use double parentheses (()), used by Bonsignori (2009) as a sign of proxemics. Table 5-12 shows the list of conventions adopted for the transcriptions in this study.

Table 5-12 Transcription conventions

Transcription	Represents
<i>Italics:</i>	used to describe setting and avatars' proxemics and actions
=	used to transcribe latching
+ some*	used to transcribe overlapping
+1 some*	used for multiple overlapping in succession
((laughter))	used to transcribe a paralinguistic feature
(XXX)	used to transcribe unintelligible speech
[ENG]	used when languages other than Italian were used
CAPITALS	used for name of avatars
SU to ITA	used to identify interlocutor when the avatar writes/talks to different people in succession or in crowded scenes
,	used to transcribe intonation break without pause
.	used to transcribe a brief pause (1 second)
..	used to transcribe a medium pause (from 1 to 2 seconds)
...	used to transcribe a long pause (3 or more seconds)
?	used to represent an interrogative tone
!	used to represent an exclamatory tone
-	used to transcribe false start, self-correction

In order to best represent what happened in the recordings, namely, the landscape in which the avatars interacted, their kinetics, their oral interaction, the tone in the avatars' voice, and the written interaction that had been recorded, the sessions were firstly transcribed in 3 columns, reporting same-time communication on the same line of the separate columns.

Excerpt 5-1 Transcription example. Session four, Let's eat!



Time	Scene description. Local chat and IM	Voice chat
00.00	<i>SU, ANN and ITA are standing in front of a building, the restaurant. They are meeting before the session starts.</i>	
00.26	<i>SU is teleporting the students. GEA arrives.</i>	
00.27	<i>DUB arrives. ITA appears as a cloud on Su's screen.</i>	<p>SU: eccoci qua. ehm, io vedo ITA ancora a nuvola.</p> <p>ANN: no, io la vedo bene.</p> <p>SU: ah sì? anch'io prima la vedevo bene, lei ha un po' di problemi oggi..</p> <p>SU: ITA tu ti vedi ora?</p> <p>ITA: Sì, adesso sì</p> <p>SU: Ora io non ti vedo bene e tu sì ((laughter))</p> <p>ITA: ((laughter))</p> <p>BEA: ((laughter))</p> <p>ANN: io vedo tutti bene e chiaramente.</p> <p>SU: ciao Gea!</p> <p>ITA: ciao Gea!</p> <p>GEA: Buonasera! ciao a tu+1tti!*</p> <p>ANN: +1ciao Gea, +2ciao DUB*!</p> <p>DUB: +2buonasera! ciao!</p> <p>GEA: cia+1o!*</p> <p>SU: +1manca* Bea, +2che*. a cui ho mandato il teleport,boh. e anche Hel+3enita che che-* sì.</p>

Excerpt 5-1 is an example of the transcription of an excerpt from an exchange in Session Four (Let's eat!). The scene description is in English whereas all interaction is transcribed in the language used by the participants. The first column recorded the times when relevant actions/communications occurred. The second column described the setting, the proxemics and kinetics of the avatars and the written communication in Local Chat (LC) and in IM. The descriptions are in italics, whereas Local Chat and IMs are written in roman characters. The third column is used to transcribe voice chat. The transcripts reported in the thesis reflect what happened during the tasks. Every instance, or lack thereof, of Local Chat, movement, gesture or noise made by the participants was recorded and features in the transcript. For the reader's ease, excerpts used in Chapter Six and Seven for the data analysis will be reported without a time column and with an English translation.

The original transcriptions are in Appendix B. After the transcription, each one of the three sessions was divided into four episodes and four separate files: an introductory part, first language task, second language task, third language task and a wrap up final part. The twelve files were uploaded onto Atlas.ti³⁶, a qualitative analysis software used for educational purposes. The use of Atlas.ti is further explained in the following section.

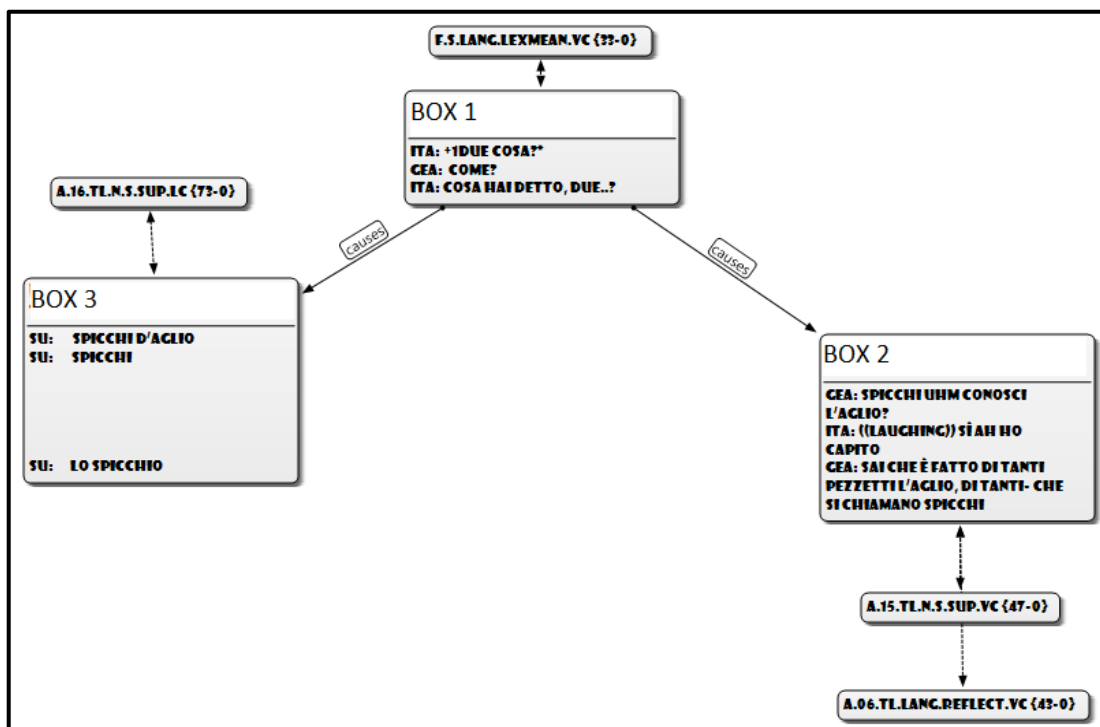
5.6 Encoding the data: Atlas.ti, segmentation of data and use of semantic networks

Atlas.ti offers the possibility to work on large bodies of textual, graphical, audio and video data and the software was used in this study for the encoding of transcribed oral and written interaction. Atlas.ti offers an encoding facility which makes it possible to extract and group the codes created from the study into families of codes for the purpose of further analysis. The documents are uploaded into Atlas.ti and, for the purposes of this

³⁶ <http://atlasti.com/>

study, each document was analysed separately for the purpose of coding as well as across their entirety for the purpose of further analysis. The three transcribed sessions that were selected for analysis consisted of four Word documents each, comprising twelve documents in total. Each session was analysed in search of episodes of disruption in the activities the participants were involved in. This preliminary analysis supplied a first set of codes that helped identify the reasons for the disruptions. Each episode was subsequently further analysed to highlight the actions undertaken by the participants to resolve the problem that had occurred. This provided a second set of codes. As the codes can be linked in Atlas.ti in terms of association, diversion, causality, subsequentality or belonging, the relationship between and across the codes was refined further. This means that for this study the excerpts of transcribed interactions between the participants (and the codes associated to such interactions) could be associated to interactions that were happening at the same time, or were caused by the initial interaction, opposed it or were part of it.

Network 5-1 Atlas.ti semantic network



An important strength of Atlas.ti is that links can be visualised in semantic networks, such as the one in Network 5-1, which then proved useful for the visual representation of the analysis of complex episodes that occurred during the language learning tasks.

Each language task, which is the chosen unit of analysis for this study, was investigated thoroughly, searching for disruptions during the undertaking of the language task. Each of these episodes of disruption constituted a segment of analysis, starting from the beginning of the episode and concluding after the disruption was resolved.

Network 5-1 is in Italian, as the conversation, and therefore the transcript, was conducted in Italian. An English translation of this particular episode is given in Table 5-13.

Table 5-13 English translation of Network 5-1

Local Chat	Voice Chat
SU: Garlic cloves SU: Cloves SU: The clove	ITA: Two what? GEA: What? ITA: What did you say, two ..? GEA: Cloves uhm do you know garlic? ITA: ((LAUGHING)) Yes ah I get it GEA: you know that it's make of many little pieces, garlic, of many.they are called cloves

The network was annotated in order to make the time progression easier to understand for the reader and it shows the start of the episode of disruption in voice chat (Box 1) and the code associated to that particular exchange. The code FS.Lang.Lex.Mean.VC (see Table 5-14) indicates that the episode was caused by an issue raised in Voice Chat by one of the students, Ita, associated to the meaning of a word in the FL (spicchio: garlic clove). This interruption by Ita causes some actions both in conversation in Voice Chat (Box 3) and in writing in Local Chat (Box 2). In this instance the network provides a clear visual of the relationship between the parts that constitute the complete episode and between the different actions that are performed during that episode, all represented by the coding.

Stage 1 data analysis: a taxonomy of episodes caused by disruptions in the activity system

I looked for occurrences of tensions or disruptions in the task activity, which prompted shifts in the focus of the task activity and a change in the object of that activity. It was argued in Chapter Three that an examination of these episodes could lead to the identification of actions that enact affordances of the virtual world. These episodes were encoded identifying the action which represented the start of the shift of focus that occurred in the activity. When, for instance, the task was temporarily interrupted by a student who had difficulty in understanding the meaning of a FL word, the action derived from the question asked by the student was encoded as Focus Shift Language Lexical Meaning (F.S.LANG.Lex.Mean). The encoding also differentiated whether the disruption emerged in local chat (LC), voice chat (VC) or through instant message (IM). In every case of disturbance the object of the task activity was temporarily set aside, so that the participants could work on minimising the disturbance and resolving the problems that had emerged for the language learners, in order to go back to continuing their task, after the interruption. In each instance the disruption was expressed using the foreign language (Italian)³⁷ either in Local Chat (LC), Voice Chat (VC) and/or using Instant Messages (IMs).

The taxonomy of all focus shifts noticed during the three sessions selected for analysis is presented in

Table 5-14, on the following page. The table also includes an English translation of an example of the type of sentence initiating that particular focus shift. In some cases the focus shift was prompted by an Italian participant, who directed the students' attention to certain intercultural and linguistic points. Those instances have been highlighted by adding a T to the encoding.

³⁷ The use of English terms was recorded only in 14 phrases throughout all three sessions.

Table 5-14 Disruption related focus shifts identified during the three sessions

Code	Description
F.S.IC.Exch.LC/T	Focus shift caused by an intercultural exchange initiated by an Italian participant in LC. Example: (SU) Do you have to go to mass every day during Holy Week?
F.S.IC.Exch.LC	Focus shift caused by intercultural exchange initiated by a student in LC. Example: (ITA) Coloured eggs? You mean chocolate eggs?
F.S.IC.Exch.VC/T	Focus Shift caused by an intercultural exchange initiated by an Italian participant in VC. Example: (SU) They don't exist in Italy. You should've gone to any of those.
F.S.IC.Exch.VC	Focus shift caused by intercultural exchange initiated by a student in VC. Example: (DUB) Now, I'm not Italian and I don't have a Health Card. What do I have to do?
F.S.IC.Exch.IM	Focus shift caused by intercultural exchange initiated by a student in IM. Example: (BEA) Ok. I don't know if it is rude to talk when others are talking, is it ok?
F.S.IC.Info.VC/T	Focus shift caused by unexpected cultural information provided by a language speaker. Example: But I live in Puglia, I don't know if you know it. It's a region in the South of Italy, it's the very heel of Italy, I live in the most southern part, in a region called, a sub-region called Salento.
F.S.LANG.Lex Search.IM	Focus shift caused by a student looking for a word in the TL, using IM. Example: (ITA) what's the word for 'big bowl'? Help!
F.S.LANG.Lex Search.VC	Focus shift caused by a student looking for a word in the TL, using VC. Example: (DUB) a, what do you call it? What's it called a 'salsa' of 'tomato'?
F.S.LANG.Lex.Mean.IM	Focus shift caused by a student looking for meaning of a TL word in IM. Example: (ITA) 'pentola' means kettle or pot?
F.S.LANG.LexMean.LC	Focus shift caused by a student looking for meaning of a TL word in Local Chat. Example: (DUB) grattugia??
F.S.LANG.LexMean.LC/T	Focus shift caused by an Italian participant clarifying the meaning of a TL word in VC. Example: (SU) Dub, what did you mean when you said it is 'too' international a city?
F.S.LANG.LexMean.VC	Focus shift caused by a student looking for meaning of a TL word in VC. Example: (ITA) What does 'mezzaluna' mean?
F.S.LANG.Morph	Focus shift caused by a student searching for the correct morphological rule of a target language word Example: (DUB) and the garlics? What is the plural of garlic?
F.S.TECH.Crash.HW	Focus shift caused by a participant crashing.
F.S.TECH.Expertise	Focus shift caused by participants having problems when trying to use some of the options of the VW software. Example: (ITA) How do you get out of mouse look?
F.S.TECH.Move.HW	Focus shift caused by participants having issues revolving around moving in the virtual world Example: (DUB) it's my computer, it's too slow.
F.S.TECH.Rez.HW	Focus shift caused by participants having issues with rezing in the virtual world. Example: (LORA) tell her that she must click Control ALT to rez.
F.S.TECH.Sound.HW	Focus shift caused by participants having issues with the sound. Example: (ANN) Mia, do you know some type of Carnival? (MIA – LC) Can you hear me?
F.S.TECH.View.HW	Focus shift caused by participants not seeing objects properly. Example: (DUB) where is the picture? Where's the picture?
F.S.OTHER	One episode of focus shift caused by an unexpected person interrupting the session. Example: (LORA) this one doesn't know where he's going.

Each code was checked against the other codes part of the same taxonomy three times before data analysis. During data analysis, a more in-depth look at the data generated further refinement of the codes. The taxonomy of focus shifts provided a segmentation of each task activity system and the basis for the encoding of affordance related action, as seen in the next section.

5.6.1 Stage 2 of data analysis: creating a taxonomy of affordance related actions

After encoding the instances of focus shift in the language task activity systems, the actions caused by these shifts which constitute the new sub-activities were encoded. When encoding instances of actions, each code was checked against the other codes part of the same taxonomy three times before data analysis. During data analysis, a more in-depth look at the data generated further refinement of the codes.

Table 5-15, in the next page, lists the 20 different types of action that were observed during the focus shift episodes.

Table 5-15 Taxonomy of affordance related actions

Code	Description
A.01.TL.Languaging.VC	Target Language Languaging in Voice Chat
A.02.TL.Languaging.LC	Target Language Languaging in Local Chat
A.03.EXP.AUT.TL.Cult.VC	Exposure to Authentic Target Language Culture in Voice Chat
A.04.EXP.AUT.TL.Cult.LC	Exposure to Authentic Target Language Culture in Local Chat
A.05.TL.N.S.Input.LC	Target Language Native Speaker Input in Local Chat
A.06.TL.LANG.Reflect.VC	Target Language Linguistic Reflection in Voice Chat
A.07.TL.LANG.Reflect.LC	Target Language Linguistic Reflection in Local Chat
A.08.TL.LANG. Reflect.IM	Target Language Linguistic Reflection in IM
A.09.TL.LEX.Support.IW	Target Language Lexical Support In-World
A.10.IC.Exchange.VC	Intercultural Exchange in Voice Chat
A.11.IC.Exchange.LC	Intercultural Exchange in Local Chat
A.12.Languaging.IM	Target Language Languaging in IM
A.13.EXP.AUT.TL.Cult.IW	Exposure to Authentic Target Language Culture In-World
A.14.TECH.Support.IW	Technical Support In-World
A.15.TL.N.S. Support.VC	Target Language Native Speaker Support in Voice Chat
A.16.TL.N.S. Support.LC	Target Language Native Speaker Support in Local Chat
A.17.TL.STU. Support.LC	Target Language Student Support in Local Chat
A.18.TL.STU. Support.VC	Target Language Student Support in Voice Chat
A.19.TL.N.S. Support.IM	Target Language Native Speaker Support in IM
A.20.IC.Exchange.IM	Intercultural Exchange in IM

Actions encoded as Exposure to Authentic Target Language Culture in Voice Chat (VC) or Local Chat (LC) and numbered as A03, and A04 in the table, refer to moments during which the students were given, in VC or LC, examples, information or insights into aspects of the Italian culture, by the native speakers. An example of code A03 can be seen in full in Excerpt 5-2 which was recorded during the second task of Session Six (Holidays in Italy) and took place only in Voice Chat. During this episode Ann, the Italian participant who was in charge of the task at that stage (talking about the different traditions linked to the Carnival) briefly mentioned the Sardinian Carnival characters

mamuthones. On hearing that, the teacher interrupted the task to expand on those characters, drawing the students' attention to that topic and providing a description of the *mamuthones*, which provoked a question from one of the students.

Excerpt 5-2 Session Six. A03. Exposure to Authentic Target Language Culture in Voice Chat: the *mamuthones*

Voice Chat

SU: e poi quando andrete in Sardegna, Mia e..Bea andranno in Sardegna il prossimo anno, vedranno i mamuthones dal vero./ *and when you'll go to Sardinia, Mia and Bea will go to Sardinia next year, they will see the mamuthones live*

ANN: dice sia affascinante io non l'ho mai visto.+1(XXX)* / *they say it's fascinating I have never seen it+1(XXX)**

SU: +1mah.io li ho* visti in video e fanno cioè sono un po' particolari eh./ +1uhm I saw *them in a video they do well they are quite peculiar

ANN: sì è tutto un movimento particolare nelle vie della piazza ma lo scopo è sempre quello di eh scacciare l'inverno i i momenti cupi e far tornare la primavera.+1penso però*che cose del genere le abbiate anche voi nei vostri paesi, Bea?/ *yes it's a special movement in the streets leading to the square but the aim is always to chase winter the dark days and let the spring in.+1I think though* that you have something similar also in your countries, Bea?*

SU: +1capito Bea?*/ +1did you understand Bea?*

BEA: scusi?/ *Excuse me?*

SU: hai capito che in Sardegna ci sono i Mamuthones?/ *Did you understand that they have Mamuthones in Sardinia?*

BEA: no..cosa significa mamuthones./ *No...what does mamuthones mean.*

On the other hand, Exposure to Authentic Language Culture In-World coded as A13, indicates at times examples of the participants using or referring to in-world objects in order to clarify aspects of the foreign language culture. At other times it refers to Snapshot 5-2 Session Eight (Damn it hurts!): link to International Women's Day



participants sharing links in LC, as it is shown in Snapshot 5-2 that captures a moment around the end of Session Eight (Damn, it hurts!). This episode in Session Eight starts with Ita's question about Women's day, as seen in Excerpt 5-3.

Excerpt 5-3 Session Eight, A13 Authentic Language Culture In-World

Voice Chat

ITA: no!cosa significa la festa della donna!/no! *what does Women's day mean!*

SU: è l'otto marzo vedi ti manda un link anche Annette, l'otto marzo vabbè storicamente è nata da un episodio molto triste/*it's on the eight of march you see Annette is sending you a link too well historically it was born out of a very sad episode*

While Su replies to Ita's question, Ann shares a link to a website on the history of Women's day in LC.

The codes Target Language Linguistic Reflection in Voice Chat, Local Chat and Instant Messaging (IM), encoded as A06, A07, and A08, refer to instances during which the participants express doubts and questions about the foreign language in VC, LC or IM.

When, however, the participants used the foreign language to solve a linguistic problem or clarify an issue, namely, mediated cognitively complex ideas in Italian, those actions were encoded as Target Language Linguaging³⁸, in VC, LC or IM, and encoded as A01, A02, and A12. The Linguaging episodes happened through the unfolding of other actions; they usually started with a Linguistic Reflection action and proceeded with actions such as those identified as Target Language Native Speaker Support in Voice Chat or in Local Chat, and encoded as A15 and A16; or they were actions of Student Support in Local Chat or in Voice Chat, encoded as A.17 and A18. In these episodes, Italian participants or other students joined the communication to help to resolve the problem. An example of Native Speaker Support can be read in Excerpt 5-4, during which HEL, one of the Italian participants, explains the meaning of *riti* (rituals) to Ita. The *riti* excerpt is part of a longer Linguaging episode.

³⁸ Linguaging (Swain, 2006; Swain & Lapkin, 2011) mediates the process of learning, as it allows the learner to express thought into language and to create and negotiate meanings and intentions.

Excerpt 5-4 Session Six. A15 Native Speaker Support in Voice Chat. The meaning of *riti***Voice Chat**

ITA: scusa cosa significa riti?/what does 'riti' mean?

HEL: eh i riti sono tutte le manifestazioni tutte gli come dire sì dico bene le manifestazioni legate alla celebrazione in questo caso di una festa/ 'riti' (*rituals*) are all those displays how should I say it yes that's fine it's displays connected to celebrating a festival, in this case

ITA: oh/ oh

HEL: un rito è una celebrazione eh.. che si ripetono, queste celebrazioni si ripetono uguali ogni anno [...]/a ritual is a celebration that is repeated, these celebrations are repeated in the same way every year

Language support was also provided by means of actions enacted by participants making use of specific technical features of the VW in order to point to, walk towards, or highlight objects within the virtual world that could help resolve a linguistic problem. Those actions were encoded as A09 Target Language Lexical Support In-World. One instance of A09 can be seen in Snapshot 5-3, taken during Session Six, Feste in Italia (Holidays in Italy). For this part of the task the students were taken to an area of Imparafacile Island where they would talk and hear about the 2nd of November (All Souls' Day, a day traditionally devoted to the dead in Italy).

The area in-world was set up as a graveyard and had large posters with pictures of traditional Sicilian scenes of All Souls' Day.

Snapshot 5-3 Session Six, All Souls' Day



The students heard a Sicilian (Lora, the lady standing in front of the fruit poster) talk about how that day is celebrated in her region. When “*frutta martorana*” was mentioned, the students asked what it meant. While Lora replied, the teacher directed the students’ attention to a picture showing *frutta martorana* as can be seen in Excerpt 5-5.

Excerpt 5-5 Session Eight. A09 Target Language Lexical Support In-World, pointing to *frutta martorana*

Voice Chat

“SU: sì, guardate questa frutta ragazzi. la vedete la foto della frutta qui di fronte a a lora?/yes guys look at this fruit. do you see the picture of the fruit here behind Lora?”

In the *frutta martorana* example the picture helped clarify the meaning of a lexical item. In other instances different scripted objects were available to be used by the participants, in an effort to make the task more realistic.

Local Chat was also used as a support to highlight uncommon or difficult words and sentences by writing them down after they had been used, so that the students would have access to the correct spelling and the word/sentence would be reinforced. Those actions were encoded as 05 Target Language Native Speaker Input in Local Chat; an example of such input in Local Chat can also be seen in Snapshot 5-3, where some of the sentences about *frutta martorana* appear on the screen for everyone to read.

Actions encoded as A14 Technical Support In-World stand for those few situations (only 6 instances and not always verbalised) when a problem was solved through a technical action used to change a problematic condition. Examples of A14 are teleporting participants, or changing volume settings.

Finally, instances of participants asking or exchanging information in Voice Chat or Local Chat about cultural habits were recorded as Intercultural Exchange and encoded as A10 and A11. An example of A10 Intercultural Exchange can be seen in Excerpt 5-6 which is part of a longer Intercultural Exchange on different Italian restaurants in Dublin..

Excerpt 5-6 Session Four, A10 Intercultural Exchange in Voice Chat. Pizza in Dublin

ITA: sei mai andata al ristorante si chiama Ciao bella Roma?/ *have you ever been in that restaurant called Ciao bella Roma?*
 SU: sì.e la pizza è buona/ *yes.and the pizza is good*
 ITA: ti piace?/ *do you like it?*
 SU: sì/yes
 ITA: sì la pizza sì/yes the pizza yes
 SU: mi piace molto la pizza è una delle pizze forse migliori su Dublino città/ *I love that pizza it's probably one of the best in Dublin city*
 ITA: sì.mi piace molto/ *yes I like it a lot*
 SU: conosci Caffè di Napoli?/ *Do you know Caffè di Napoli?*
 BEA: sì ho visto Caffè di Napoli..sì sì/ *Yes I saw Caffè di Napoli.yes.yes*
 ITA: ah
 SU: +1la pizza lì* è buona/+*Ithe pizza* is good there*
 BEA: +1ma è non* vicino all'università.è difficile per andare/+*Ibut it's not* near the university it's difficult to get there*
 SU: no +1(XXX)*no+*I(XXX)**
 ITA: +1Dub andiamo* lunedì?/ *+IDub, shall we go* on Monday?*
 DUB: a Caffè di Napoli?sì.io e te?/ *to Caffè di Napoli?you and me?*

The episode took place at the end of the session and involved almost all participants.

The difference in the mode of interaction (written or oral) entails a difference in the counting of the different instances of actions using Voice Chat, Local Chat or Instant Messaging. That is to say that one instance of Voice Chat use can stand for a very short utterance (only one word) or a long speech made by one of the participants. Alternatively, instances of Local Chat or Instant Messaging were counted each time each participant's writing was recorded, as long as it was done at in separate utterances.

When encoding instances of actions, each code was checked against the other codes part of the same taxonomy three times before data analysis. During data analysis, a more in-depth look at the data generated further refinement of the codes.

5.7 Summary

In this chapter *L'italiano in gioco*, the pilot course run in Second Life® ahead of *SLitaliano* was presented and showed how the experience with *L'italiano in gioco* affected the design and running of *SLitaliano*. The chapter then proceeded to present *SLitaliano*, the language course that provided the data for this research study, its design,

structure and the timeline of its development. *SLitaliano*, its sessions, and the language tasks were then described in detail. The participants' selection process and recruitment were explained and the different groups of participants were described in terms of their role and importance for the study. This was followed by a detailed account of the data collection, the typology of data, their preparation and the approach followed for the encoding of the data. The chapter concluded with two taxonomies: a taxonomy of the Focus Shift episodes observed in the data and a taxonomy and description of the actions resulting from the Focus Shift episodes. The two taxonomies provide the starting point of the data analysis laid down in Chapter Six and Chapter Seven.

Chapter 6 What happens during language learning in a virtual world: focus shift episodes, actions and contradictions

Chapter Five detailed the design of the SL® language course and the methodology of data collection and analysis. The chapter ended with a taxonomy of the focus shift episodes observed in the three sessions, and a taxonomy of the actions that were enacted in the course of those episodes, to resolve the disruption that had initiated the focus shift. Chapter Six presents the first phase of the data analysis. The chapter starts with a narrative account of how each of the three sessions chosen for data analysis developed and of what the participants in *SLitaliano* did during those sessions. The chapter then proceeds to identify and analyse in detail the types of disruptions observed during the sessions and the related focus shift episodes. It is proposed that the tensions and disruptions that occurred during the development of the language tasks may be evidence of underlying contradictions within the task activity system and that the actions enacted during the focus shift episodes to resolve such contradictions, are the enactment of emerging language learning affordances of the virtual environment. Finally, one of the focus shifts episodes is examined, in order to show what happened when a deviation from the script of the task occurred and how this analysis can help highlight language learning affordances.

6.1 A narrative account of the three sessions of *SLitaliano*

Chapter Five provided an outline of the three sessions chosen for data analysis and showed how each session consisted of five parts, an introductory part, three main language tasks and a final wind-down time. The following sections present a narrative description of each of the three sessions.

6.1.1 Session Four: Si mangia! (Let's eat)

Session Four, Si mangia! (Let's eat), was designed so that the students could revise and learn food terminology and food habits, and experience the Italian food culture. The session took place on two areas of Imparafacile Island: the introduction and the first and second language tasks were conducted in the areas shown in Snapshot 6-1, outside and inside an Italian restaurant/pizzeria. The third language task and the final wind-down part of the session took place in an open area on the Island.

Snapshot 6-1 Session Four: Si mangia! Restaurant area



Imparafacile Island - Area outside the restaurant (Introductory part)



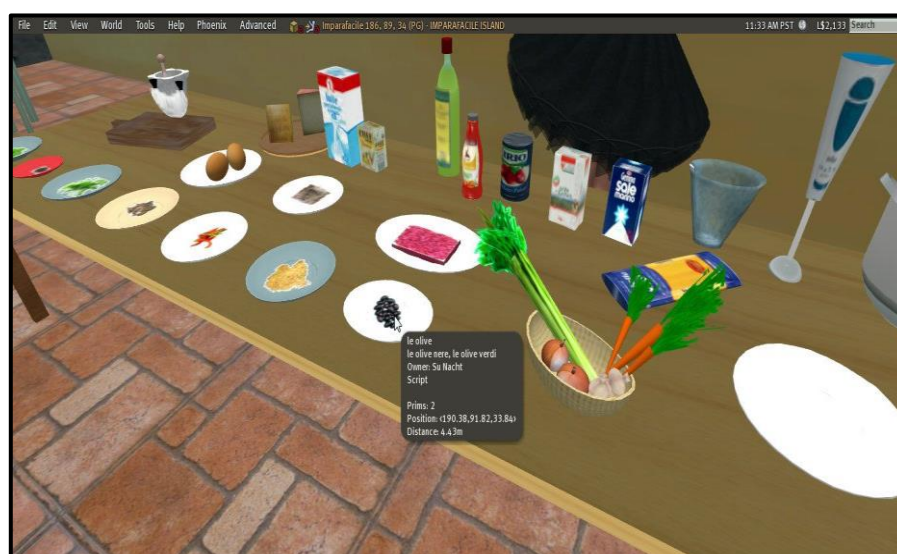
Imparafacile Island - Restaurant (Task 1 and Task 2)

Session Four started outside the restaurant. Eight participants were present for that session: three students (Bea, Dub, and Ita³⁹) and five Italian participants (Su, Ann, Dax, Gea, and Hel). As session Four was Hel's first session, this first part was mostly spent with the students and Hel introducing each other. After just over ten minutes, the group entered the restaurant/pizzeria area that had been furnished with a few tables, a bar area and, on one side, a long table with a choice of cooking tools and ingredients, as seen in Snapshot 6-1. Once the group was inside the restaurant, the first language task, *An easy*

³⁹ Ita's avatar did not rez properly and is therefore seen in the snapshots as a white cloud.

recipe, started. During *An easy recipe* the students were expected to listen to and interact with one Italian participant, Gea, who would tell them about one of her favourite recipes and explain how it is made. The task objectives were: to revise food vocabulary, to introduce new terms and intercultural information, and to set the scene for the language task that would follow. Gea's description of her recipe for *spaghetti aglio, olio e peperoncino*⁴⁰, was interrupted a few times by the students, who asked the meaning of some Italian words or looked for more detailed information on how to use certain ingredients. *An easy recipe* lasted about 10 minutes and, after that, the students were asked to work together on a collaborative language task, *Cooking together*. This language task required the students to use the ingredients and kitchen tools available on the table in the restaurant and devise a recipe, presenting it to the other participants. Each object on the table had been scripted in such a way as to allow participants, who hovered their mouse over it, to read lexical, grammatical or factual information about that object, as seen in Snapshot 6-2 for a plate of olives.

Snapshot 6-2 Session Four: Si mangia! Scripted table for *Cooking together*

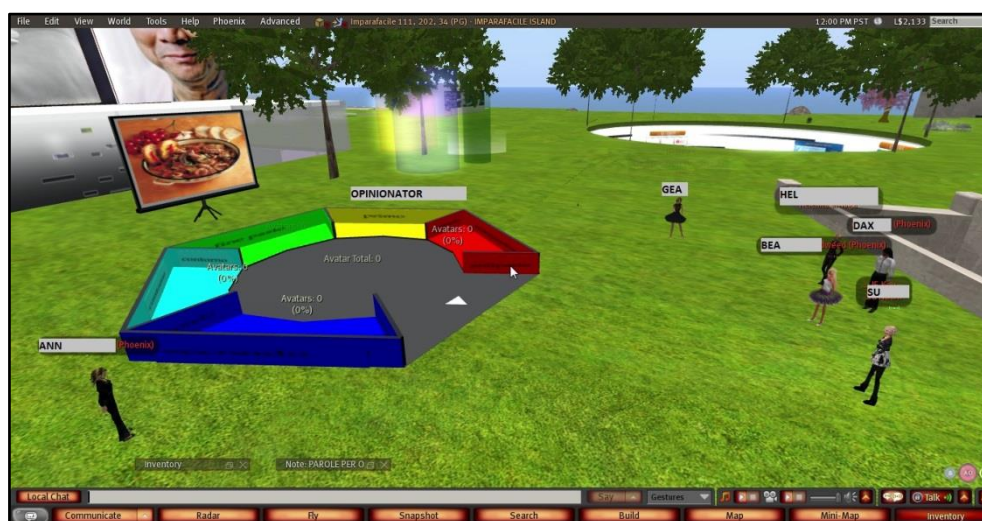


⁴⁰ Spaghetti aglio, olio e peperoncino (garlic, oil and chilli) is the traditional dish Italians make at home after a night out.

The first five minutes of the language task were spent collaborating to resolve a technical problem experienced by two of the students, who could not access the information about the objects on the table. When the issue was resolved, the students spent about 20 minutes discussing and arguing how to prepare a pasta sauce with the ingredients and tools on the table. The Italian participants supported the students in their ‘culinary experience’ with comments and linguistic help, when needed.

After the completion of *Cooking together*, the group moved out to an open area on Imparafacile Island (as seen in Snapshot 6-3). The area had been set up with two scripted objects: a hexagonal platform, (the Opinionator) and a large screen. Once in the area, the students were given instructions on how to play the *Opinionator game*. This game was designed to support the revision of food terminology and of Italian food habits and was run by Su, the researcher/teacher, with the aid of one of the Italian participants, Ann. Su would call out and write in Local Chat names of foods and drinks and Ann, who was in charge of the screen, would rez a photo for each word. After the word was called out, the students were to run to the section of the Opinionator that represented the part of an Italian meal during which that food or drink would normally be consumed.

Snapshot 6-3 Session Four: Si mangia! Open area



Each section in the Opinionator featured a different course of an Italian traditional meal (starter, first course, second course, side order, after the meal) and the centre of the hexagon would show the number of students standing in each section, as in a 3D pie chart. The *Opinionator game* lasted about 30 minutes and was interrupted a few times due to technical issues or linguistic and intercultural questions. At the end of the session the group continued to talk about their experience and opinions of food and food habits, so it was decided to hold the wind-down part of the session near the game area.

6.1.2 Session Six: Feste in Italia (Holidays in Italy)

Session Six was designed so that the students would revise, learn and experience different Italian national and traditional holidays and festivals and share their own experience of those holidays and festivals.

Snapshot 6-4 Session Six: Feste in Italia. Introductory part, Edunation/Imparafacile Island



Edunation - Su Nacht's house
Introductory part



Imparafacile Island- Open area
Introductory part

The introductory part of *Feste in Italia* started in Edunation, at the researcher's residence, where she met the students, Mia, Ita, Bea, and Dub, explained what the session to come would entail and helped iron out some initial technical problems. The students and the

researcher then teleported to Imparafacile Island, where they met four Italian participants, Hel, Ann, Gea, and Lora (see Snapshot 6-4). As it was Lora's first session, during this first part on Imparafacile Island the students and Lora got to know one another.

Imparafacile Island had been set up with various landscaped areas representing different Italian holidays and festivals and, after the introductory part was over, the group was asked to play *Treasure hunt* and search for the Easter area (Snapshot 6-5). Everyone walked, ran or flew around looking for the area, which would be the site for the next language task.

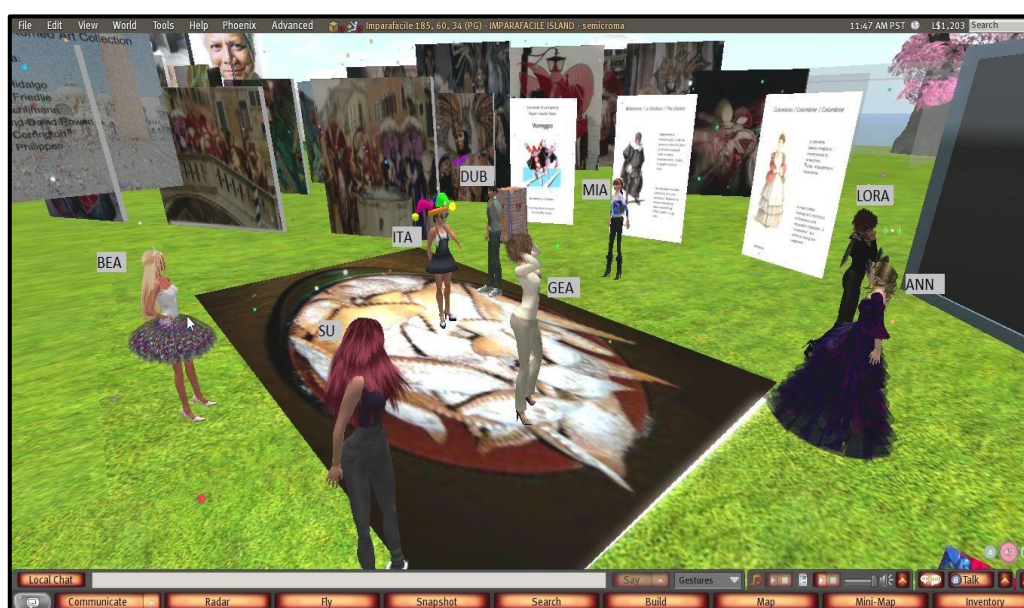
Snapshot 6-5 Session Six: Feste in Italia. The Easter area



The *Easter language task* was a guided interaction task on Easter traditions, prompted by Hel. Hel had chosen Easter as her favourite holiday period; she explained the reasons for her choice and talked about some of the Italian Easter traditions she likes. The participants took part in the conversation and shared their experiences. The task lasted about 20 minutes and was interrupted at times for language related questions, intercultural exchanges, or technical problems.

After the *Easter language task* was completed the group went in search of the Carnival area, where Ann was waiting to guide the *Carnival language task*, about the varied Carnival traditions in Italy. The Carnival area had been set up with pictures of traditional Italian masks from the Italian Commedia dell'arte, pictures from famous Italian Carnivals, confetti, balloons and scripted objects, such as boxes with Carnival gear and an Orange thrower (see Snapshot 6-6).

Snapshot 6-6 Session Six: Feste in Italia. The Carnival area



During the *Carnival language task* the participants talked about their experience of the Carnival holiday. Also, they were encouraged to play with the Orange thrower⁴¹ and have a battle of the oranges. The Orange Thrower was designed to offer participants the chance to reproduce the Italian Carnival tradition of the battle of oranges in Ivrea⁴². The *Carnival language task* lasted just over 15 minutes and had some interruptions, due to technical problems or linguistic and intercultural question. After the task was completed, the group moved to the All Saints' Day area. As some of the students were experiencing lag, thus could not move easily, it was decided to teleport them to the area.

⁴¹ The Orange Thrower is a scripted object that gives you an orange if you click on it. Once you have the orange, you can use it as a weapon and take part in a battle.

⁴² Ivrea is a city in Piedmont, an Italian northern region. Its Carnival tradition is famous all over Italy.

The area devoted to All Saints' Day was set up as a cemetery, and had pictures of the traditional Sicilian All Saints' Day sweets and stalls (see Snapshot 6-7). The guided interaction *All Saints' Day language task* was led by Lora, who described how that holiday is traditionally celebrated in her region, Sicily, and involved the students in the talk. About mid-way during the task, the arrival of an avatar shaped as a light-bulb, who bumped into some of the participants, caused an interruption, which did not last long, as the light-bulb left the area after about one minute. The conversation proceeded regularly, with a few interruptions by students who asked Lora and the other Italian participants linguistic and intercultural questions.

Snapshot 6-7 Session Six: Feste in Italia. The All Saints' area



The *All Saints' Day language task* lasted just over 20 minutes and, after it was completed, it was decided to run the wind-down part of the session in the same area, where the participants talked about the session and about Sicily, its culture and literature and about travelling through Italy.

As the hospital visiting hours were over, the students had to convince Hel to let them see Gea, whose room was on the second floor of the building. The way to the second floor was via two scripted teleport buttons, placed on the walls of the building, one on each floor (see Snapshot 6-8). Hel and Su directed each student upstairs, one floor at a time, to Gea's room. Talking to Gea, the students found that she had been hospitalised after a fall she suffered during a mugging⁴³. Gea told the group about her incident and the students asked questions, commented on what happened and talked about their own experience with hospitals and crime. The *Visiting a friend at the hospital* language task lasted about 35 minutes, and was interrupted with linguistic and intercultural questions.

Snapshot 6-9 Session Eight: Mamma mia, che dolore! Making an appointment with a consultant



After the visit to Bea, the group went to the first floor of the building and viewed some consultants' studios, before moving back to the ground floor and entering the reception of the Health Centre, where the students had to make an appointment with a consultant. Each student had been given a notecard that described his/her health problem and their

⁴³ Gea's story was linked to the theme of Session Seven: C'è un problema! (There's some trouble), during which the students had reported a crime at an Italian Police station.

task was to approach the nurse (Kaj) and book an appointment, as seen in Snapshot 6-9.

The four role-plays lasted about 30 minutes in all, with each student negotiating with the nurse and the practicalities of dealing with the Italian National Health system.

Finally, the group moved to the chemist's, where Ita, who had a bad cold in real-life, bought something for her cold. At the end of the session, during the wind-down part, the group started to talk about their experience during the session but then shifted to an unexpected topic, the history and tradition of International Women's Day in the different countries. The conversation was triggered by the fact that Session Eight was run on the 8th of March, International Women's Day. This is an important date in Italy and the Italian participant who had designed and built the hospital building had arranged a few vases of mimosa (the traditional plant given to women for Women's Day in Italy) and had given mimosa brooches to all the Italian women present. Also, International Women's Day had been mentioned a few times by the Italian participants in the course of the session, stirring the curiosity of one of the students, who asked about the meaning of this day and how it is commemorated.

To conclude, this section has provided a narrative account of what happened during the three sessions chosen for data analysis. It also included how each language task was disrupted at times, either due to technical problems experienced by the participants, or with linguistic or intercultural issues and questions posed by the students. Consequently, the following sections present an analysis of the types of disruptions experienced during the three sessions and of the shifts in the focus on the object of the language task activity induced by these disruptions.

6.2 Types and distribution of disruptions and related focus shifts

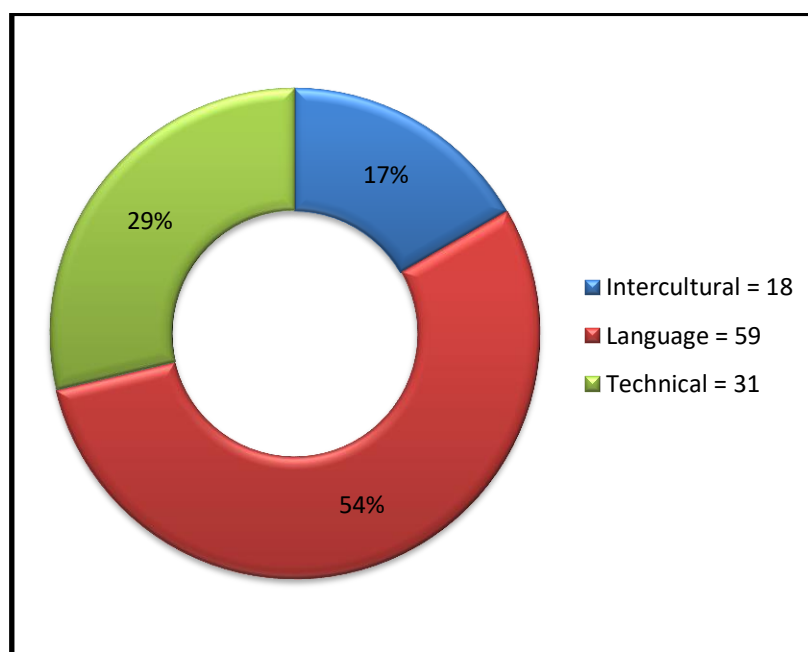
The total number of disruptions and related focus shifts recorded during the three sessions is 108. During every recorded episode of deviation from the script of the language task,

the primary object of that language task was temporarily set aside, so that the participants could work on minimising the disturbance and/or on resolving the issues that had emerged, in order to go back to completing their original task. Three main types of disruption were identified as:

- disruptions caused by a linguistic issue, such as questions or uncertainties in the foreign language (Language disruption);
- disruptions caused by an intercultural question or issue (Intercultural disruption);
- disruptions that were brought about by issues with the hardware or the software used during the course (Technical disruption).

Figure 6-1 shows the incidence of each type of disruption during the three sessions of *SLitaliano*.

Figure 6-1 Distribution of types of disruption during the three sessions



The highest number of focus shifts, 59 episodes in all, and comprising 54% of the total, was induced by Language disruptions. Focus shifts prompted by technical problems and issues were also quite common and were recorded 31 times during the three sessions,

representing 29% of the total. Finally, intercultural questions and discussions induced a shift in the focus in the task activity in 18 instances, giving 17% of the total number of disruptions. The focus shifts prompted by Language and Intercultural questions or issues account for over two thirds (71%) of the total amount of episodes observed in the data. As the objective of the language course was to encourage language production and increase intercultural awareness, uncertainties, questions and reflection on aspects of the foreign language structures and vocabulary and on its culture were expected and are clearly evident in the results. For instance, during The *Opinionator game* in Session Four (Si mangia!), distractors (drinks or dishes that are considered Italian but are not, or are never consumed during a main meal in Italy) had purposely been inserted and prompted discussions during the task. In other cases the objects used during the VW sessions had been created using pictures of authentic products and documents, some of which were unknown to the students or contained new vocabulary.

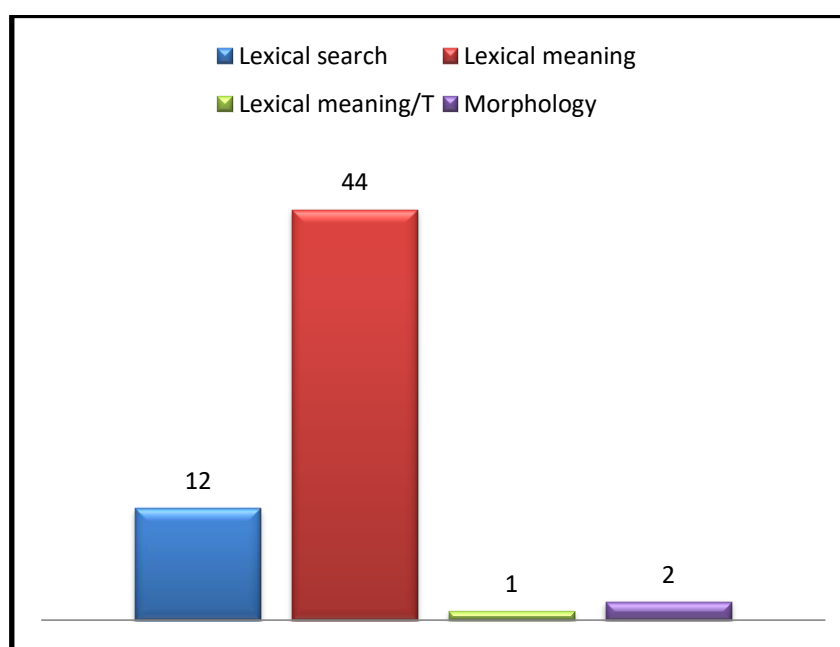
Some technical disruptions had also been expected. Chapter Two highlights technical problems as one of the main hurdles impeding a wider use of these virtual environments and Chapter Five mentions how the pilot course had experienced numerous problems due to faulty software or obsolete hardware. Measures had been put in place in order to minimise these issues, but disruptions due to technical problems (31 cases) were still quite high in number. The following sections will examine each type of focus shift, Language, Intercultural and Technical, in detail.

6.2.1 Language related focus shifts, types and description

Figure 6-2 shows the occurrence of the different types of language related focus shifts. The four types of language related focus shifts were caused by (i) 44 instances of linguistic issues and questions, which comprise requests for the meaning of a word, initiated by students, (ii) one case of linguistic issues and questions initiated by an Italian participant, (iii) 12 episodes of lexical searches such as how to say words or express

certain concepts in the target language, and (iv) two questions on the correct morphological or syntactic choice for words or sentences in the foreign language. In each case the learners' linguistic uncertainty in the FL caused the participants to temporarily abandon the language task at hand and turn their attention to solving the linguistic issue.

Figure 6-2 Types of Language related focus shifts



Firstly, the largest number of focus shifts (44) was induced by Lexical Meaning questions, with students interrupting the action to ask about the meaning of something they heard or read during the course of the task, as seen in Excerpt 6-1, during the *Cooking together* language task in Session Four. This example is a part of the full focus shift episode.

Excerpt 6-1 Lexical Meaning question, Session Four: the meaning of *dorato*

DUB: frighiamo per fare eh dorato, sì?/we fry to make it dorato, yes?
 ITA: cosa significa dorato/what does dorato mean
 DUB: dorato.per fare..no bruciate e no bianco ((laughter))/dorato.to make it..no burnt and no white ((laughter))
 ITA: ah.sì sì ho capito ((laughter))/ah.yes yes I understand ((laughter))

After Dub mentions the word *dorato* (golden brown) Ita interrupts the task to ask for the meaning of *dorato*, which Dub explains.

Excerpt 6-2 provides a second example of a Lexical Meaning focus shift that took place during the *Visiting a friend at the hospital* task in Session Eight. After Gea's retelling of her fall during a mugging, Dub asks for the meaning of *scippare* (to mug). While Gea replies to Dub's question, Su writes the word in Local Chat, supporting Gea's explanation.

Excerpt 6-2 Lexical Meaning question, Session Eight, the meaning of *scippare*

Local Chat	Voice Chat
SU: SCIPPARE	DUB: ma ho, io ho una domanda/ <i>but I have a question</i> GEA: dimmi/yes DUB: non lo so esattamente cosa vuoi dire con scippare è lo stesso che rubare/ <i>I don't know exactly what scippare means is it the same as to steal</i> GEA: sì ma rubare eh a una persona portando via qualcosa che una persona ha indosso cioè a +1a*assalire una persona che cammina/yes <i>but to steal ehm from people taking something that they have on them I mean to assault a person while they are walking</i> DUB: +1ah*sì sì sì sì/ah yes yes yes
SU: LA BORSA DI SOLITO/ THE BAG USUALLY	

Another instance of a Lexical Meaning initiated focus shift occurred during Session Six, *Feste in Italia* (Holidays in Italy), while the participants were working on a language task, as seen in Snapshot 6-10.

Ann is describing the different traditions of Carnival in Italy to the group in the area on Imparafacile Island that had been staged with pictures of the Italian Carnival, as it is celebrated in different parts of the country.

Snapshot 6-10 Session Six, Si mangia! Carnival area, the *cenci* episode



The Lexical Meaning focus shift episode is shown in Excerpt 6-3. During the progression of the *Carnival language task* Lora, Gea and Su refer to a popular Italian Carnival biscuit, which has different names in different parts of Italy and which is depicted on the photo on the ground of the Carnival area. Some of the different names for that biscuit are mentioned and Su writes them down in Local Chat. The episode starts when one of the students, Dub, interrupts the exchange about Carnival to ask for the meaning of the word *cenci*, and the task is temporarily set aside while the Italian participants help him with the meaning and the pronunciation of the word. After Dub's question is answered, the participants resume the language task and continue to talk about the Carnival holiday.

Excerpt 6-3 Lexical Meaning question, Session Six, The meaning of *cenci*

Local Chat	Voice Chat
SU: ZEPPOLE SU: CENCI SU: FRAPPE SU: CHIACCHIERE	DUB: no ho +1cosa significa cenci* <i>I don't +1what does cenci mean*</i> BEA: +1trovo la storia molto interessante +1I find the history very interesting* SU: sono questi Dub +1questi* <i>these ones Dub +1these*</i> ANN: +1sono tutti*nomi degli stessi dolci

	<p>+ <i>I they are all* names for the same cake</i> SU: guarda la foto dove sono io <i>look at the picture were I'm standing</i> DUB: (XXX) LORA: Dub sono i nomi locali nelle varie regioni +1 degli stessi biscotti* <i>Dub they are local regional names +1 for the same biscuits*</i> DUB: +1 ah ok* SU: dello stesso tipo di dolce <i>of the same sort of sweet</i> DUB: ((laughter)) SU: perché come sai l'Italia ha nomi diversi per una cosa venti nomi diversi venti regioni diverse <i>because as you know Italy has different names for the same thing twenty different regions twenty different names</i> DUB: e co-come si pronuncia lo primo? cenci? <i>and how do you pronounce the first one? cenci?</i> SU: cenci DUB: cenci SU: i cenci [WITH A TUSCAN PRONUNCIATION] ANN: i cenci [WITH A TUSCAN PRONUNCIATION] giusto ((laughter)) in Toscana <i>i scenci right ((laughter)) in Tuscany</i> ANN: ok. l'ultimo tipo di carnevale è il mio favorito perché la manifestazione più famosa è quella della mia città [...] <i>ok. the last type of carnival is my favourite because the most important example of it is in my city [...]</i></p>
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Secondly, in one specific case, the Lexical Meaning disruption was prompted by the teacher (Lexical Meaning/T), who highlighted a student's lexical error, as seen in Excerpt 6-4.

Excerpt 6-4 Lexical Meaning/T, Session Four, the use of *troppo*

	<p>SU: [...] perché Dub hai detto che Dublino è una città TROPPO internazionale?.../Dub why did you say that Dublin is TOO international a city? DUB: io?/me? SU: eh.hai detto troppo/eh you said troppo DUB: sì ma perché c'è tanti stranieri/yes but because there are many foreigners SU: ma è negativo?/but is it negative? DUB: non è negativo no./it's not negative no SU: ah ma troppo è negativo /ah but troppo is negative DUB: mol+1ti*/many BEA: +1 molti* molti/many many DUB: molti stranieri/many foreigners SU: eh volevi dire molto allora penso/ah you meant to say molto then I think DUB: moltO o moltI/a lot or many SU: molto molto/a lot DUB: quello che voleva dire/what I wanted to say</p>
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This episode happened during the wind-down part of Session Four, *Si mangia!* (Let's eat!). During this part the participants had been talking and sharing information about eating out in Dublin and their experience of the different Italian restaurants in the city. Dub had used the adverb *troppo* (too/too much) in his description of Dublin as 'too international a city'. Su, the researcher, interrupted the conversation, to focus Dub's attention on the meaning of what he had said and to make sure that that was what he intended to say.

Thirdly, in 12 instances the students interrupted the task for a Lexical Search (asking for help to find a specific word in Italian), as seen in Excerpt 6-5, which happened during Dub's *Making and appointment with a consultant* role-play.

Excerpt 6-5 Lexical Search focus shift, Session Eight, looking for painkillers

Local Chat	Voice Chat
SU: ANALGESICO	DUB: ho capito.e come si chiama quello tsk la medicina per per per no avere dolore di più/I get it.and what do you call that tsk the drug for for no pain ever KAJ: per non avere dolore?ci sono degli antidolorifici +1che lei* può in questo caso acquistare nella farmacia qui di fronte./not to get pain?there are antidolorifici that you can buy in the chemist's opposite here DUB: +1anti*/anti KAJ: si +2chiamano*antidolorifici/they are called antidolorifici
SU: ANTIDOLORIFICO	DUB: +2ok*...va bene grazie mille/ok thank you so much

Fourthly, in two instances the language task was interrupted with a question about the morphology of the foreign language, as seen in Excerpt 6-6 and Excerpt 6-7, both from Session Four, *Si Mangia!* The two episodes happened during the *Cooking together* task, while the students were working together at making a pasta sauce. During the first episode, (Excerpt 6-6) Dub briefly interrupts the work on the new recipe to make sure he has the correct the plural for the word *aglio* (garlic).

Excerpt 6-6 Morphological focus shift, Session Four, the plural of *aglio*

Local Chat	Voice Chat
SU: gli agli/the garlics	<p>DUB: ((laughing)) le cipolle e...gli agli?come si di-co-com'è il plurale di aglio, Ita./onions and...garlics?what's what's the plural of garlic,Ita.</p> <p>GEA: sì.gli agli/yes.the garlics</p> <p>ITA: gli agli/the garlics</p> <p>DUB: gli agli, agli.gli agli e dopo...uhm ah... mettiamo un, un po' di...olio di oliva?sulla..la padella?e... /the garlics.garlics.the garlics and after...uhm ah...we put a, a little ...olive oil?on the..the pan?and...</p> <p>ITA: ok ((laughing))</p>

Dub asks another student, Ita, for help and Gea, an Italian participant, joins in and offers help. Su, the researcher, highlights Gea's and Ita's replies by writing the correct form in Local Chat. The second episode, seen in Excerpt 6-7, was also initiated by Dub, who, while the students were deciding how much pasta should be used for three people, asks for help on choosing the correct form of the adjective *quanto* (how much), as he wants to agree the

Excerpt 6-7 Morphological focus shift, Session Four, the agreement of *quanto*

Local Chat	Voice Chat
<p>SU: quantA</p> <p>SU: quantA pastA</p>	<p>DUB: quanto?/how much?</p> <p>BEA: per tre +1persone*/for three people</p> <p>DUB: +1quanto o quanti?*quanto o quanti?quanto../how much or how many how much or how many</p> <p>BEA: quante/how many</p> <p>DUB: quante...quanta.quanta pasta./how many...how much.how much pasta.</p> <p>DUB: quanta pasta ((chuckles)) pasta singolare...no?non plurale/how much pasta ((chuckles)) pasta singular...isn't it?not plural</p> <p>BEA: sì.non lo so/yes.I don't know</p>

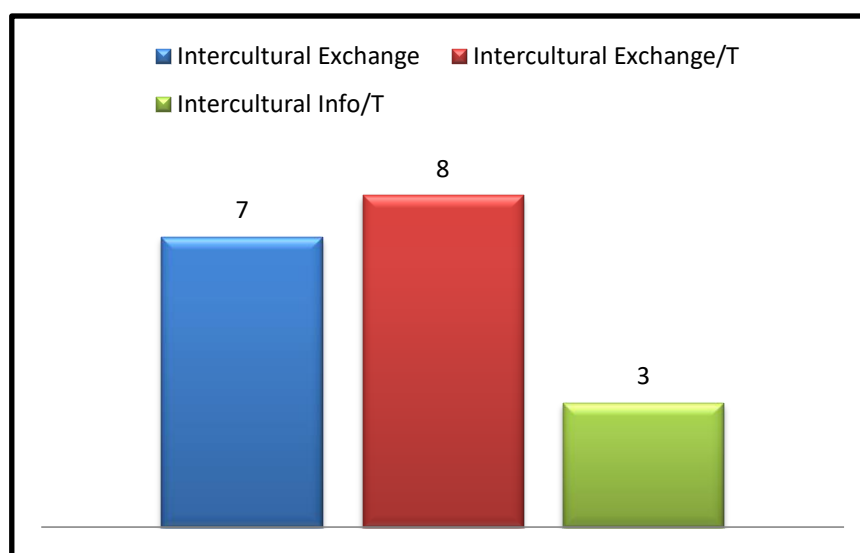
adjective with the noun *pasta*. During this episode Bea, one of the students, offers her help in Voice Chat and Su writes down the correct form in Local Chat.

6.2.2 Intercultural focus shifts, types and description

Figure 6-3 shows the three different types of the 18 Intercultural related focus shifts observed during the sessions and their occurrence, with the /T indicating episodes not

initiated by a student. Focus shifts caused by intercultural exchanges consisted of episodes during which the language task was interrupted due to ‘curiosity’ about an aspect of the FL culture. During the three sessions the three types of interruptions ranged from (i) seven exchanges about how to do certain things ‘the Italian way’ to questions about Italian and regional habits and traditions initiated by students, (ii) eight exchanges about how to do certain things ‘the Italian way’ initiated by Italian participants, (iii) three information exchanges on a cultural topic spontaneously provided by Italian participants who were eager to share their experience and the culture of their area. These spontaneous pieces of information were either provided after a language task was concluded or were not related to the object of the language task at hand.

Figure 6-3 Types of Intercultural focus shifts



The chart shows that the largest number of focus shifts were Intercultural Exchange focus shifts, namely 15 episodes during which the participants either exchanged information about their own countries’ national and local costumes or asked for information about the culture of the country of the other participants. Excerpt 6-8 provides an example of an Intercultural Exchange focus shift initiated by a student. The excerpt shows the start of a long Intercultural Exchange focus shift started by Dub when, after hearing mention of a

Health Card, he was worried, as he did not have one and, being a foreign national, did not know how this would affect him.

Excerpt 6-8 Intercultural Exchange focus shift, Session Eight, the Health Card

DUB: adesso non sono italiano e non ho una tessera sanitaria cosa +l devo fare*/ *now I'm not Italian what do I have to do**
 KAJ: +l non ha la* tessera sanitaria? ah è un grosso problema allora. è un grande problema lei dovrà recarsi presso un altro sportello di un altro ufficio per ottenere eh la tessera sanitaria perché senza quella non si può accedere a quelli che sono i servizi sanitari in italia/+you don't have a* health card? ah *it's a big problem. it's it's a big problem you will have to go to another section in another office to get a health card as you can't access the Italian national health system without a health card*
 DUB: ma si non è italiano?/ *but if one is not Italian?*

Another instance of an Intercultural Exchange focus shift prompted by a student that occurred during Session Eight can be read in Excerpt 6-9, which shows the start of a longer focus shift episode about International Women's Day.

Excerpt 6-9 Intercultural Exchange, Session Eight, Women's Day

Local Chat	Voice Chat
<p><i>ANN writes a link in local chat to a website with the history of International Women's Day</i></p> <p>ANN: a New York/in New York</p> <p>ANN: 1908</p>	<p>[...]</p> <p>ITA: no! cosa significa la festa della donna!/ <i>no! what is Women's Day!</i></p> <p>SU: è l'otto marzo vedi ti manda un link anche Annette, l'otto marzo vabbè storicamente è nata da un episodio molto triste/ <i>the eighth of March see Annette is giving you a link, the eighth of March that is historically it was born out of a very sad episode</i></p> <p>KAJ: da una tragedia/ <i>a tragedy</i></p> <p>[...]</p> <p>DUB: mi senti?/ <i>can you hear me?</i></p> <p>SU: ah. sì sì ti sento ti sentiamo/ <i>ah. yes yes I can hear you we can hear you</i></p> <p>DUB: no. io ho chiesto che in Brasile sì è un un è una festa internazionale penso io. però non lo so la storia non lo so perché otto marzo è una festa della donna./ <i>no. I asked that in Brasil yes it is a a national holiday I think. but I don't know the history I don't know why eighth of March is Women's Day</i></p> <p>SU: ((laughter)) perché c'è stato ci fu ma non mi ricordo in che anno è successa questa tragedia in questa fabbrica a New York in cui sono morte le operaie che 1908. ecco nel 1908./ <i>Because there has been there was but I don't remember in which year this tragedy happened in this factory in New York where women workers died who 1908. there. in 1908</i></p> <p>[...]</p>

As the session took place on International Women's Day, an important date in Italy, the student Mia started to talk about what her family usually does. At this point, Ita, another student, first sent the researcher an Instant Message asking for the meaning of Women's Day and then asked again in Voice Chat, interrupting the wind-down part of the session. While Women's Day had been mentioned earlier during the session, it had not been part of the language tasks for that session. Ita's question, however, prompted a long exchange on the meaning of Women's Day in Italy and in other countries and on the history of that particular day. This intercultural episode was not engineered in the language task and it was a consequence of the particular date that very session took place in.

In contrast, one of the intercultural issues engineered by the teacher to occur during a language task is the *cappuccino* episode, a part of which can be read in Excerpt 6-10 and which took place in Session Four during the *Opinionator Game*. The teacher had inserted the word *cappuccino* in the list of words to be called out, expecting some of the students to get the answer wrong. Cappuccino was a distractor, added to the list in order to create an Intercultural disturbance, as many foreigners would drink cappuccino after a meal, which is often considered unacceptable in Italy. Two of the students knew that and a lively discussion started in the group, on the correct time for ordering and drinking a cappuccino.

Excerpt 6-10. Engineered intercultural exchange, Session Four, the *cappuccino* episode

Local chat	Voice Chat
SU CAPPUCINO	<p>SU: numero diciassette.cappuccino./ <i>number seventeen.cappuccino.</i> SU: ((smiling)) lo sape+1vo*/((chuckles)) <i>I knew+1it*</i> BEA: oh.no..no.ah!/ <i>oh.no..no.ah!</i> SU: brava Bea.e brava Ita.non si mangia il cappuccino a pranzo!non si beve il cappuccin +1a*/ <i>well done Bea.and well done Ita.one doesn't eat cappuccino for lunch!one doesn't drink cappuccin +1a*</i> BEA: +1si* ((laughs))/ +1yes* ((laughs)) SU: bravi!grazie./ <i>well done!thanks.</i> DUB: perché no?/ <i>why not?</i></p>

ANN Dub è perplesso/ <i>Dub is perplexed</i>	SU: sono molto felice.gra+zie*/ <i>I'm very happy.than+ks*</i> BEA: +1perché*per colazione/+1 <i>because*for breakfast</i> SU: brava/bravo DUB: perché?/ <i>why?</i> BEA: è cola-è una è una cosa per colazione sta alla mattina/ <i>it's break-it's a it's a thing for breakfast it's in the morning</i> DUB: uhm SU: grazie +1Bea*/ <i>thanks +1Bea*</i> DUB: +1allora cosa bevi*/+1 <i>so.what do you drink*</i> BEA: In Irlanda è per tutti ma...penso in Italia è è per colazione ((smiles))/ <i>In Ireland it's for everybody but...I think in Italy it's it's for breakfast ((chuckles))</i> DUB: ((smiles)) e allora cosa bevi?/((chuckles)) <i>so what do you drink?</i> SU: acqua./ <i>water.</i> DUB: acqua?/ <i>water?</i> SU: vi+1no*/ <i>wi+1ne*</i> ITA: +1vino!*/ <i>+1wine!*</i> GEA: +1vino*/+1 <i>wine*</i> SU: vino/ <i>wine</i> SU: e caffè/ <i>and coffee</i> BEA: sì/ <i>yes</i> GEA:alla fine/ <i>at the end</i> SU: caro Dub/ <i>dear Dub</i> DUB: ma cappuccino no è caffè?/ <i>but cappuccino is it not coffee?</i> SU: no è cappuccino/ <i>no it's cappuccino</i> BEA: sì ma caffè con latte e..è specializzata/ <i>yes but coffee with milk and..it's specialised</i>
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Figure 6-3 also shows that most of the Intercultural focus shifts were initiated by the Italian participants, who appeared to adopt a ‘teaching mode’ when it came to explaining the cultural traditions and ways of their country or regional area (Intercultural Exchange/T, was initiated twice by the teacher and six times by the other Italian participants). The figure shows native speakers as being rather active in providing intercultural input and initiating this type of episodes. The following example, in Excerpt 6-11, shows one of the Intercultural focus shift episodes initiated by one of the Italian participants, Gea. Gea, who was playing the part of the injured friend during the *Visiting a friend at the hospital* language task, interrupted the account of her incident to make sure that the students would understand what an Italian identity card is and what it means when it is stolen or lost.

Excerpt 6-11 Intercultural Exchange/T focus shift, Session Eight, the identity card

GEA: e anche la carta d'identità voi Mia hai capito cos'è la carta d'identità? tu
sai cosa/ *and also my identity card Mia did you get carta d'identità? do you
know what*
MIA: sì in inglese si dice ID./ *yes it's called ID in English*
GEA: identity card ah..anche voi avete quello sì.tu ce l'hai sì/ *identity card
ah..you have that too yes.you have it*
MIA: sì/yes
GEA: perché anche quella è pericoloso perché possono utilizzarla/ *because
it's dangerous they can use it*
DUB: ma in Irlanda non esiste sì non esiste/ *but it doesn't exist in Ireland yes
it doesn't exist*
GEA: no?/no?

Excerpt 6-11 shows the start of the identity card episode, which was much longer and developed in a description of the different IDs in the two different countries.

The role that the native speakers played in these situations is also clear in the three Intercultural Info/T episodes; in these instances the focus shift was caused by an Italian participant interrupting the task at hand in order to provide additional cultural information around it. Excerpt 6-12, from Session Four, *Si mangia!* (Let's eat!), is an example of an Intercultural Info episode just as the students are about to complete their first task, listening to an Italian recipe and Gea, the Italian who has just taught them how to cook *spaghetti aglio, olio e peperoncino*, interrupts the task to make sure the students understand the importance of cooking pasta *al dente*.

Excerpt 6-12 Intercultural Information, Session Four, pasta *al dente*

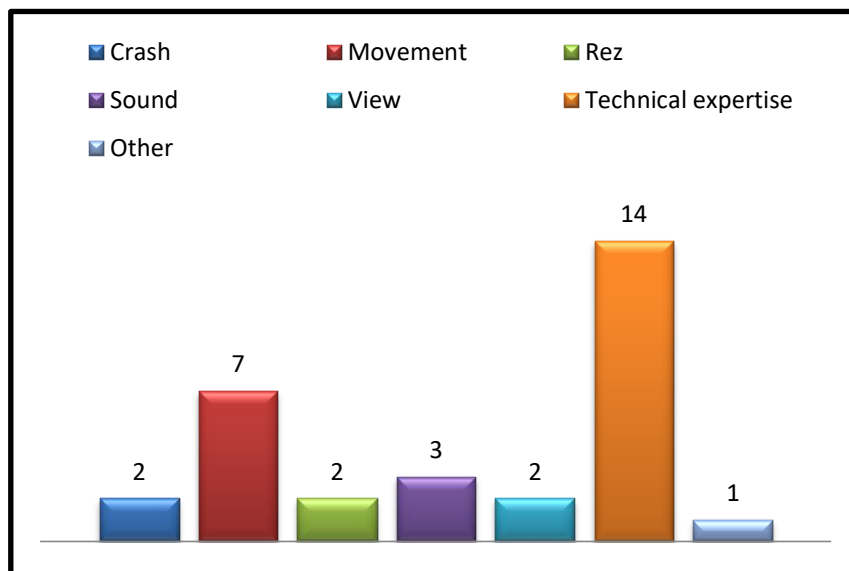
GEA: hai capito? eh uh e infatti Annette ha scritto 'al dente' perché la pasta deve essere
uh non troppo cotta, non troppo dura/ *Did you get it? Eh uh actually Annette wrote al
dente as pasta must be uhm not too cooked, not too hard*
DUB: sì/yes
GEA: e in italiano si dice 'al dente'..cioè che il dente la deve sentire, capito?
((chuckles))/ *and in Italian we say 'al dente'... I mean, the tooth must feel it, got it?*
((chuckles))
DUB: sì sì sì ((chuckles))/ *yes yes yes ((chuckles)) [...]*
ANN: +1 vie- viene dall'italiano*comunque/+ *it comes from Italian* anyway*
GEA: certo perché la pasta ((laughter)) è nostra/ *certainly, because pasta ((laughter)) is
ours*

The episode then continues with more information about how to cook pasta.

6.2.3 Focus shifts caused by technical disruptions, types and description

Figure 6-4 shows the different types of technical disruptions that resulted in a focus shift during the language task. In all 31 episodes, technical issues were verbalised in Italian, and the group helped out by providing support and instructions. The different types of technical disruption observed during the three sessions were caused by problems related to the hardware, such as use of obsolete hardware or lack of some important hardware components, such as a mouse. Technical disruptions were also caused by the students' poor expertise in fully exploiting some of the technical features of the SL© software or of their own hardware.

Figure 6-4 Occurrence of technical disruptions



Also, the bandwidth available in the area some of the students lived was often not up to standard. This caused episodes of crashing or slowed down the computer to a point when the participants experienced problems with rezing, navigating the VW, viewing objects or listening to each other. In these cases some of the software technical features could not be accessed by the students experiencing the problem. Summarising, the seven types of technical disruptions observed were: (i) 14 instances relating to technical expertise, (ii) seven cases relating to movement, (iii) three disruptions concerning sound, (iv) two

crashes, (v) two problems with rezing, (vi) two cases relating to view, and (vi) one other technical issue.

An example of a focus shift episode initiated by a hardware problem can be seen in Excerpt 6-13, which happened at the start of the *Easter language task*, during Session Six, Feste in Italia (Holidays in Italy).

The group had been on a hunt, looking for the Easter area on Imparafacile Island, but Dub had a very poor bandwidth and had difficulties moving his avatar, which ended up blocked inside a building near the area. Dub needed some help and time to free himself and walk to the Easter area, where the group was waiting.

Excerpt 6-13 Technical focus shift, Session Six, movement

DUB: è che mio computer è troppo lento ((laughter))/problem is my computer is too slow ((laughter))

SU: ah.ho capito ho capito non ti preoccupare/ah.I get it I get it don't worry

SU: ((laughter)) devi uscire da quella ((chuckles)) casa.gra-perfetto((laughter)) you have to get out of that ((chuckles)) house.tha.perfect

In 14 instances the technical issue was a direct consequence of the students' lack of expertise in mastering the software and in navigating the virtual world. It can be inferred that a longer time spent training the students might have led to fewer of these types of episodes. The students had had a long training period in the VW and had also been trained individually in-world. This, however, may have not been enough, as the high incidence of disruptions due to the students' technical expertise (45% of the total) demonstrates. Moreover, during the course of *SLitaliano* it became clear, through informal chat with the students in college that two of them did not have a mouse and one did not have a working headphone cable. The lack of proper hardware had an influence on the students' full use of the VW software, which improved once the students were given suitable hardware.

A focus shift episode initiated by a technical expertise issue can be seen in Excerpt 6-14. The episode happened during the warm up phase of Session four, Si mangia! (Let's

s eat). During the introductions one of the students, Bea, had a problem hearing the participants and interrupted the task to ask for help.

The exchange in Excerpt 6-14 shows how, due to Bea's problem, the initial task of greetings and introductions is momentarily set aside in order to resolve the sound issue. Bea uses both voice chat and instant messaging to highlight her difficulty and Su first tries to explain to Bea how to use the software to adjust the other participants' voice volume. As the student finds it difficult, Su proceeds to raise her own voice volume, which, in turn, makes her sound clearer to all participants.

Excerpt 6-14 Technical experience focus shift, Session Four, sound problem

Local Chat	Voice Chat
<p><i>Su is increasing the volume of her microphone in the SL settings</i></p> <p>BEA: (IM)Non ti sento/I can't hear you</p>	<p>BEA: scusi Susanna, mi dispiace.il tuo microfono è basso/ <i>excuse me Susanna, sorry.your mic is low</i></p> <p>SU: è troppo basso il mio microfono?allora lo alzo/ <i>is my mic too low?I'll turn it up then</i></p> <p>BEA: sì sì/yes yes</p> <p>SU: sì sì non ti preoccupare.hai provato ad alzarmi tu anche?/ <i>yes yes don't worry.have you tried to turn up my voice too?</i></p> <p>BEA: scusi?/ <i>Sorry?</i></p> <p>SU: hai provato ad alzare il mio microfono vicino a [English] talk?../ <i>have you tried to turn up my volume next to [English] talk?..</i></p> <p>BEA: uhm</p> <p>SU: se-lo vedi dove hai [English] talk?... / <i>if-do you see where you have [English] talk?...</i></p> <p>SU: un attimo che lo alzo, eh, comunque.../ <i>one second,I turn it up myself, eh, anyway...</i></p> <p>SU: mi senti meglio?/ <i>can you hear me better?</i></p> <p>BEA: sì sì/ <i>Yes yes</i></p> <p>GEA: è meglio sì, anch'io senti+Ivo*sì/ <i>it is better yes, I also hear+Id*yes</i></p> <p>HEL: +I sì ti sento* anch'io meglio ti sentivo anch'io un po' lontana invece/+<i>Iyes I hear you* better too I also heard you a bit far away instead</i></p> <p>GEA: è più chiaro sì/ <i>it is clearer yes</i></p> <p>HEL: va decisamente meglio/ <i>it's definitely better</i></p> <p>BEA: grazie/ <i>thanks</i></p>

To conclude, 3 different types of disruptions have been observed in the 3 sessions analysed: disruptions caused by questions and problems with the use of the foreign language, disruptions caused by questions on intercultural topics and disruptions and

breakdowns due by technical problems with the hardware or software. It was noticed that, even though language related problems and issues initiated the largest number of deviations from the script of the language tasks analysed, technical disruptions were also a common source of focus shifts. It is important to note that these difficulties were expressed using the foreign language (Italian), as the use of English words was recorded only 14 times throughout the three sessions, five of which, were used by the Italian participants.

The following section investigates the focus shift episodes as possible manifestations of contradictions in the task activity system, whose resolution may bring about a possible expansion in the system and a possibility for learning to occur.

6.3 The focus shift as a possible manifestation of an underlying contradiction in the activity system

Chapter Three argued that “deviations in the observable flow of interaction” of an activity (Engeström et al, 1991, p. 91), may constitute the visible manifestation of a contradiction within the activity system, or between different activity systems. It was explained that contradictions in an activity can be of great importance, as they may constitute a cause of change and development in the activity (Murphy & Rodriguez-Manzanarez, 2008). Episodes arising from a contradiction in the activity may also bring the activity to a halt, but, if they lead to the reshaping and development of the pre-existing activity, and the construction of a new object and motive(s), they may, in some cases, lead to learning, so that problems, in this sense, become resources and a source of development. It was also explained that not all deviations from the activity are an expression of a systemic contradiction; it is however interesting to highlight episodes of shifts in the focus of the various task activities undertaken during the virtual world course, as each time the task was set aside to concentrate on language and culture related questions or on a technical

issue, language production increased and the group was exposed to the possibility of ‘noticing’ language and intercultural points. The following sections will resume the analysis of the focus shifts described in section 6.2 and show how some of the deviations from the script of the language tasks may have been caused by underlying contradictions in the task activity systems.

6.3.1 Focus shifts caused by language and technical disruptions and their underlying contradictions

Section 6.2 showed that the largest number of focus shifts was prompted by language related disruptions (59 episodes) and by technical issues experienced by the participants (31 episodes). Generally, language related disruptions were caused by students looking for a word or for the meaning of a word, or for a particular language structure.

The following example (Excerpt 6-15) shows a focus shift initiated by a student looking for the meaning of a word in the FL. This focus shift episode was observed during the *Opinionator game* language task played during Session Four, *Si mangia!* (Let’s eat!).

Excerpt 6-15 Lexical meaning focus shift, Session Four, the *peperonata*

SU: numero dodici.peperonata!/Number twelve.peperonata!
DUB: cos’è la peperonata?/What is peperonata?
SU: eh.aspetta che si rezzi la foto così la puoi vedere.aspetto.quando mi dite che vedete la foto vi conto./Wait for the picture to rez so you can see it.I’m waiting.when you tell me you see the picture I’ll count you.
DUB: adesso vedo./Now I see
SU: ok
BEA: ((to herself) no, no
DUB: è una zuppa/It’s a soup
SU: no.
DUB: no è una zuppa/It’s not a soup
DUB: primo/First course
ITA: ((laughter))
SU: contorno.brava Bea.è come una ver- si usa come contorno.ecco.e si mangia con il secondo../Side order.bravo bea.it’s like a veg.it’s used as a side order.so.and it is eaten with the second course..

This linguistic issue emerged at the start of the game and involved the meaning of one of the words called out by the researcher: *peperonata*⁴⁴. After Dub's question, the game stops briefly, while the student's doubt is being clarified, in part, by the picture uploaded on the in-world screen.

Episodes of linguistic uncertainty such as the one above, or those presented in section 6.2.1, may be the indication of a secondary contradiction in the activity system, one between the subject (the student) who is involved in completing the language task and the foreign language, seen not only as an object of the language task activity in the form of improved FL competence, but also as a cognitive tool adopted by the subject to complete the activity. Similarly, the 31 observed focus shifts that were prompted by interruptions due to technical problems may also highlight a secondary contradiction in the activity system. This contradiction is yet again one between the subject of the activity and one of the mediating tools, the software or the hardware used to access the VW.

When these episodes occur, as Lim & Hang (2003, p. 52) noticed:

[...] ICT may become an object rather than a tool for the student or teacher when the subject encounters problems using the hardware or software. Instead of focusing on the object of higher order thinking, the object may become using the ICT hardware or software.

Excerpt 6-16, from a longer episode of a focus shift prompted by a technical problem, is an example of this consideration.

Excerpt 6-16 Technical expertise focus shift, Session Four, reading the Opinionator

SU: [...] tu Dub li vedi, i nomi?/ <i>Dub do you see the names?</i> DUB: solo la colore non la parola, no./ <i>only the colour not the word, no.</i> SU: ma voi, li vedo solamente io ragazzi?/ <i>but am I the only one who sees them guys?</i> HEL: io li vedo eh i nomi./ ITA: ah sì.ma perché tu sei vicino./ <i>I see them eh the names</i> SU: ma fate lo zoom!ma a parte io li vedo anche da lontano.allora+landate più vicino*va bene, no, non c'è bisogno che stiate al muretto/ <i>yes because you are closer</i> ITA: ahhh! ANN: +io li vedo da lontano*/ <i>I see them from afar</i>

⁴⁴ Peperonata is an Italian vegetable side dish made with bell peppers.

The episode took place in Session Four, *Si mangia!* (Let's eat!) at the start of the *Opinionator game* language task, while the rules of the game were explained. The start position of the game had been set at a wall, facing the Opinionator. While the different sections on the Opinionator platform were explained, Ita, one of the students, stops the task saying that she can't read the labels on each side of the Opinionator platform. It soon becomes clear that the other two students, Dub and Bea, are experiencing the same problem. Excerpt 6-16 presents the last part of the focus shift episode, in the moment when the other students and some of the Italian participants start getting involved in the interaction. After Ita mentions the distance from the Opinionator, the researcher resolves the problem by allowing the students to stand closer to the platform. This episode shows how the technical disruptions cause a change in the course of the activity. The hardware or software during a language task activity are normally used at an operational level; these operations, however, become perturbed and conscious due to the disruptions, to the point that the operations turn into actions, and become part of a sub-activity. Focus shift episodes caused by intercultural questions and exchanges, on the other hand, have to be analysed somewhat differently, as is seen in the next section.

6.3.2 Focus shifts caused by intercultural disruptions and their underlying contradictions

The analysis of the disruptions prompted by intercultural exchanges or information reveals instances that do not seem to revert clearly to an underlying contradiction in the activity system per se. Figure 6-3 in Section 6.2.2 showed how critical the native speakers' input was in these cases. 11 out of the 18 episodes of intercultural focus shift were indeed prompted by the Italian participants providing information about their local and regional culture or the culture of the target language country. Table 6-1 exemplifies those seven student initiated instances of deviance from the script of the language task and the tasks that the students were performing when those disruptions occurred.

Table 6-1 Intercultural focus shifts engineered through task design

Session	Task	Description of episode
Session Four (Let's eat!)	Task One: An easy recipe The students are in an Italian restaurant/pizzeria and listen to an Italian native speaker who explains how she cooks one of her favourite recipes. Students ask questions and interact with the 'cook'.	Chilli episode: One student, Bea, interrupts the task asking for information on how to use chilli in that particular recipe.
Session Four (Let's eat!)	Task Two: The Opinionator game. A scripted platform (Opinionator) and a large screen are rezed in a field outside the restaurant. Names of food or drinks are called out and written in LC. A picture of each item is displayed on the screen. Students must run to the section in the Opinionator that represents the meal course that food/drink is associated to.	Cappuccino episode: One student, Dub, interrupts the task with a question on the reasons for never drinking cappuccino after a meal.
Session Six (Holidays in Italy)	Task One: Walking around Italy through its holidays-Easter The students are in the Easter area and listen to how Easter is celebrated in Italy. They talk about on their own experience of Easter.	Coloured eggs episode: One student, Ita, interrupts the conversation in LC, asking what <i>coloured eggs</i> are. This starts a description of the different traditions of colouring eggs in different countries.
Session Six (Holidays in Italy)	Task Two: Walking around Italy through its holidays-Carnival The students are in the Carnival area, where they listen to the different traditions of Carnival in Italy. They exchange their own experience of Carnival.	Violence at Carnival episode: One student, Bea, interrupts the task with a question on violence in the streets during the Carnival celebrations.
Session Eight (Damn! It hurts!)	Task Two: Making an appointment with a consultant The students stand in the reception area of a medical centre and make an appointment with a consultant.	Health Card episode: One student (Dub) interrupts his task with a question on how to get an Italian health card.
Session Six (Holidays in Italy)	Task Two: Walking around Italy through its holidays-Carnival The students are in the Carnival area, where they listen to the different traditions of Carnival in Italy. They exchange their own experience of Carnival.	Turn-taking in Italian conversation: One student, Bea, asks the researcher for help with dealing with turn-taking when speaking in an Italian group. The episode happens in IM.
Session Eight (Damn! It hurts!)	Wind-down part Dedicated to reflection on the session, discussion of problems, and/or wind-down chat within the group.	International Women's Day episode: Session Eight was run on International Women's Day. The mention of that day sparked Ita's curiosity and initiated a long chat about the history of International Women's Day and the way it is commemorated in different countries.

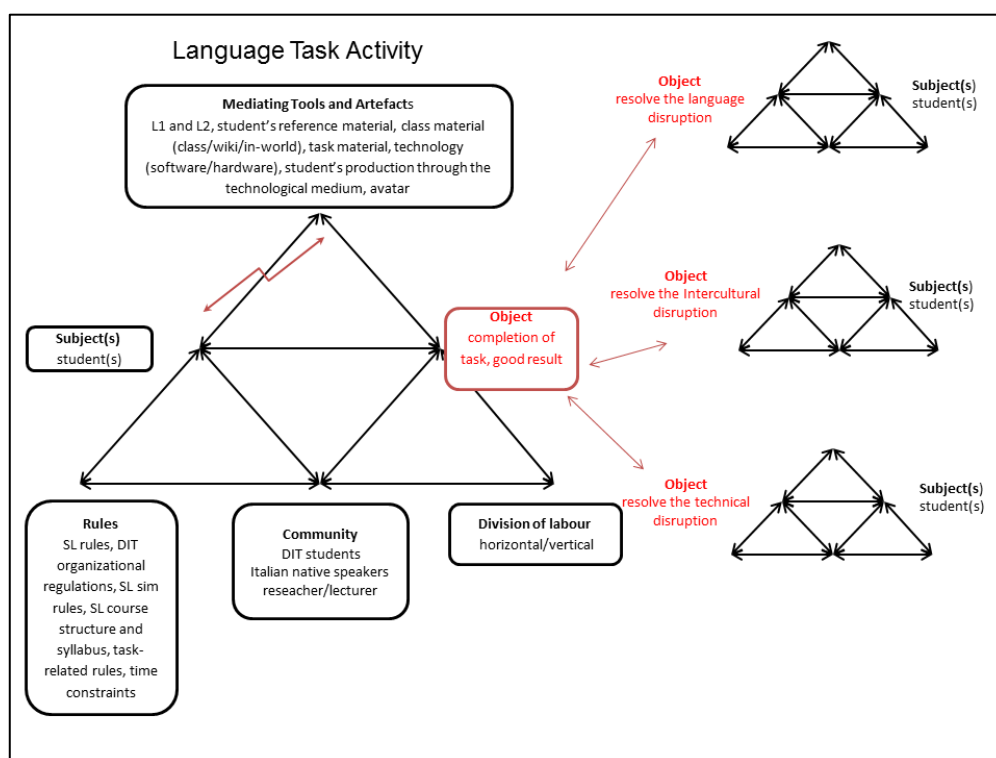
The intercultural questions, issues, and exchanges that brought about these particular student-initiated episodes may have been manifestations of a secondary contradiction in the system, one between the subject undertaking the task (the learner) and the target language cultural rules. In the first five cases in Table 6-1, in order to fully accomplish the task, the students were expected to be aware of particular rules that govern the life and habits of the FL country. The latter two instances, despite not being connected to the successful completion of the task, highlighted a weakness in the intercultural competence of the student who initiated the episode. In each of these cases the shift in the focus of the activity created a new activity, with a new object, which involved the group of participants.

It has been argued in the previous sections that the tensions and disruptions that initiated the episodes of focus shift observed during the three sessions of *SLitaliano* may have been a manifestation of an underlying secondary contradiction in the language task activity system.

Figure 6-5 depicts the activity theoretical model of a language task as designed by the teacher and represents the tensions and disruptions that were observed in the different tasks as a red zig-zag line between the subject(s) of the activity system, the students, and the artefacts and tools mediating the language task activity, be it the foreign language, the foreign language culture, or the software and hardware used for that activity.

These tensions and disruptions resulted in a temporary shift from the object of the language task at hand, during which the subject(s) became involved in new collective sub-activities in an effort to resolve the disruption.

Figure 6-5 Model of a language task activity system with secondary contradictions and resulting sub-activity systems



The new sub-activities are represented by the small triangles in the figure, each with the same subjects as the language task activity system, but directed by a different object. During each of these sub-activities the subjects enacted actions aimed at resolving the issue that had initiated the focus shift.

The next section investigates one of these focus shift episodes, in order to highlight what happened during one of these sub-activities.

6.4 What happens during a focus shift episode: the case of the Health Card episode during the *Making an appointment with a consultant* role-play

Making an appointment with a consultant was one of the language tasks in Session Eight, Mamma mia, che dolore! (Damn, it hurts!) where the students were expected to walk into an Italian Public Health Office and make an appointment with a consultant.

A few days before the session, each student had been sent an in-world notecard with information and instructions for the role-play. Kaj, the Italian participant who was going to play the nurse, had also been given a description of her role as a receptionist at an Italian Public Health Centre and instructions for the role-play.

As the episode investigated in this section occurred during Dub's role-play, Table 6-2 shows an English translation of Dub's and Kaj's instructions for the *Making an appointment with a consultant* role-play.

The instructions show that the aim of Dub's task was to deal with an urgent health problem and make a doctor's appointment compatible with his own work commitment. Kaj's role, on the other hand, was to create some difficulties for Dub while, at the same time, helping him making his appointment.

Table 6-2 Making an appointment with a consultant, Dub's (i) and Kaj's(ii) instruction notecards

<p>(i) DUB: You fell off your moped and your wrist is hurting badly. The doctor advised you to go for an x-ray scan as soon as you can. You work every morning and are free only after 2.00 pm.</p>
<p>(ii) KAJ: For Dub: at first try to give him an appointment at 10.00 am. He won't be able to make it ... ask him when he's free and tell him he'll have to wait for the next week to see a consultant.</p>

Snapshot 6-11 was taken during Dub's role-play and shows the participants during Dub's role-play, at the Health Office.

Snapshot 6-11 Session Eight, Making an appointment with a consultant, Dub's role-play



Dub's language task activity was interrupted four times, with three language-related disruptions and one intercultural question that unfolded in a long episode, the Health Card episode, analysed in this section.

The Health Card focus shift episode can be read in Excerpt 6-17 (over page). During the course of the role-play, Kaj referred to the Health Card a few times, as the Health Card is an important document for anyone who has to deal with the Italian public Health System. Finally, she reminded Dub not to forget to bring it with him on the day of the appointment, or he would have to pay fully for the visit and every test. Upon hearing this, Dub felt the need to clarify his situation and asked:

“Now, I'm not Italian and I don't have a Health Card. What do I have to do”
setting temporarily aside the object of the language task activity, namely, to book an appointment with a consultant, in order to find out how to deal with his 'Health Card issue' and resolve it.

Excerpt 6-17. Session eight: the Health Card exchange, intercultural focus shift

Local Chat	Voice Chat
SU: NIENTE TESSERA SANITARIA/NO HEALTH CARD	DUB: adesso non sono italiano e non ho una una tessera sanitaria cosa +1devo fare*/now, I'm not Italian and I don't have a health card. What *I do I have to do* KAJ: 1non ha la* tessera sanitaria?ah è un grosso problema allora.è è un grande problema lei dovrà recarsi presso un altro sportello di un altro ufficio per ottenere eh la tessera sanitaria perché senza quella non si può accedere a quelli che sono i servizi sanitari in italia /+Idon't you have* a health card?ah this is a big problem then.it it is a big problem you will have to proceed to another help desk in another office to get a health card because without it one can't access all that represents the health services in Italy
SU: DEVE RECARSÌ A PRENDERLA/YOU MUST PROCEED TO GET IT	DUB: ma si non è italiano?/but if you are not Italian? KAJ: anche per i non italiani è necessario che abbiano una copertura assicurativa che viene data con il rilascio della tessera sanitaria in un altro ufficio però, non qui da me/it is also necessary for the non-Italians to have an insurance cover which is supplied through the issue of a health card in another office though not here by me
SU: IN UN UFFICIO/IN AN OFFICE	DUB: oh KAJ: questa è la il primo passo che lei deve fare è la prima cosa che lei deve fare è richiedere la tessera sanitaria è molto importante.perché oggi è solo una caduta e il polso che le fa male.ma domani potrebbe essere qualcosa di molto più grave e allora le toccherà poi pagare tutto a lei se non ha la tessera sanitaria./this is the first step you have to take it is the first thing you have to make it is requesting a health card is very important.because today it is only a fall and your wrist hurting.but tomorrow it could be something more serious and then you will have to pay for everything if you don't have a health card.
SU: GRAVE/SERIOUS	DUB: e da dove devo andare per fare la tessera/and where do I have to go to get it KAJ: io le darò l'indicazione per recarsi presso un ufficio..eh per avere la tessera sanitaria..eh.signorina lionard anche in pronto soccorso purtroppo è necessario avere la tessera sanitaria altrimenti il servizio deve essere pagato.è proprio necessaria anche per il pronto soccorso./I will give you directions on how to proceed to the office..ehm to get the health card..ehm.miss ann unfortunately even at the Accident and Emergency it is necessary to have a Health Card or one has to pay for the service.it is really necessary at the Accident and
ANN: Se è urgente però potrebbe provare al pronto soccorso ... Magari c'è da aspettare un po'.../If it is urgent he could try Accident and Emergency... though there could be some waiting time... SU: CI VUOLE LA TESSERA SANITARIA/ONE NEEDS A HEALTH CARD SU: ANCHE AL PRONTO SOCCORSO/AT THE A&E TOO ANN: Grazie/Thanks	

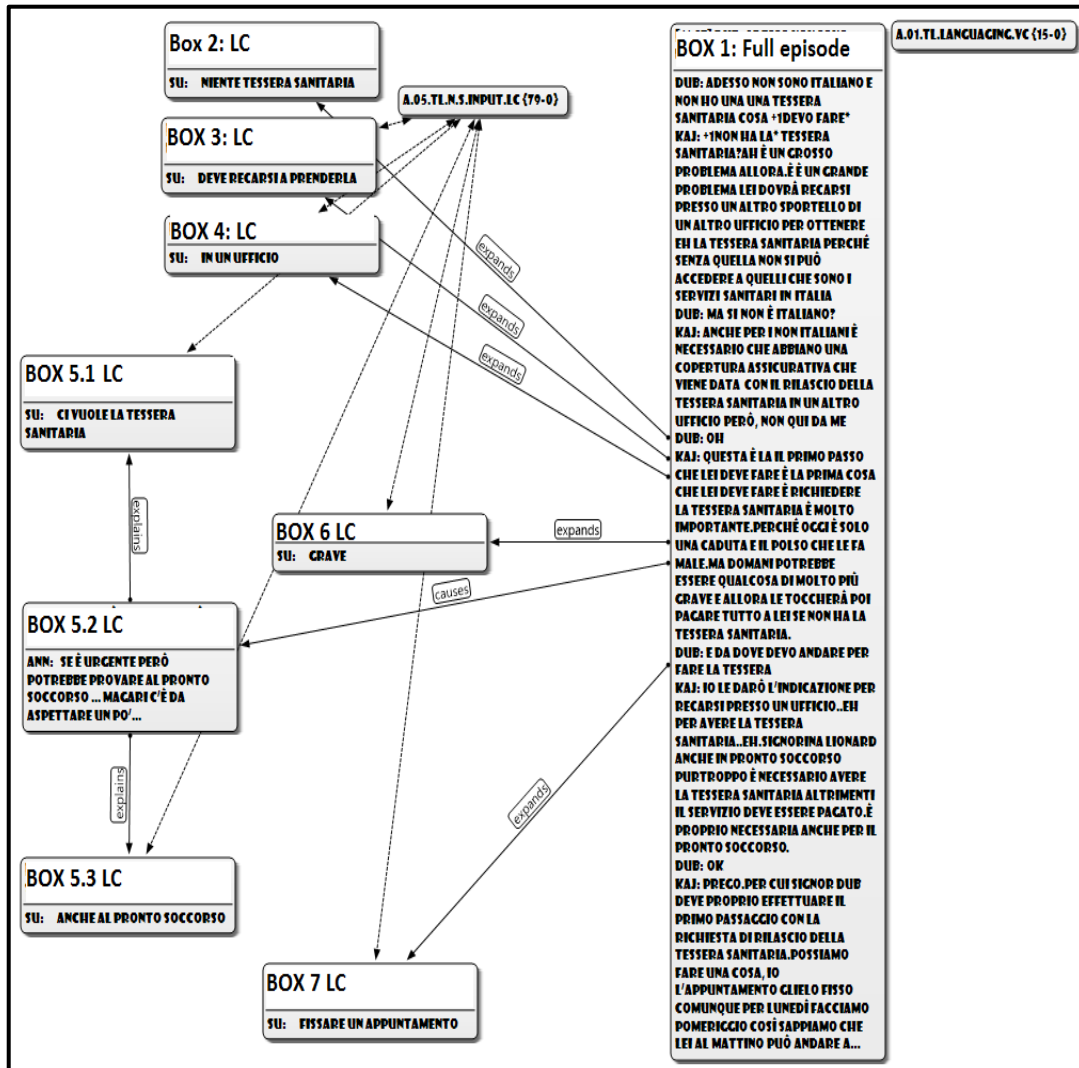
<p>SU: FISSARE UN APPUNTAMENTO/TO SET UP AN APPOINTMENT</p>	<p><i>Emergency too.</i> DUB: ok KAJ: prego.per cui signor Dub deve proprio effettuare il primo passaggio con la richiesta di rilascio della tessera sanitaria.possiamo fare una cosa, io l'appuntamento glielo fisso comunque per lunedì facciamo pomeriggio così sappiamo che lei al mattino può andare a chiedere la tessera sanitaria per cui io glielo fisso per lunedì pomeriggio.lei però si presenti con la tessera sanitaria.altrimenti non potrà accedere ai servizi sanitari.d'accordo?/no problem.so mister Dub you really must fulfill the first step by requiring the issue of a health card.we can do something.I will anyway set your appointment for Monday let's make it afternoon so we know that you can go and request a health card in the morning so I set it up for Monday afternoon.but come here with a health card.or you are not allowed to access any health service.is it fine? DUB: ok [...]</p>
---	---

The interruption of the task activity, and the shift of the focus of the activity, whose object changed momentarily from making an appointment to finding information on how to acquire a Health Card, did not arise during the role-plays played by the other students and emerged as a consequence of Dub's lack of awareness of how the Italian Health System works. In this case, the disruption in the flow of the task, as a manifestation of an underlying contradiction in the task activity, initiated a sub-activity. As was seen in Chapter 3, systemic tensions are seen as a source of development in the activity and this episode shows how such a tension, emerging as a disruption to the activity, offered a possibility for learning.

In Excerpt 6-17 we see that Dub's request for help was responded to by Kaj in Voice Chat and by Su and Ann, who used Local Chat for their comments.

The episode is short and the issue was resolved quickly, but a more in-depth look at the actions performed by the participants, shows interesting layers in the exchange, as illustrated in Network 6-1, overleaf.

Network 6-1 Session Eight, Mamma mia, che dolore! Network view of the Health Card episode



Network 6-1 shows what happened during the Health Card episode: Box 1, on the right hand side, presents the full episode as it took place in Voice Chat between Dub and Kaj, whereas the Boxes on the left side of the network, Box 2 to Box 7, show what was written in Local Chat by Su and Ann, and how their comments were connected to the Voice Chat interaction.

Box 1 shows how Dub's question prompted a Voice Chat exchange between him and Kaj, the nurse, who explained the importance of having a Health Card, to avail of the Italian free public Health service and explained the procedure to follow, in order to obtain

one. The exchange between Dub and Kaj is an example of *Languaging* as Dub and Kaj mediate cognitively complex ideas using language, while working at clarifying this issue. The *Languaging* episode, however, soon expands to include Su and Ann, in *Local Chat*. The actions enacted in *Local Chat* by Su were in support of the students' following and understanding the interaction. Su expanded on what was being said in *Voice Chat* by writing down in *Local Chat* some of the most relevant words and phrases, in capital letters, so as to make them more visible to the students, as the following phrases, from Box 2 and Box 3, show:

NIENTE TESSERA SANITARIA = NO HEALTH CARD DEVE RECARSI A PRENDERLA" = YOU MUST PROCEED TO GET IT

Su's action was encoded as: A05 Target Language Native Speaker Input in *Local Chat* (Box 2, 3, 4, 5.1, 5.3, 6, and 7). Also, Su's support in *Local Chat* became part of the *Languaging* episode's expansion in *Local Chat*, as the line in Box 5.1 shows:

CI VUOLE LA TESSERA SANITARIA = ONE NEEDS A HEALTH CARD

This line, and what was being explained by Kaj in *Voice Chat*, caused a reaction by Ann (Box 5.2), who joined the conversation offering an alternative solution to Dub's problem:

Se è urgente però potrebbe provare al Pronto Soccorso ... magari c'è da aspettare un po'... = If it is urgent, though, he could try the A&E ... there might be a bit of a wait ...
--

to which Kaj replied in *Voice Chat*:

eh.signorina lionard anche in pronto soccorso purtroppo è necessario avere la tessera sanitaria altrimenti il servizio deve essere pagato = ehm.miss lionard unfortunately even at Accident and Emergency is necessary to have a Health Card or one has to pay for the service.it is really necessary at the Accident and Emergency too

Kaj's statement was highlighted in *Local Chat* by Su (Box 5.3)

ANCHE AL PRONTO SOCCORSO = EVEN AT THE A& E

The short Health Card focus shift episode shows how an interruption in the language task at hand, started in Voice Chat by a student voicing a problem, was resolved by means of actions of languaging and language support using two modes of communication, Voice Chat and Local Chat, at the same time.

Chapter Three defined affordances as *actions in potential and relations of possibilities between users*; the actions observed during this episode can be considered to be the manifestation of emerging affordances of the environment. In this episode thus, the emerging language affordances noticed and used by the participants to resolve the intercultural disruption are: the possibility of languaging in the target language, both in writing and orally and the possibility to access authentic native speaker input. The emergence of both language affordances is a consequence of the emergence of the social affordances of the virtual world. On the other hand, both the languaging episode and the Native Speaker Input provided by Su are actions made possible by the use of one of the technical affordances of SL®, its Local Chat. In this situation the LC provides the teacher with the chance to offer Target Language Native Speaker Input (TL.NS.Input.LC) in a clear and comprehensible way, without interrupting the on-going Voice Chat. Thus, it can be concluded that Dub's problem is dealt with by the other participants providing linguistic and intercultural support and information by means of actions that highlight the emergence of affordances of the virtual environment, which facilitate language production and exposure to the foreign language. In this particular episode, these affordances are the use of mode of communication, both oral and written, made possible by the emergence of this technical affordance of the virtual world, and the use of languaging, which is made possible by the social affordance of the VW.

The Health Card episode is a clear example of the richness of what happened during the different tasks undertaken during the *SLitaliano*. Each of the 108 recorded focus shift episodes presents a similarly intricate development, supported by webs of actions that

highlight emerging affordances of the medium. These actions will be investigated in the following chapter to evidenciate patterns that indicate emerging affordances for language learning and a list of language learning affordances in virtual worlds.

6.5 Summary

Chapter Six presented the first phase of the data analysis. It provided a narrative of the three sessions chosen for data analysis and then it proceeded to identify three main types of tensions and disruption that caused shifts in the focus of the task activity system: disruptions arising from technical issues, caused by linguistic problems and questions, and/or initiated by intercultural questions and information. It was proposed that the tensions and disruptions identified may be evidence of underlying contradictions within the task activity system and it was shown how these disruptions caused a deviation from the script of the language task, a shift in the focus of the language task activity system, and temporary departure from the object of the language task activity, and the creation of new sub-activities, made of actions that the group performed in order to attain the object of the new sub-activity. Finally, the investigation of the Health Card episode offered a deep analysis of one of these critical incidents and of the actions that were enacted in the course of the new sub-activity. It was argued that these actions show the emergence of language learning affordances of the virtual world. Chapter Seven will present the second phase of the data analysis, providing a detailed investigation of the types of actions enacted during the focus shifts episodes that occurred during the three sessions and the language learning affordances related to those actions.

Chapter 7 Affordances for language learning

Chapter Six showed how each language task in the *SLitaliano* experienced tensions and disruptions that brought about focus shift sub-activities, during which actions were enacted leveraging on the technical and social features of the virtual world to resolve those disruptions. It was argued that the actions part of the focus shifts episodes that occurred due to a technical, linguistic or intercultural deviance from the script of the task activity system can be seen as a manifestation of emerging language learning affordances of the Virtual World. Those actions, encoded in Chapter 5, Section 5.6.2, are analysed in this Chapter to evidenciate patterns that indicate emerging affordances for language learning.

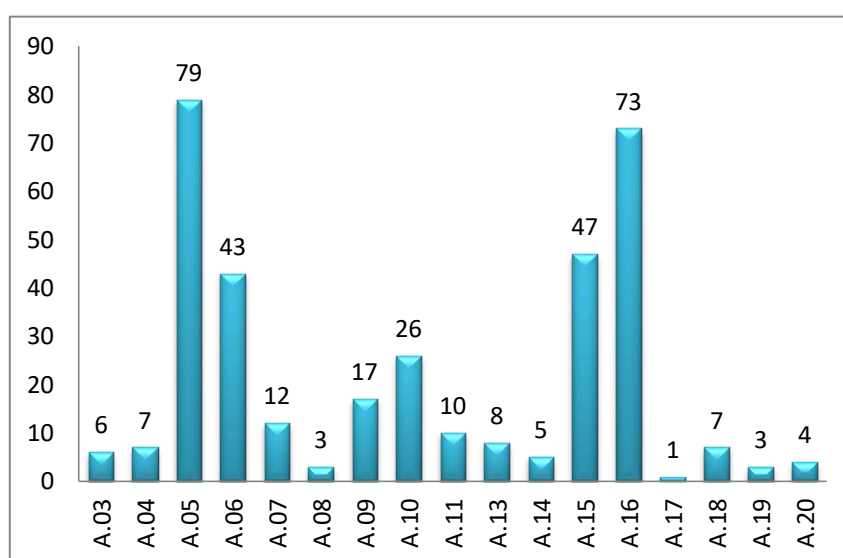
Chapter Seven starts with an overview of the affordance related actions that were performed during the focus shift episodes. These actions will be investigated in terms of distribution, of subject performing the actions, and of the mode of communication used for their enactment. Particular attention will be paid to the linguistic action of *Languageing*, which stands out in the data analysis, as a chain of actions, namely, an action encompassing different actions and, sometimes, focus shifts. Subsequently, the chapter analyses the technical affordances of the virtual world that emerged during the focus shift episodes, how they were leveraged for language learning and by whom. Finally, the data analysis focuses on cases of non-realisation of the technical affordances of the medium and what happened in those instances.

7.1 Overview of the distribution of the actions performed during the focus shift episodes

Chapter Six showed that disruptions in the language task activity were due to technical, intercultural or linguistic problems on the part of the students. These disruptions caused shifts in the focus of the language task and resulted in the actions listed in Chapter Five,

Section 5.6.2, enacted by the participants during the focus shift episodes. An in-depth analysis of the occurrence of the different types of actions, as seen in Figure 7-1, shows considerable differences and draws attention to areas of interest.

Figure 7-1 Distribution of actions observed during the focus shifts



The diagram in Figure 7-1 does not show episodes of Languageing, which were made of clusters of actions and are analysed in detail in Section 7.2.1. The diagram shows 17 types of actions and four of these have more than 40 recorded instances. The two most commonly performed actions were: (i) A05, namely: Target Language Native Speaker Input in Local Chat and (ii) A16, namely: Target Language Native Speaker Support in Local Chat. Those two actions were mainly performed by the researcher/teacher, who used Local Chat to provide students with visible access to the most relevant words and phrases used in Voice Chat during the language task, and to reply to students' queries, without interrupting the on-going interaction. In the case of A05, the researcher/teacher used LC to highlight certain parts of the interaction in over 97% of the 79 recorded cases. In the case of A16 the researcher/teacher used Local Chat to help the learners in 86% of the 73 recorded instances. Two further actions that were also recorded a noticeable amount of times were: (iii) A15, namely: Target Language Native Speaker Support in Voice Chat, and (iv) A06, namely: Target Language Linguistic Reflection in Voice Chat.

In the case of A15, the Italian participants helped and supported the learners 47 times, mainly as a response to their request for help in linguistic issues, represented by A06, which was enacted 43 times.

On the other end of the spectrum are columns representing 13 other sets of actions of which there were 26 instances (in one case) or fewer. The least visible actions were two actions performed by means of Instant Messaging, namely: A08 Target Language Linguistic Reflection in IM, which was recorded in three cases, and A19, Target Language Native Speaker Support in IM, with two examples, and one case of a student helping another out to resolve a technical issue, using Local Chat, in A.17: Target Language Student Support in Local Chat. As the visual data was recorded by the researcher, the IM interaction available for data analysis is what was sent to the researcher, which explains the low number of actions undertaken using Instant Messaging.

To conclude, a first analysis of the distribution of the actions shown in Figure 7-1 highlights the following two main points of interest:

- the relevance and role of the community (particularly of the native speakers) in providing help and support during the focus shift episodes
- the different modes of interaction chosen by the participants to act and interact in the virtual world.

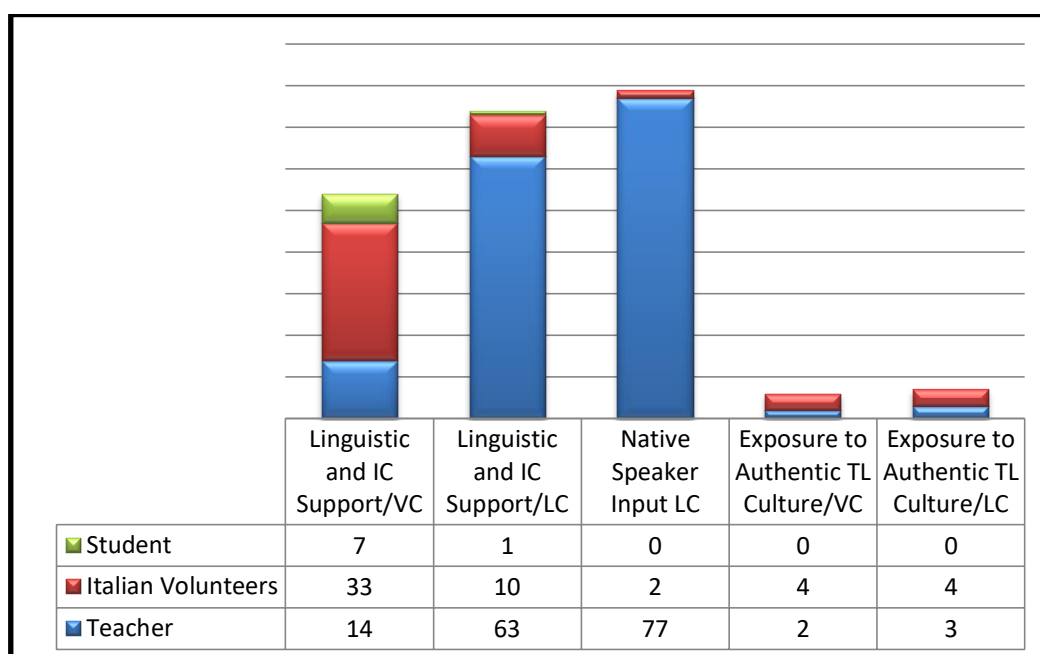
The two aspects are considered in detail in the following sections.

7.2 The community as a source of affordances for language learning

Figure 7-1 displays a high number of actions performed by the community of participants, which consisted of Italian volunteers, the researcher/teacher and the DIT students, as a support to the learners during the focus shift episodes. The total number of

times the participants were recorded helping out, either by exposing the students to the culture of the foreign language country, or supporting them to deal with language and/or intercultural issues, is quantified in Figure 7-2, which shows the incidence of all recorded support actions by other students, by the researcher/teacher and by the other Italian volunteers, both in language related matters and on intercultural topics.

Figure 7-2 Incidence of community support during the focus shifts



The first two columns in the diagram list all instances of Target Language Native Speaker Support and Student Support in Voice Chat and Local Chat (A15: Target Language Native Speaker Support in Voice Chat, A16: Target Language Native Speaker Support in Local Chat, A17: Target Language Student Support in Local Chat, A18: Target Language Student Support in Voice Chat). The next column, Native Speaker Input in LC shows instances of A05: Target Language Native Speaker Input in Local Chat. The latter two columns list, respectively, the distribution of exposure to authentic target language culture in Voice Chat (A03) and exposure to authentic target Culture in Local Chat (A04).

As previously noted, peer support was not very common; the students participated in all tasks and collaborated actively, but were not always able to help, clarify or respond to

each other's linguistic or intercultural questions. On the other hand, the diagram shows the active role played by the native speakers. The teacher presence was particularly active in Local Chat, mostly providing Target Language Input, as mentioned previously. The other Italian participants preferred the use of Voice Chat. Most focus shift episodes were resolved by means of different actions, enacted by the teacher and by the Italian volunteers, collaborating with the students during the activity, as is shown in the following to examples.

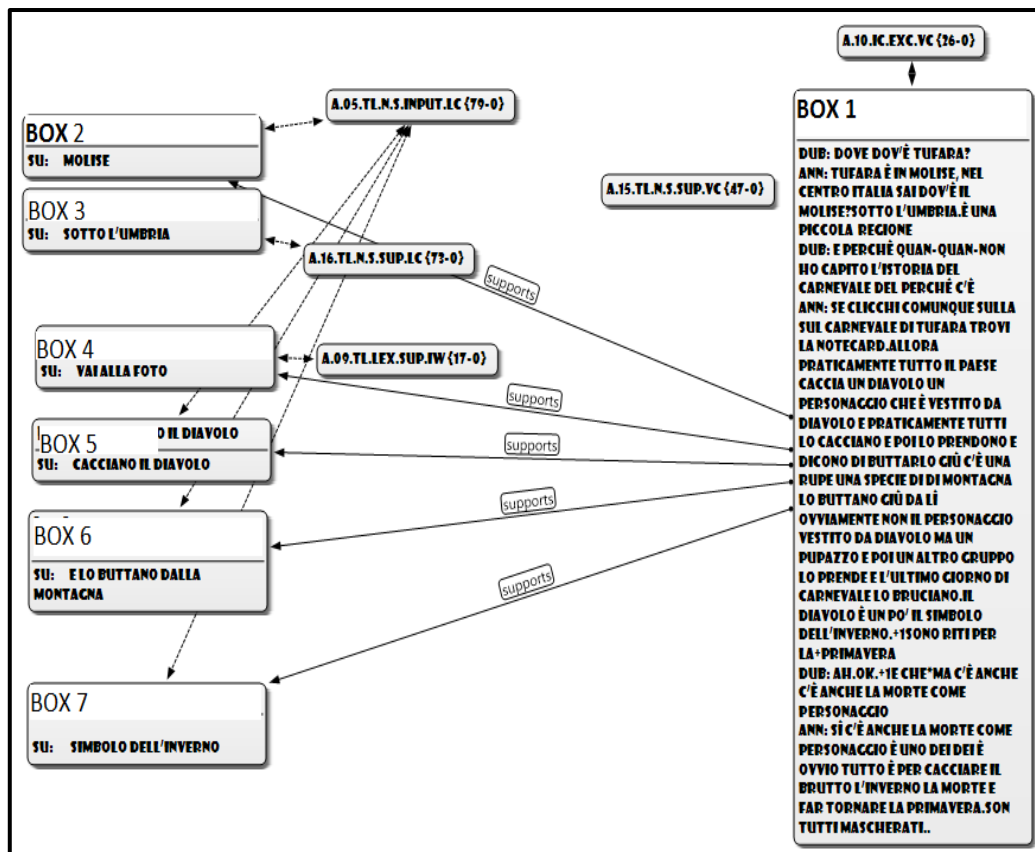
Excerpt 7-1 Session Six, the *Tufara* episode

Local Chat	Voice Chat
SU: MOLISE	DUB: dove dov'è Tufara?/where where is Tufara?
SU: SOTTO	ANN: Tufara è in Molise, nel centro Italia sai dov'è il
L'UMBRIA/UNDER	molise?sotto l'umbria.è una piccola regione/Tufara is in
UMBRIA	Molise, in the centre of Italy.do you know where Molise
	is?under Umbria.it's a small region
SU: VAI ALLA	DUB: e perchè quan-quan-non ho capito l'istoria del
FOTO/GO TO THE	carnevale del perchè c'è/and it's why wh-when-I hand't
PICTURE	understood the story of carnival,of the reason why it
	exists
SU: CACCIANO IL	ANN: se clicchi comunque sulla sul carnevale di Tufara
DIABOLO/THEY	trovi la notecard.allora praticamente tutto il paese caccia
CHASE THE DEVIL	un diavolo un personaggio che è vestito da diavolo e
SU: E LO	praticamente tutti lo cacciano e poi lo prendono e dicono
BUTTANO DALLA	di buttarlo giù c'è una rupe una specie di di montagna lo
MONTAGNA/AND	buttano giù da lì ovviamente non il personaggio vestito
THROW HIM DOWN	da diavolo ma un pupazzo e poi un altro gruppo lo
A CLIFF	prende e l'ultimo giorno di carnevale lo bruciano.il
SU: SIMBOLO	diavolo è un po' il simbolo dell'inverno.+1sono riti per
DELL'INVERNO/A	la+primavera/if you click on the on the carnival in
SYMBOL OF THE	Tufara you find the notecard.well practically all the town
WINTER	chases a devil a man dressed as a devil and they all
	chase him then they take him and say they will throw him
	down a cliff a kind of mountain they throw him down not
	the man dressed as a devil obviously but a puppet and
	then another group takes it and the burn it on the last
	day of carnival.the devil is a kind of symbol for the
	winter.it's a spring ritual
	DUB: ah.ok.+1e che*ma c'è anche c'è anche la morte
	come personaggio/ah.ok.so but there's also there is also
	death as a character
	ANN: sì c'è anche la morte come personaggio è uno dei
	dei è ovvio tutto è per cacciare il brutto l'inverno la
	morte e far tornare la primavera.son tutti mascherati../yes
	there is also death as a character it's one of the gods it's
	obvious it's all to chase away the bad the winter and
	death and call the spring back.they are all wearing a
	costume...

The *Tufara* episode in Excerpt 7-1 took place during Session Six, Feste in Italia (Holidays in Italy), while the participants were involved in the *Carnival language task*. As Ann, who was in charge of guiding the *Carnival language task*, was talking about the different Carnival traditions, one of the students, Dub, who had been reading the posters placed around the area interrupted Ann to ask about the town of Tufara, mentioned in one of the posters and started the intercultural exchange episode.

Network 7-1 shows how Dub's question in Voice Chat was answered by Ann, with a target language support action (A15, in Box 1) while Su, the researcher/teacher, used Local Chat at the same time, to help the student (in Box 3 Su explains that Molise is a region placed under the region Umbria) or to provide some of the relevant information in writing (A16, Native Speaker Input in Local Chat in Box 2, 4, 5, 6 and 7).

Network 7-1 Session Six, Holidays in Italy, the *Molise* episode



This episode also shows an example of target language lexical support in-world, as both Ann and Su (Box 5) direct Dub to click on the poster and get a notecard with all the information about Tufara and its Carnival tradition.

Although Figure 7-1 and Figure 7-2 only record the actions observed during the focus shift episodes, and do not include all instances of native speakers taking part in the language tasks or informally chatting with the students during the course of the sessions of *SLitaliano*, they do, however, show the extent of the community's role in contributing to the resolution of problematic episodes when the language tasks were disrupted. In these instances the Italian native speakers brought an added factor to the language session, as they provided a different voice to the teacher's, both in terms of approach, attitude, meta-language knowledge and language competence, and in terms of accents, linguistic register and cultural history. It was explained in Chapter Five, that the Italian volunteers originated from different parts of Italy, spoke as usual in the accent of those parts and often used regional words and gave information about the part of Italy they lived in. One example can be seen in Excerpt 7-2, which shows the start of an Intercultural focus shift episode from Session Four, *Si mangia!* (Let's eat!). During the introduction part of the session, Hel, who met the students for the first time, deviated from the general introduction script to describe Salento, the Southern area she lives in.

Excerpt 7-2 Session Four, *Si mangia!*, the *Salento* episode

HEL: [...] io invece vivo in Puglia, non so se la conosci, è una regione al sud dell'Italia eh- è proprio il tacco dell'Italia praticamente e abito proprio nella parte più a sud, in una regione che si chiama, in una sub-regione che si chiama eh Salento.../ *I on the other hand live in Puglia, I don't know if you know it, it's a region in the south of Italy, eh it is the heel of Italy and I live in its most southern part, in a region that is called, in a sub-region that is called ehm Salento ..*
 HEL: sì è un posto molto bello, è +1 un posto che ho imparato ad ama*/ *Yes, it is a beautiful place, it is a place I have learned to lov**
 DUB: +1 ok, piacereb*/ *Ok, I'd lov**

Hel's interruption initiated a longer intercultural exchange on the musical and dance traditions of that area of Italy. During most of the focus shift episodes the participants

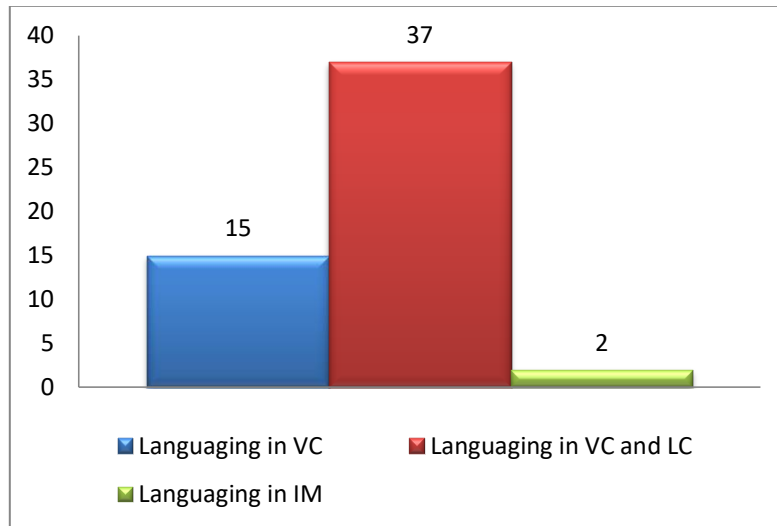
collaborated to resolve issues and problems using the foreign language. When language was used as a mediational tool in longer focus shift episodes that comprised of different actions, these clusters of actions were encoded as Languageing (A01, A02, A12) and episodes of Languageing are discussed in the next section.

7.2.1 Talking a problem through: episodes of Languageing during the focus shift episodes

The use of the term Languageing is associated with a view of language as part of our sociocultural context. Languageing is seen as a mediational tool in the process of learning, as it allows thinking to be transformed into language and helps mediate a cognitively demanding activity (Swain, 2006). Also, languageing happens when learners use the target language to mediate language problem solutions. This can enable people to create and negotiate meanings and intentions, and can become a major source of L2 learning (Swain, 2006, Swain & Lapkin, 2011). For the purpose of this study Swain's concept of languageing was extended to include episodes in which the participants, learner and non-learners, used the foreign language to resolve disruptions in the task due to technical problems or to intercultural questions, as, even in cases when the participants resorted to the foreign language to resolve a non-linguistic problem, they had to use and/or were exposed to language they were not familiar with, which they discussed during those episodes.

Figure 7-3 presents the incidence of Languageing episodes during the focus shifts. 54 episodes of Languageing were noticed during the three sessions. As Figure 7-3 shows, the modes of communication used during these episodes varied, and the preferred mode of communication to resolve problems was a mixture of Voice Chat and Local Chat. An in-depth analysis of episodes of Languageing conducted only in Voice Chat, in Voice Chat and Local Chat, and using Instant Messaging follows.

Figure 7-3 Languageing episodes during the focus shifts



The Languageing episode in Excerpt 7-3 was recorded during Session Eight, Mamma mia, che dolore! (Damn, it hurts!) during the *Visiting a friend at the hospital* language task.

The students had just arrived at the Hospital and had met their friend's Gea's doctor, Hel, who would take them to Gea's room, on the second floor of the Health building.

Teleporting to the second floor was not as straightforward as usual, and the students had some problems in finding and using the two teleport buttons placed on the wall of the Health building (see snapshot in Excerpt 7-3 to see the button on the first floor of the building).

Excerpt 7-3 Session Eight, Damn, it hurts! Languageing to solve a technical problem



HEL: allora per salire, perché Gea si trova al piano superiore... potete uscire per favore?...ecco Mia, eh fra i due cartelli area videosorvegliata e farmacia c'è un uhm un ascensore diciamo così ((laughter)) un teleport che vi porterà su...cliccate su questo triangolo e vi troverete su.vado avanti.vi precedo.ah lo sta usando../ *so to go up, because Gea is on the upper floor...can you please go out?...good Mia, ehm between the area videosorvegliata and farmacia signs there is a ehm a lift we could say ((laughter)) a teleport which will take you upstairs...click on this triangle and you will find yourselves upstairs.I go first.I precede you.ah you are using it..*

SU: avete capito come si fa?/ *did you understand how to use it?*

DUB: sì.cliccate/ *yes.you click*

SU: ecco.clicca di destro +1e poi clicca teleport*/ *so.right click +1and then click teleport**

HEL: per il piano superiore, destro +1siedi qui (XXX) e poi clicca sopra*/ *for the upper floor, right +1sit here (XXX) and then click on**

SU: perfetto.Bea/ *perfect.Bea*

BEA: dov'è teleport?/ *where's teleport?*

SU: è vedi la farmacia e area videosorvegliata?+1c'è*un triangolo.vedi un piccolo triangolo nero?/ *it is you see the farmacia and area videosorvegliata?+1there is*a triangle.do you see a little black triangle?*

BEA: +1sì*.oh sì./ *+1yes*.oh yes.*

SU: sì.clicca sul triangolo de-benissimo!/ *yes.click on the triangle of-very well!*

BEA: grazie./ *thanks.*

SU: prego/ *not at all*

HEL: dovete salire ancora sopra eh/ *you have to go further up eh*

EVERYONE IS NOW ON THE FIRST FLOOR

SU: anche questo.ce ne è un secondo qui.il triangolo che va su...qui ragazze.dove sono io...qui./ *this one too.there is a second one here.the triangle going up...here girls where I am standing...here.*

Hel and Su provided help and support, directing Bea, in particular, in Voice Chat. The foreign language was used to mediate the solution to the problem, by explaining the position of the two buttons and providing instructions on how to use them to get to the second floor.

Most of the Languaging episodes, 37 in all, were conducted using both Voice Chat and Local Chat. An example of participants engaging in languaging in different modes can be read in Excerpt 7-4: the *panna* (cream) episode. This episode took place during Task Two (Let's cook together) in Session Four (Let's Eat!). During this collaborative task the students were asked to work together to devise a recipe with the ingredients and tools available on a table in the restaurant area. In this particular moment the students, who had decided to prepare a tomato-based pasta sauce, started a discussion on the use of cream in a tomato-based sauce.

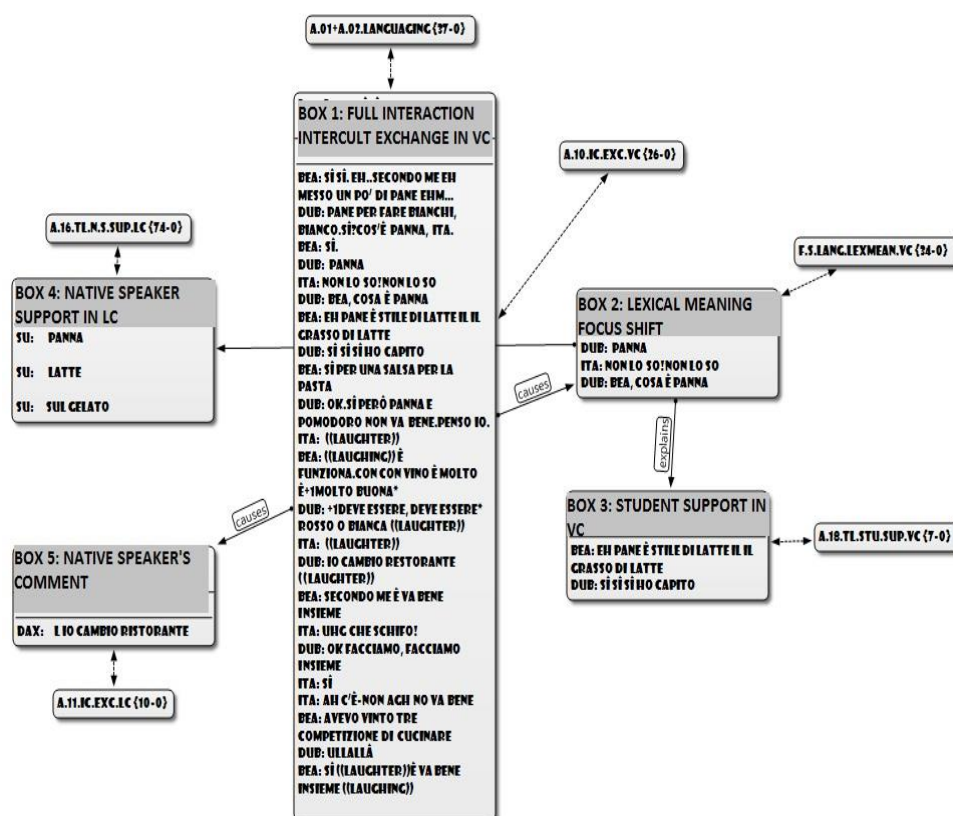
Excerpt 7-4 Session Four, Si mangia! the *panna* episode

Local Chat	Voice Chat
	BEA: sì sì. eh..secondo me eh messo un po' di pane ehm.../yes yes ehm I think ehm put a bit of bread
	DUB: pane per fare bianchi, bianco.sì?cos'è panna, Ita./bread to make whites, white yes?what's panna (cream), Ita
	BEA: sì./yes
	DUB: panna/cream
SU: PANNA	ITA: non lo so!non lo so/I don't know! I don't know!
	DUB: Bea, cosa è panna/Bea, what is 'panna'
SU: LATTE/MILK	BEA: eh pane è stile di latte il il grasso di latte/ehm 'pane' (bread) is style of milk the fat of milk
	DUB: sì sì sì ho capito/yes yes yes I understand
	BEA: sì per una salsa per la pasta/yes for a pasta sauce
SU: SUL GELATO /ON ICE CREAM	DUB: ok.sì però panna e pomodoro non va bene.penso io./ok yes but cream and tomato don't go well I think
	ITA: ((laughter))
	BEA: ((chuckles)) è funziona.con con vino è molto è+1molto buona*/it's works, with with wine it's very very good
	DUB: +1deve essere, deve essere* rosso o bianca ((laughter))/it must be, it must be either red or white
DAX: io cambio ristorante/I'm changing restaurant	ITA: ((laughter))
	DUB: io cambio restorante ((laughter))/I change restaurant
	BEA: secondo me è va bene insieme/I think it's goes well together
	ITA: uhg che schifo!/how disgusting!
	DUB: ok facciamo, facciamo insieme/ok let's make, let's make together
SU: :D	ITA: sì/yes
	ITA: ah c'è-non agh no va bene/ah there's ah no it's ok
	BEA: avevo vinto tre competizione di cucinare/I won three cooking competitions
SU: anche secondo me/I think that too	DUB: ullallà/wow
	BEA: sì ((laughter))è va bene insieme ((laughter))/yes it's goes well together

The *panna* episode is represented in Network 7-2. It starts as a Language focus shift, with Bea suggesting to use *pane* (bread) in the sauce (Box 1).

Bea's mispronunciation of the word *panna* as *pane* seems to add to the problem caused by the meaning of *panna*, and Dub and Ita are confused, so that Su, the researcher/teacher, helps out by providing the correct spelling of *panna* in Local Chat. At this point, Dub asks Ita for help, as he is not sure of the meaning of the word *panna* (Box 2). Su tries to provide an explanation in Local Chat (Box 4), but Bea clarifies the situation, by explaining the meaning of *panna* (Box 3), despite still mispronouncing it as *pane* (bread).

Network 7-2 Session Four, the 'panna' episode



At this point the task could go ahead as the initial language problem has been solved, only, the exchange moves on to the culinary choice of using cream in a tomato-based pasta sauce, starting an Intercultural focus shift, which attracts the attention of one of the Italian native speakers, Dax, who uses Local Chat to pass a comment on the students' gastronomical competence (Box 5).

The actions performed during the course of the Languageing *panna* episode are shown in Network 7-2: the complete interaction in Box 1 is an Intercultural Exchange in Voice Chat, where Student Support action in Voice Chat (Box 3) and Native Speaker Language Support in Local Chat (Box 4) are enacted to resolve the Lexical meaning question by Dub (Box 2). The intercultural Exchange thus expands in Voice and in Local Chat, involving Dax, with an Intercultural Exchange action (Box 5). The *panna* episode shows how episodes of Languageing could be made up of clusters of different actions.

An example of a Linguaging episode which took place in IM, was recorded in the course of Session Six, Feste in Italia (Italian Holidays), in the course of the *Carnival language task*. This episode was initiated by the researcher/teacher, who, during the unfolding of the task, while Ann and Lora were describing how the Carnival tradition is celebrated in their area, had noticed that Bea, one of the students, was not taking active part in the interaction. The researcher/teacher contacted Bea in IM writing (in Italian):

<p>SU: (IM to BEA) come va Bea? Capisci?/ <i>How are things Bea? Do you understand?</i> SU: (IM to BEA) domanda se non capisci/ <i>Ask if you don't understand</i></p>

To this Bea replied asking a question about the acceptability of interrupting other people who are talking. It became clear, after the researcher/teacher contacted Bea, that the student was not confident in the turn-taking rules of Italian conversation, a language in which over-lapping is a common practice and is not considered rude.

<p>BEA: (IM to SU) va bene, no lo so se è maleducato a parlare quando gli altri persone sono parlare. è va bene a detto le cose penso? sì o no? non lo so/ <i>I'm fine, I don't know if it is rude to talk when other people are talking. is it ok to say what I think? yes or no? I don't know</i> SU: (IM to BEA) no no non è mai maleducato parlare quando gli altri parlano ☺)/ <i>no no it's never rude to talk when others talk ☺</i></p>
--

Only after being reassured by the teacher, does Bea ask a question and take part in the conversation on the Carnival tradition.

The considerable amount of episodes of Linguaging during the focus shifts points to Linguaging as a common way to resolve a disruption in the language task; Linguaging emerges in these cases as a language learning affordance of the virtual world, an affordance resulting from the emergence of the social affordances offered by the VW, and, also, made possible by the leveraging of the technical affordances for synchronous communication available to VW users. The emergence of technical affordances for synchronous communication in actions aimed at resolving technical, linguistic and intercultural problems is examined in the next section.

7.3 Technical affordances for FL communication in the Virtual

World: modes of interaction

Synchronous communication was listed in Chapter Three as one of the technical affordances of VWs that can be most useful for education, as it facilitates collaboration and intercultural exchanges. This section investigates the use of Voice Chat (VC), Local Chat (LC) or Instant Messaging (IM) as a mode of communication in the foreign language during the focus shift episodes and, eventually, as an affordance for language learning. As the community of participants in the language course has emerged in the previous sections as a language learning affordance of the virtual world, particular attention will be paid to which group of participants made use of which mode of communication and in which circumstances.

Figure 7-4 Use of communication modes during the three sessions

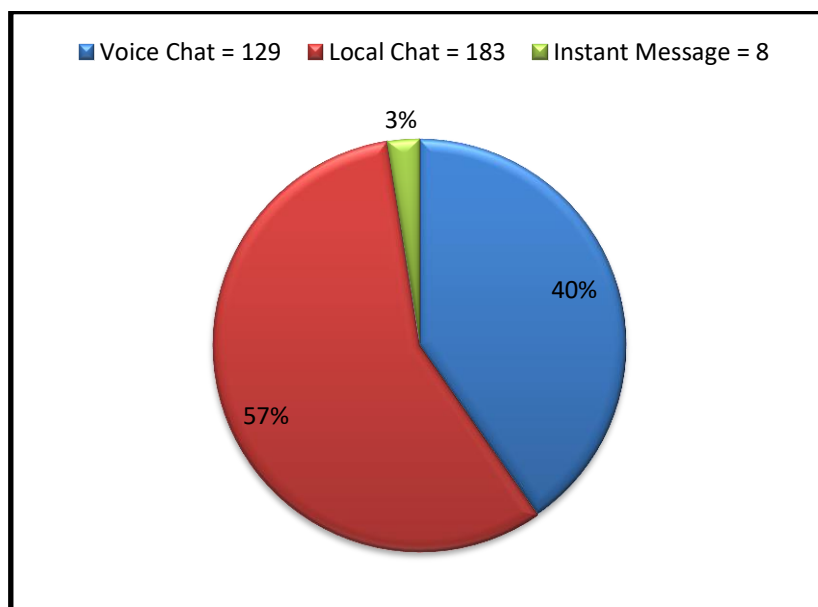
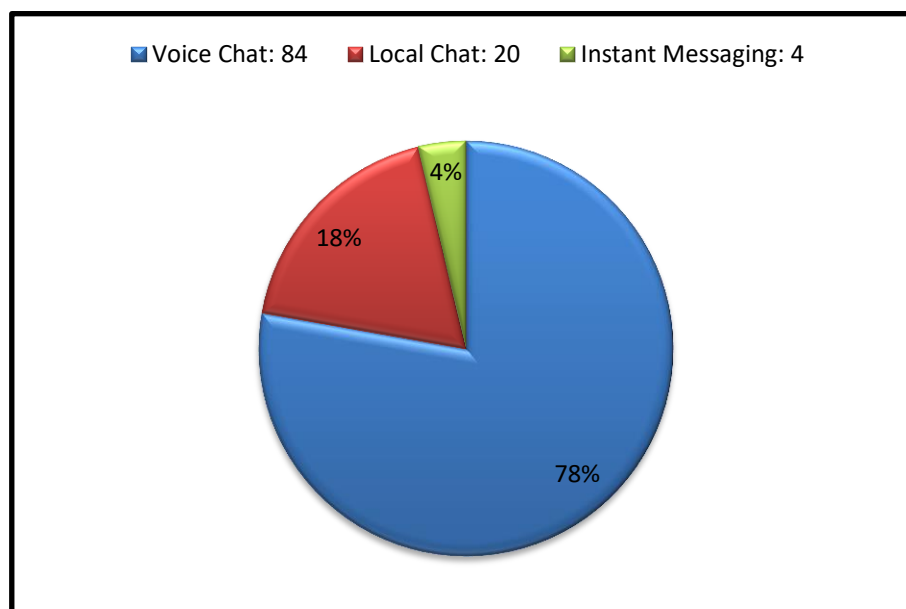


Figure 7-4 shows the number of instances of use of Voice Chat, Local Chat and IM during the focus shift episodes. The mode of communication that was resorted to most often was Local Chat, with 183 instances of participants writing in the text chat modality. Voice Chat was recorded a total of 129 times and Instant Messaging in only 8 cases. It is

important to mention that each instance of LC use stands for every singular occasion when a participant wrote Local Chat, even if it was one word only. In the case of Voice Chat recordings, on the other hand, one recorded instance of use can stand for a long spoken utterance by one participant. Although the numbers relating to the use of the different modes of communication may not be indicative of the amount of time spent interacting in the different modes, it is interesting to see how the modes of interaction were used.

Chapter Six explained how most focus shifts were initiated by the learners. Figure 7-5 shows the preferred mode of interaction adopted by the participants when they verbalised an issue, asked a question, or provided the intercultural information that interrupted the language learning task. Figure 7-5 shows that in a high percentage of cases problems and issues were expressed using Voice Chat, which was recorded 84 times, counting for 78% of the 108 focus shift episodes that occurred during the three sessions. In 20 instances (18% of the total) the focus shift was initiated writing in Local Chat and in the rest of the instances, in four cases, the focus shift was expressed writing to the researcher/teacher using Instant Messaging.

Figure 7-5 Use of modes of communication to initiate a focus shift episode



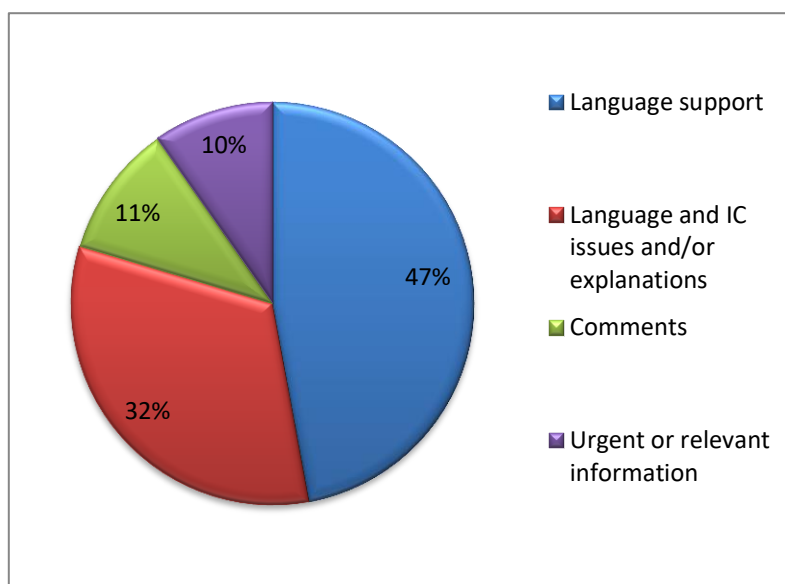
Each question and/or request for support was then followed up by the other participants, be it the Italian volunteers, the researcher/teacher, or the other learners, who used Voice Chat, Local Chat or both, as seen in a number of previous examples in this chapter.

Figure 7-4 shows that Local Chat was resorted to more often than Voice Chat and the transcripts of the focus shift episodes seen in the previous sections indicate that this mode of communication was used mainly as a support for the interaction that took place in Voice Chat. The following sections analyse in detail which participants used Local Chat and Voice Chat and what were the reasons for use in these modes.

7.3.1 Reasons for using Local Chat

Analysing the data, the instances when the participants used Local Chat to communicate can be classified in four main groups: (i) Local Chat was used to provide linguistic or intercultural support, usually by means of writing down relevant information that was being exchanged in Voice Chat; (ii) Local Chat was used as an alternative to the Voice Chat, to express linguistic problems or to provide explanations on linguistic or intercultural issues; (iii) participants used Local Chat to comment on what was being said in Voice Chat, or on the actions that were performed during the sessions; (iv) Local Chat was used to communicate urgent or relevant information, thus avoiding interrupting the flow of the interaction in Voice Chat. The incidence of use of Local Chat is shown in Figure 7-6, over page.

Figure 7-6 Reason for using Local Chat



The most common reason for using Local Chat, in 47% of the instances of use, was to provide language and intercultural support to learners, as seen in Excerpt 7-5, which shows part of a Languageing episode that occurred during Session Four.

Excerpt 7-5 Session Four, Si mangia! Language support in voice chat

Local Chat	Voice Chat
SU: SI/YES	ITA: ok.cosa vuo-vuolete sapere? +1Dub*?/ok.what do you want to know? +1Dub*?
SU: MACINATO/ MINCED BEEF	DUB: +1ah*..c'è c'è carne? sulla tavola?
	No.../ +1ah*..is there is there meat? on the table?
	No.
SU: SI/YES	ITA: non lo so./I don't know.
SU: MACINATO /MINCED BEEF	DUB: vedi carne?/do you see meat?
	ITA: sì./yes.
	DUB: sì?possiamo fare la lasagna../yes? we can make lasagna..
	ITA: sì?/yes?
SU: NON C'è LA PASTA PER LE LASAGNE/ THERE'S NO PASTA FOR LASAGNE	DUB: sì?... cos'è ... Ita./yes?... what's ... Ita.

The example was recorded at the start of the *Cooking together* language task, during which the students were asked to devise a recipe using the tools and ingredients available on a table in the area they were in. As two of the students could not see the objects on the table, Ita, who was not experiencing this technical problem, started to list what she saw

on the table. In this moment, Su, the researcher/teacher, uses Local Chat to support Ita and Dub without interrupting their exchange.

Also, Local Chat was used in 32% of the cases to communicate language issues and/or explanations, as is seen in Excerpt 7-6, which was recorded during the *An easy recipe* language task, in Session Four.

Excerpt 7-6 Session Four, Si mangia! asking for the meaning of *rosolare*

Local Chat	Voice Chat
<p>ITA: cosa significa rosolare?/<i>what does rosolare mean?</i></p> <p>SU: ROSOLARE: CUOCERE NELL'OLIO FINO A CHE DIVENTA GIALLO DORATO/<i>ROSOLARE: TO COOK IN OIL TILL IT BECOMES GOLDEN</i></p>	<p>GEA: [...] prima che la pasta sia cotta, quindi sia pronta, fate rosolare appena appena l'aglio.nella padella.fate attenzione.l'aglio deve.prendere colore.rosolare vuol dire quello, e non friggere.e soprattutto non bruciare ((giggles)) [...]/<i>before the pasta is cooked, before it's ready, lightly brown the garlic in the fryin pan.watch it.the garlic must.become golden.that's what rosolare means,not fry.and most importantly not burn ((giggles)) [...]</i></p>

In this part of a longer Languageing episode, Ita noticed the word *rosolare*, asked for its meaning in Local Chat and was helped by Su.

In 11% of the instances, Local Chat was resorted to by the participants to comment on what was happening during the session. Comments cover all types of written remarks, not necessarily language related, made by participants during the focus shifts. In these cases, at times, the Local Chat was used as a place for letting off steam, and 'having a laugh' when something funny was being said or done (the use of emoticons such as 😊 was also used in the comments), as can be seen in Excerpt 7-7, Excerpt 7-8, and Excerpt 7-9.

Excerpt 7-7 Session Four, Si mangia! Comment on a type of pasta sauce

ANN: io conosco una salsa con pomodoro panna e vodka /*I know a sauce with tomato cream and vodka*

ITA: Voglio provarla Annette/*I want to try it Annette*

The comments in the short exchange in Excerpt 7-7 between Ann and Ita, are part of a longer languaging episode that occurred during the *Cooking together* language task.

While the students were arguing about the use of cream in a tomato-based pasta sauce, Ann used Local chat to comment on that, causing Ita to respond to her comment. In other cases the Italian volunteers expressed their views on certain choices made by the students, such as the one seen in Excerpt 7-8, which was also recorded during the *Cooking together* language task and was prompted by the students' proposal to start cooking their pasta sauce by frying onion and garlic together.

Excerpt 7-8 Session Four, Si mangia! Comment in Local Chat on using garlic and onion together

HEL: no, ti prego!/*No, please!*
 SU: bravi/ *Be good*
 SU: shhhh italiani/*shhh italians*
 HEL: aglio e cipolla insieme?/*garlic and onion together?*
 HEL: ahaahahaahahahh ok/*haa haa haa ok*

Also, the use of Voice Chat in a VW such as SL® can take time to master, as residents need to learn how to respect turn-taking and avoid talking over each other. In these cases, Local Chat was useful for all those comments that were not particularly necessary to what was being said in Voice Chat, but helped each individual express their own feelings and opinions.

Finally, in other cases the participants resorted to using Local Chat for urgent or relevant communication, namely, if they could not get their message through in Voice Chat or did not want to interrupt the VC communication. One of these cases can be seen in Excerpt 7-9, which shows part of a focus shift episode due to a technical problem occurring during the introduction part of Session Six, Festa in Italia (Holidays in Italy).

As Dub had problems with the sound of the chat, he first resorted to Local Chat to explain what was happening, Su then continued using Local Chat, as Dub's sound problem was only experienced with her communications in Voice Chat.

Excerpt 7-9 Session Six, Feste in Italia, problems with Su's voice

Local Chat	Voice Chat
ITA: ci sei Dub?/ <i>Dub are you with us?</i>	SU: perfetto.anche voi vi sento molto bene.Dub?...((laughter))è sordo.non sente più.../ <i>great.I can you all very well too.Dub?((laughing))he's deaf.we can't hear him any more...</i>
DUB: non sento benne/ <i>I can't hear well</i>	SU: non capisco.ci sei?/ <i>I don't understand.are you here?</i>
SU: prova a parlare Dub/ <i>try to speak Dub</i>	SU: non sento bene..../ <i>I can't hear well....</i>
SU: ho capito/ <i>I understand</i> Solo con me? <i>Only with me?</i>	DUB: non so perché.perché io posso capire però c'è quello ccchhhhhsscchhh così..è troppo alto/ <i>I don't know why.because I can understand but there's that ccchhhhhsscchhh so..it's too loud</i>
SU: ok allora non importa/ <i>no worries then</i> perché io parlerò poco ok?/ <i>because I won't talk a lot ok?</i>	DUB: sì.solo con te / <i>yes.only with you</i>
SU: però ora devo parlare un pochino/ <i>but now I have to talk a bit</i> <i>Su uses a laughing gesture</i>	DUB: ok ((chuckles)) DUB: ok ((chuckles))
SU: posso?/ <i>may I?</i>	

Local Chat, in this instance, offered the opportunity to resolve the problem more easily.

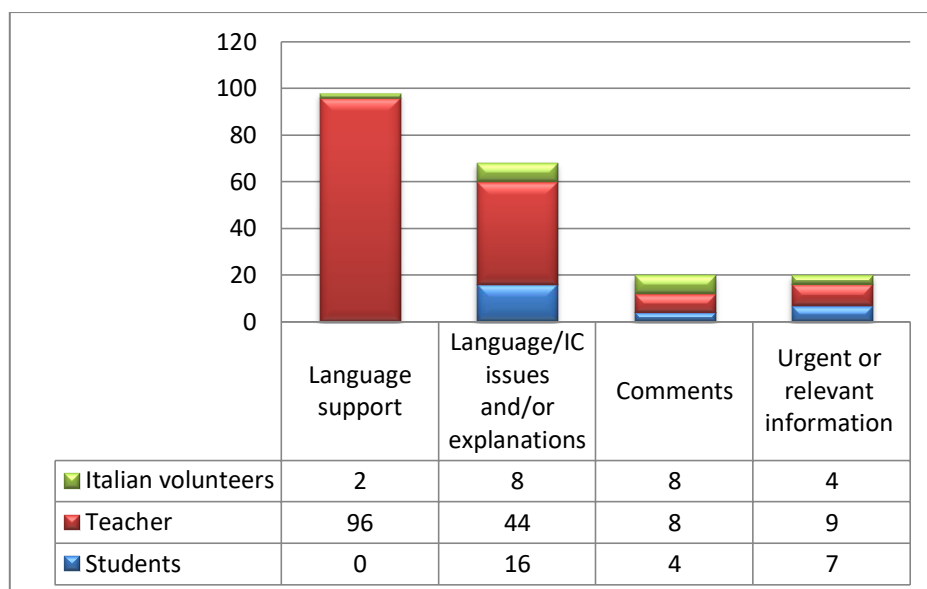
To conclude, it is clear from the analysis of the use of Local Chat that this mode of communication was used by participants mostly as a support to what was being said in Voice Chat during the focus shift episodes. An investigation of who used LC can further explain the role of this technical affordance during the language task.

7.3.2 Who used Local Chat

It was mentioned that Local Chat was used mainly by the Italian participants. Figure 7-7 shows in detail who among the participants used this mode of communication and shows

how Local Chat was mainly resorted to by the researcher/teacher, especially in actions of language support (96 cases) and linguistic and intercultural explanations (44 instances). This indicates that the writing technical affordance of the VW was perceived to be a valid pedagogical tool by the educator and used as such.

Figure 7-7 Groups that used Local Chat and for what



Local Chat appears to have constituted an alternative to the Voice Chat for the learners, mostly when they needed support to their linguistic or intercultural questions (in 16 instances).

Students also availed of Local Chat in seven cases for urgent communication. An example can be read in the sentence written by Ita in Session Six (Holidays in Italy), during the *Carnival language task*.

The group was in the Carnival area, where an Orange Thrower had been placed, for the students to play with (see Snapshot 7-1).

Snapshot 7-1 Session Six, Feste in Italia, the Orange Thrower



Su started to explain in Voice Chat how to use the Orange Thrower, but was interrupted by Ita who wrote in Local Chat:

ITA: come si tira?/how does one throw?

Ita's question was acknowledged by Su, who tried a different way to explain the Orange Thrower's use, in Voice Chat.

Finally, the use of Local Chat for comments was shared equally between the Italian volunteers and the researcher/teacher (8 instances each) and was recorded only 4 times for the students.

To conclude, the synchronous Local Chat technical affordance of Second Life®, for written communication, emerged during the focus shift episodes and was leveraged by the participants in ways that often supported the resolving of technical, language and intercultural issues and disruptions, offering the possibility of language learning not only in spoken but also in written mode. The use of Local Chat is also a matter of interest, as this technical affordance of the VW had not been specifically designed in the language tasks, which had all been based on using Voice Chat. The use of Voice Chat is seen in the following section.

7.3.3 Who used Voice Chat and for what

It was stated in Section 7.3, Figure 7-5, that the focus shifts were initiated mainly in Voice Chat. This implies that the learners expressed their difficulties using the Voice Chat as a preferred mode of communication. Figure 7-8 corroborates this, as it shows the different actions performed by the participants when the use of Voice Chat was recorded. The actions in the chart are: (i) A03: exposure to authentic target language culture, (ii) A06: target language reflection, (iii) A10: intercultural exchange, (iv) A15: target language native speaker support and (v) A17: target language student support.

Figure 7-8 Different instances of VC use

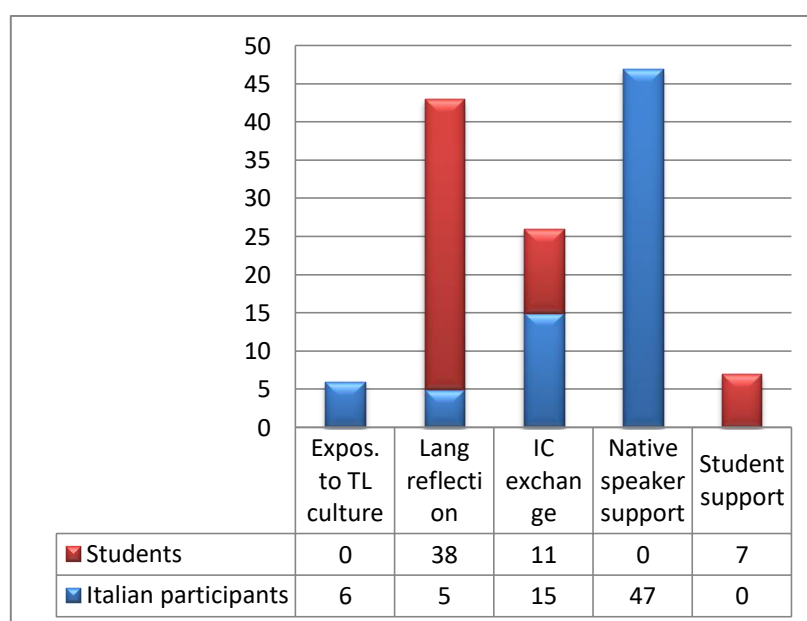


Figure 7-8 shows that Voice Chat was used by the students in 38 instances of language reflection, that is, in cases when the learners asked for help in linguistic issues. 11 cases of intercultural exchange were initiated by the students' questions and comments on intercultural topics and, in seven instances, the students helped their peers in a language or intercultural issue. The Italian participants used Voice Chat mainly to provide support to the learners' questions and problems (in 47 cases), to give cultural information on their region or their country, in 6 cases and to initiate intercultural exchanges, in 15 cases or, in six instances, language reflection. The use of Voice Chat during the sessions can be

compared to what would happen during a language class in the physical world, where students experiencing difficulty ask for help and are supported by an expert, be it their teacher, a native speaker of the language of study, or a peer who is more competent in that particular problem. The considerable difference with a physical world language class was, nonetheless, the presence of a larger and more varied group of native speakers.

The virtual world features for synchronous communication were clearly essential for the running of the course and for resolving of the various technical, linguistic and intercultural disruptions that took place during the language tasks. Other technical affordances of the virtual world, which were acted upon during the focus shift episodes are explored in the next section.

7.4 Use of other in-world technical features as an affordance to complete the language task

Besides the features that allow synchronous communication, the virtual world of SL® provides technical features that afford simulation and immersion and have been identified as a strong factor in the educational affordances of VWs, mentioned in Chapter Three.

Such characteristics allow users: (i) to create and/or modify a landscape, (ii) and to modify its settings, such as the sound settings, (iii) to move around the virtual world, (iv) to point to objects and other avatars in the virtual world, (v) to work and interact in a multimodal way, as websites can be shown directly in-world, and photos and files can be uploaded, and (vi) to create, interact with and/or modify objects.

The technical characteristics that were used during the three sessions are listed in the following Table 7-1.

Table 7-1 Technical features of Second Life® that were used during the sessions

Feature	What it does
Landscaping	Example: creating an environment that shows characteristics of the target language country, or that brings to mind certain situations, times of the year, feelings.
Sound settings	Example: SL® viewers give the user the possibility to set up one's and other avatars' volume and the overall sound volume of the surrounding area.
Moving in the virtual world	Examples: walking towards objects to clarify what people are talking/writing about; teleporting subjects.
Mouse crosshairs	A type of ray-casting feature of SL®, which gives the avatar the chance to show to others the objects they are pointing at, by displaying a ray going from the avatar's hand to that particular object.
Uploading images in the virtual world	Examples: using screens that can be scripted to show various pictures; setting up posters and signs with photos of authentic documents, or information on some lexical or cultural aspects of the language.
Local Chat to exchange links	Examples: everyone can pass on links to websites with relevant information.
Scripted objects	Examples: displaying objects that the participants can interact with, wear, use to play games, or use for role-plays. Also, pass on scripted objects to other participants.

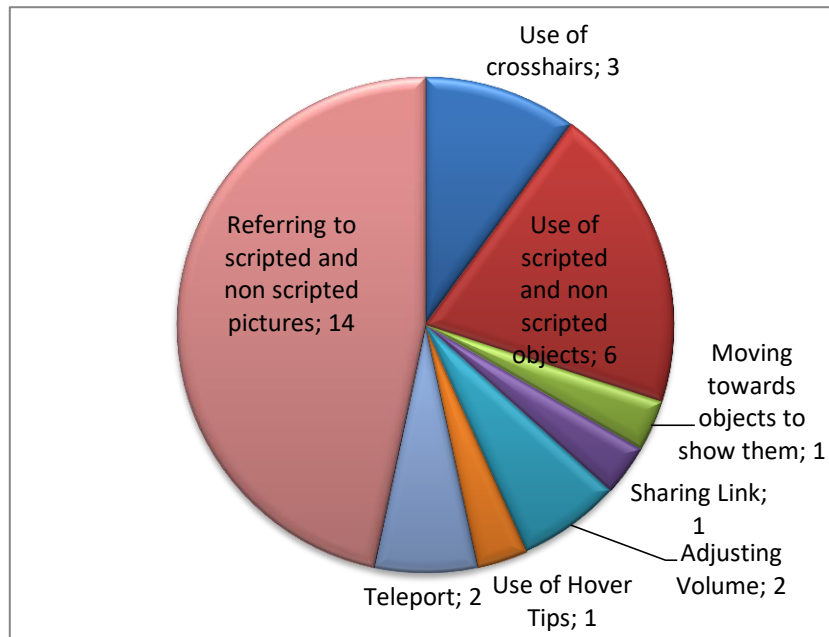
These technical features were used in actions undertaken by the participants while collaborating towards the solution of a technical, linguistic or intercultural problem, or, at times, these features were resorted to as an aid to a cultural or language explanation, or to focus the participant's attention.

Fig.7-9 shows the actions that resulted from the use of these characteristics of the VW, and that occurred during the focus shift episodes.

These technical affordances of Second Life® were often acted upon by participants to resolve a technical, linguistic or intercultural interruption that had occurred during the course of the language task.

The 14 recorded actions of showing or referring to photos or drawings that had been placed in the environment is a consequence of the landscaping feature of the virtual world.

Figure 7-9 Other technical affordances that emerged during the focus shift episodes



The pictures were often referred to in order to clarify lexical and/or intercultural questions, as can be seen in Snapshot 7-2, taken during the *All Saints' Day* task, in Session Six.

Snapshot 7-2 Session Six, Feste in Italia, pictures of different All Saints' Day sweets



In this moment during the task, Lora, who was guiding the task, talked about *frutta martorana*⁴⁵, a traditional sweet eaten in Sicily for All Saints' Day. Ita asked for the meaning of *frutta martorana* and was directed in Voice Chat and in Local chat to the pictures placed around the area.

In other cases, the pictures placed around the area prompted the learners to ask questions about what they saw on the pictures, as in the case of the Tufara episode, mentioned in Section 7.2, which happened during the *Carnival language task* in Session Six. The focus shift episode in this instance was initiated by Dub, who had been reading one of the posters around the area that explained about the Carnival in Tufara. The information on the poster prompted Dub to ask:

DUB: dove dov'è Tufara?/where where is Tufara?

and initiating an intercultural focus shift episode.

In two instances the feature that allows the setting of the different sounds in the virtual world was accessed to resolve a sound problem. In both occasions the action was verbalised, as can be seen in Excerpt 7-10, which is part of a longer focus shift episode initiated by Bea during the introduction part of Session Four, *Si mangia!* (Let's eat). The issue was handled in Voice Chat first by trying to help Bea fix the technical issue herself, then by the researcher/teacher changing her own volume settings.

Excerpt 7-10 Session Four, *Si mangia!* Resolving a sound problem

<p>BEA: scusi Susanna, mi dispiace.il tuo microfono è basso/ <i>excuse me Susanna, sorry.your mic is low</i> SU: è troppo basso il mio microfono?allora lo alzo/ <i>is my mic too low?I'll turn it up then</i> BEA: sì sì/yes yes SU: sì sì non ti preoccupare.hai provato ad alzarmi tu anche?/ <i>yes yes don't worry.have you tried to turn up my voice too?</i> BEA: scusi?/ <i>Sorry?</i> SU: hai provato ad alzare il mio microfono vicino a [English] talk?../ <i>have you tried to turn up my volume next to [English] talk?..</i> BEA: uhm SU: se-lo vedi dove hai [English] talk?... / <i>if-do you see where you have [English] talk?...</i> SU: un attimo che lo alzo, eh, comunque.../ <i>one second,I turn it up myself, eh, anyway...</i></p>
--

⁴⁵ Frutta martorana are traditional marzipan sweets, in the form of fruits and vegetables, from Sicily.

In one instance, during a technical problem experienced in Session Four, during the *Opinionator* game, one of the Italian volunteers, Ann, helped to resolve the technical problem experienced by the students (see Snapshot 7-3).

Snapshot 7-3 Session Four, the Opinionator game, reading the labels

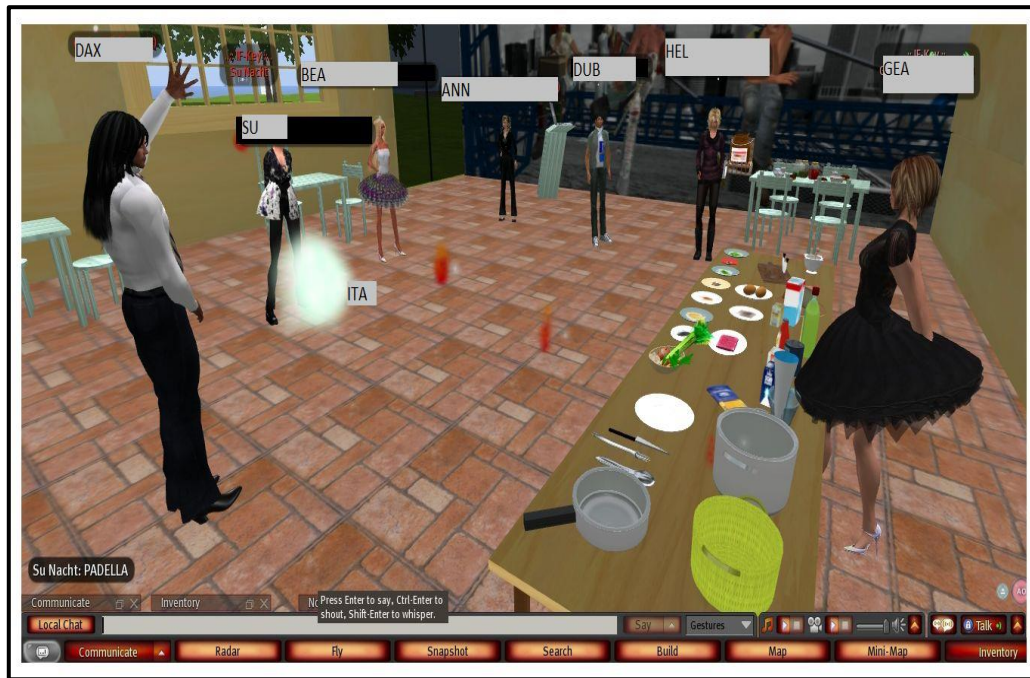


As the students could not read the writings on the sides of the Opinionator platform, Su, the researcher/teacher, read them out and gave the colour associated to each section and Ann walked towards each section, to clarify what Su was explaining.

Another case of availing of the SL® technical features to highlight something that was being explained in Voice Chat was the use of crosshairs, which was recorded during Session Four, *Si mangia!* (Let's eat) during the *An easy recipe* language task.

The episode in question can be seen in Snapshot 7-4, which shows Dax pointing to a pot and his action being highlighted by the use crosshairs (the red dots), which show where the pot is. Dax's action was prompted by Dub's question for the meaning of the word *pentola* (pot).

Snapshot 7-4 Session Four, Si mangia! Using crosshairs to show the pot



In one instance the local chat was used to share a link, as can be seen in Snapshot 7-5.

Snapshot 7-5 Session Eight, Mamma mia, che dolore! Sharing a link in Local Chat



The action was performed during the wind-down part of the session, while the participants were talking about International Women's Day. Ann, who was taking part in

the conversation in Local Chat and in Voice Chat, shared a link to a website on the history of this particular commemoration.

Finally, the participants used scripted and non-scripted object to aid the language task, such as the Orange Thrower that was mentioned in Section 7.3.3.

All the technical affordances mentioned in this section are specific to the virtual world of Second Life® and provided useful resources when the participants worked on resolving technical, linguistic, and intercultural problems. Often, these technical affordances had been designed as an integral part of the language task; sometimes, however, they failed to emerge. The next section looks at what happened when a technical affordance of the medium failed to be noticed and investigates examples of technical breakdowns.

7.5 Consequences of the non-realisation of a technical affordance: cases of Virtual Corpsing

It was seen in Chapter Six that when a technical affordance that had been designed by the researcher/teacher as an aid to the completion of the language task failed to be noticed or to be enacted by the participants, the technical disruption in the task caused either a technical breakdown, or a shift of focus in the task, with participants collaborating at resolving the technical problem; this caused instances of Virtual Corpsing during the sessions. Chapter Two explained that Virtual Corpsing is a sudden loss of the illusion of virtuality, caused by a shift from the virtual to the real world. This, according to Marsh (2001, 2003) can break the participants' attention in the virtual world and decrease their feel of presence, thus possibly diminishing the possibility of a successful use of the medium (Riva, 2004) of learning. During these episodes of disruption due to a difficulty with or a failure to use the software or hardware, the participants had to divert their attention from the language task to the technical issue and lost that feeling of 'being

there', in the virtual environment. During the course of the three sessions, instances of Virtual Corpsing were recorded 18 times, as is shown in Figure 7-10.

Figure 7-10 Instances of Virtual Corpsing

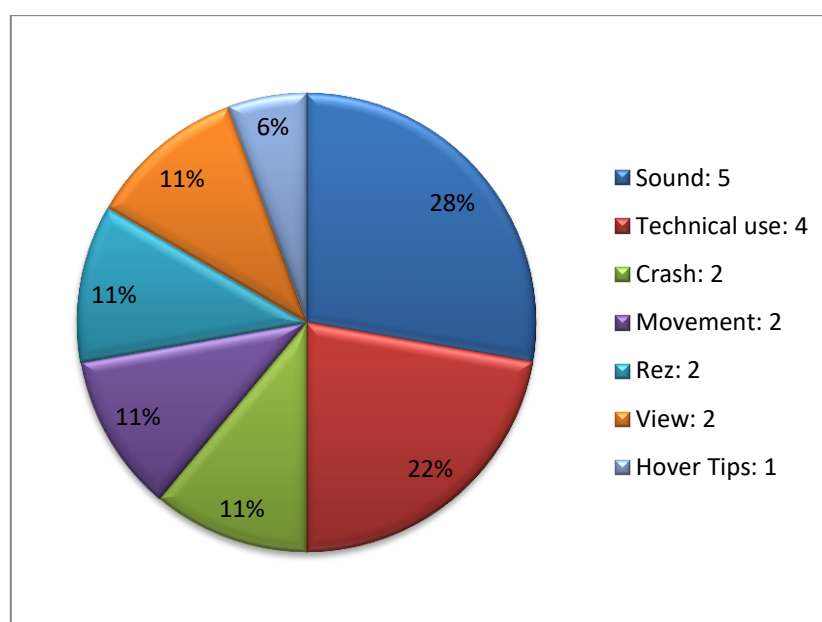


Figure 7-10 shows each case of Virtual Corpsing and the type of technical disruption it was caused by. Issues related to sound problems were the most common resulting in five cases, followed by examples of the students' difficulties in mastering the use of the software, labelled as Technical use and featuring in four cases. The most extreme cases of Virtual Corpsing were due to crashing, as in such situations the student was logged off the virtual world and had to restart the software to log in again and continue the session. Crashing was only recorded twice during the three sessions and both times the two students managed to log into the VW within five minutes. One of the two crashing episodes was verbalised once the student logged back in and wanted to resume working on the language task. One example of this is shown in the next section.

7.5.1 An extreme case of Virtual Corpsing: a crash episode

During Session Six, *Feste in Italia*, *Holidays in Italy*, Ita, one of the students, crashed during the *Carnival language task*. When Ita logged back in, she contacted the

researcher/teacher by IM. Excerpt 7-11 shows the dialogue that took place between the student and the researcher/teacher in IM.

Excerpt 7-11 Session Six, Feste in Italia, Ita's IM exchange after crashing

ITA:	(IM) mi spiace, sono caduta .. ke cazzo!!/ <i>Sorry, I crashed ... what the fuck!!!</i>
SU:	(IM to ITA) basta che tu non ti sia fatta male/ <i>as long as you didn't hurt yourself</i>
ITA:	(IM) [IN ENG] what?
SU:	(IM to ITA) non ti vediamo Ita/ <i>we can't see you Ita</i>
ITA:	(IM) cosa vuol dire, basta che tu non ti sia fatta male/what's the meaning of "basta che tu non ti sia fatta male"
SU:	(IM to ITA) [IN ENG]as long as you didn't hurt yourself non ti vediamo fa' appearance/ <i>we can't see you try appearance</i>

Excerpt 7-11 shows how Ita indicates that she is having other technical problems and is advised to log off and on again. The other participants continue with the language task, but, when Ita logs back in a second time, the exchange on her technical problem moves to Voice Chat. Ita's difficulties are indeed noticed by the other participants, as her avatar is not rezing properly. The *Carnival language task* is thus momentarily interrupted and the group helps Ita. The exchange in Voice Chat can be read in Excerpt 7-12.

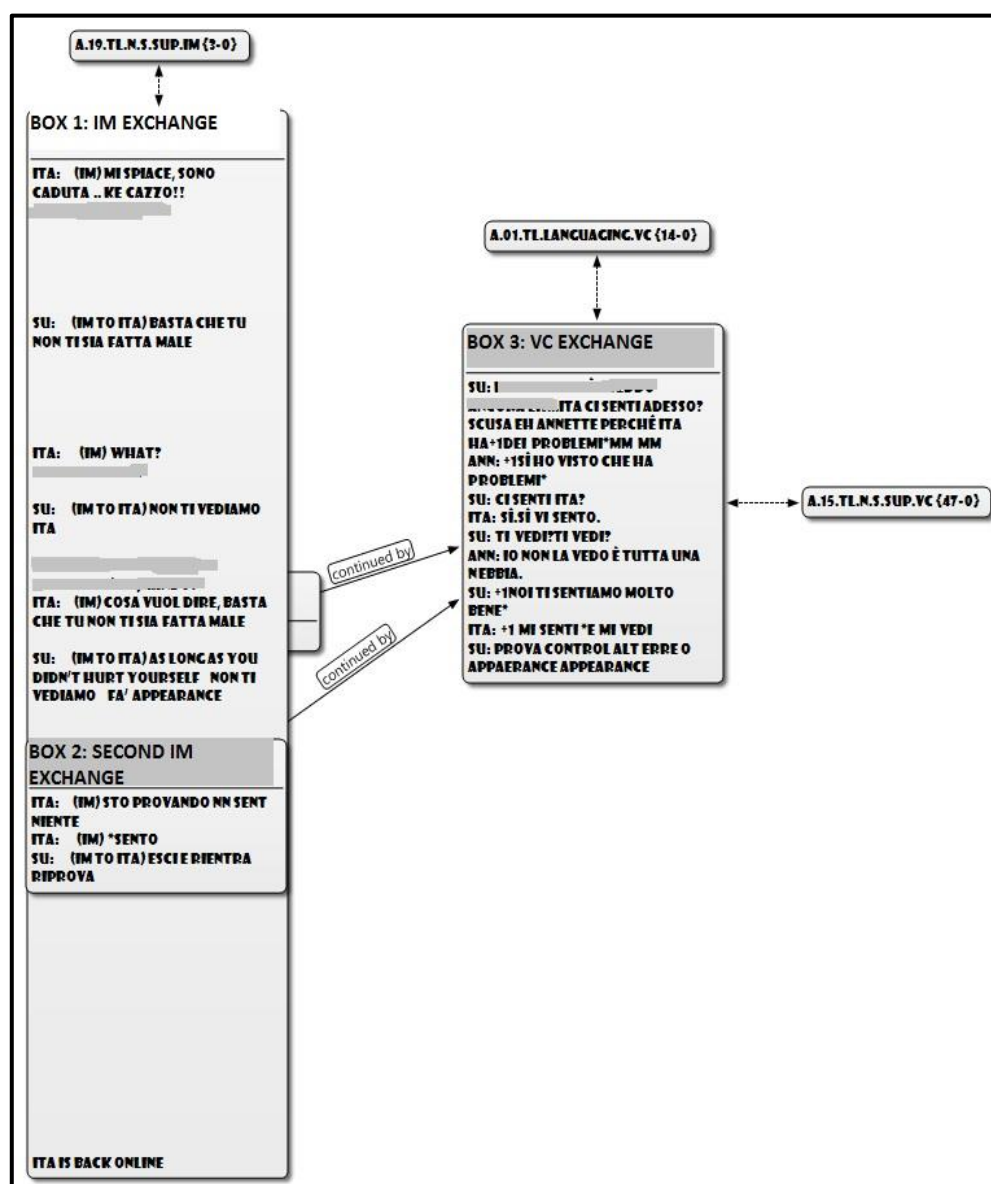
Excerpt 7-12. Session Six, voice exchange after crashing

SU:	[...]Ita ci senti adesso?scusa eh annette perché ita ha+1dei problemi*mm mm/ <i>Ita can you hear us now?sorry Annette, Ita is ha+Iving problems</i>
ANN:	+1si ho visto che ha problemi*/+ <i>Iyes, I saw she is having problems*</i>
SU:	ci senti Ita?/ <i>can you hear us Ita?</i>
ITA:	sì.sì vi sento./yes, yes <i>I can hear you.</i>
SU:	ti vedi?ti vedi?/ <i>can you see yourself?can you see yourself?</i>
ANN:	io non la vedo è tutta una nebbia./ <i>I can't see her she's all a fog</i>
SU:	+1noi ti sentiamo molto bene*/+ <i>I we can hear you very well*</i>
ITA:	+1 mi senti *e mi vedi/+ <i>Ican you hear me* and can you see me?</i>
SU:	prova control alt erre o appaerance appearance/ <i>try Control Alt R or appearance, appearance</i>

The complete Crash episode can be seen in Network 7-3. Box 1 and Box 2 report the IM chat that occurred between the researcher/teacher and Ita, after Ita logged in for the first time. Box 3 shows the Languaging exchange that started in Voice Chat when Ita logged in the second time.

While the first exchange (Excerpt 7-11) is part of a technical problem that affects only that student and the teacher who is helping her, the second exchange involves the larger group and takes place in Voice Chat and in IM.

Network 7-3 Session Six, Feste in Italia, Ita's crash episode



Network 7-3 shows how the disruption is first handled by means of a Native Speaker Support action in IM, and, when it becomes the concern of the group of participants, it starts a Linguaging episode, during which the participants, Ita and Su, provide Ita with Native Speaker Language Support in Voice Chat. In this case an instance of Virtual Corpsing, despite its implications for presence and learning, has created a need for

communicating in the foreign language to acknowledge the issue and, later, to resolve a secondary problem caused by the first technical issue that caused the crash.

The Crash episode analysed in this section shows that an extreme case of Virtual Corpsing resulted in foreign language production. When the technical problem that caused Virtual Corpsing was verbalised, it was always dealt with by the participants by means of interaction in the foreign language. Indeed, in 11 out of the 18 episodes of Virtual Corpsing, one of the actions that were enacted as a reaction to the technical disruption was Languaging. The following section presents one of these episodes, where Virtual Corpsing was caused by the difficulty on the part of the students to use the hover tips feature of the virtual world.

7.5.2 The Hover Tips episode, a technical breakdown with many layers

The Hover Tips episode happened during Session Four, *Si mangia! (Let's eat!)* at the beginning of the *Cooking together* language task (see Snapshot 7-6).

Snapshot 7-6 Session Four, *Si mangia!* the restaurant area



The students had been asked to collaborate to devise a recipe, using the ingredients and tools available on the table. The table was scripted and anyone hovering their mouse on

recognise the objects on the table. An initial solution came from SU, who asked Ita (the only student to have activated her Hover Tips), to help her colleagues and describe to them all the objects that she could see on the table. A full transcript of the episode can be found in Appendix C.

Excerpt 7-13 Session Four, Si mangia! the Hover Tips episode, start

Local Chat	Voice Chat
ITA: Come non avete i hover tips attiva??? Su ha scritto sulla wiki!!!!/what? <i>You didn't activate the hover tips??? Su wrote it on the wiki!!!!</i> SU: GRAZIE ITA/THANKS ITA	DUB: sì però il mio +1 hover tips* non funziona. <i>/yes but my hover tips don't work</i> BEA: +1 sì. non funziona*. No./ +1 yes. they don't work No.* SU: fate lo zoom./zoom in BEA: zoom non funziona. le +1 cose* è molto piccolo e non chiaro/ <i>zoom doesn't work. +1 things* are very small and not clear</i> ITA: ((snorts)) SU: Bea, tu hai un mouse con una [INGLESE] wheel, una ruota, no?/ <i>Bea, you have a mouse with a [ENGLISH] wheel, a wheel, haven't you</i> BEA: sì. ((sighing))+1 lo so, lo so zoom*. ((sigh)) ma zoom non bene. ((sighing)) * <i>I know zoom*((sigh)) but zoom isn't good.</i> SU: +1 (XXX)*ah ITA: ((snorting and sighing)) ah! BEA: non funziona bene. <i>/it doesn't work well.</i> SU: no allora va bene. eh.. Ita a te funzionano le hover tips vero?/ <i>no ok then. eh.. Ita do your hover tips work?</i> ITA: sì./yes. SU: eh bene. allora puoi aiutare gli altri/ <i>eh good then you can help the others</i>

As Ita eventually also started experiencing problems with the Hover Tips function, Ann stepped in and suggested an alternative solution, as can be read in Excerpt 7-14.

Excerpt 7-14 Session Four, Si mangia!, the Hover Tips episode, second solution

Voice Chat
ITA: a-aspetta, il mio hover tips non funziona adesso. ma prima sì. <i>/hold on. my hover tips don't work now. but they did beforehand</i> ANN: comunque, scusate, se mettete il mouse sui vari oggetti e poi cliccate con il tasto destro del mouse e fate EDIT, scegliete EDIT, vedete il nome degli oggetti. provate un po'?... <i>/anyway, sorry, but if you hover your mouse on the object, then right click and EDIT, choose EDIT, you can see the names of the objects. give it a try...</i> GEA: è una buona idea. <i>/it's a good idea.</i>

The exchange continues, as Ita solves her Hover Tips problem and proceeds to listing all the tools and ingredients she sees on the table. During this action Ita is supported by Su, the researcher/teacher, who writes down in Local Chat all the items that Ita is calling out.

Also, while Ita is doing that, she and the other students notice ingredients and tools they do not know or recognise, such as a mezzaluna knife, cooking cream, and pine nuts and ask for their meaning or for their use as seen in Excerpt 7-15, which shows the first Language focus shift episode that occurred during the Hover Tips Language episode.

Excerpt 7-15 Session Four, Si mangia! the Hover Tips episode, the *mezzaluna* episode

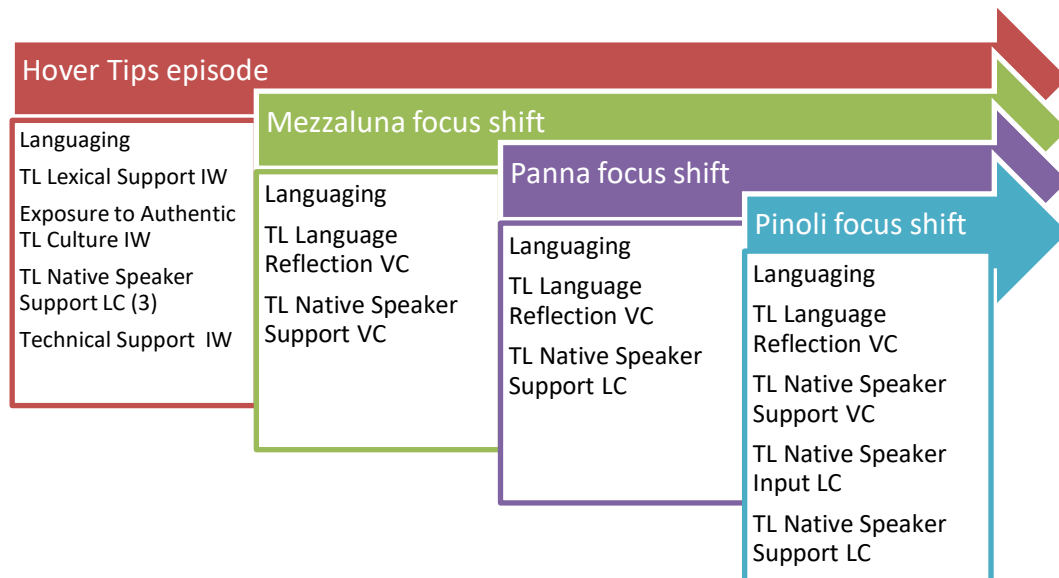
<p>ITA: cosa significa mezzaluna?/ <i>what does mezzaluna mean?</i> GEA: mezzaluna? ((whispering to herself))/ <i>mezzaluna? ((whispering to herself))</i> HEL: la mezzaluna è una specie di, di coltello curvo che ha alle estremità come dei manici in legno o in plastica e siccome ha questa forma stondata si può mettere l'ingrediente da tritare su un tagliere e poi con la mezzaluna si taglia facendola dondolare praticamente sul piano./ <i>a mezzaluna is a type of, of curved knife that has some sort of wood or plastic handles on its sides and as it has this curved form you can place on a wooden board the ingredient you want to chop and you chop it with the mezzaluna by practically rocking it on the board.</i> ITA: ok grazie./ <i>ok thanks.</i> HEL: prego. <i>not at all.</i></p> <p>DUB: ITA.dimmi cosa c'è sulla tavola.+1per piacere*/ <i>ITA.tell me what's on the table.+1please*</i> ITA: eh c'è, c'è due uova, e .../ <i>ehm there's, there's two eggs, and ...</i></p>
--

The *mezzaluna* episode shows that what started as an activity enacted to resolve a technical problem that had interrupted the language task, expands to include three language related disruptions, which initiate three separate shifts of focus in the Hover Tips episode activity system. The Hover Tips episode has many layers and a focused investigation of what happened in the course of this activity, showed that the participants performed many different actions, as seen in Figure 7-11.

Fig. 7-11 represents how the Hover Tips episode developed and actions that were observed in connection to each focus shift episode until the Hover Tips episode concluded, when the Italian participants helped Ita by writing down in Local Chat some of the objects that had been placed on the table. The actions performed by the participants

during the complete Hover Tips episode are listed in the red box, while each of the other boxes record the actions carried out by the participants during each of the linguistic focus shift episodes, the mezzaluna knife focus shift, the panna (cream) focus shift and the pinoli (pine nuts) focus shift.

Figure 7-11 The Hover Tips episode and the actions related to it



We see that the participants languaged throughout the Hover Tips activity, both in Voice Chat and in Local Chat. As noticed in other examples, questions about the objects on the table were expressed by the students in Voice Chat (TL Language Reflection in VC), and the Italian participants helped both in Voice Chat (Native Speaker Support in VC) and in Local Chat (Native Speaker Input and Native Speaker Support in LC).

This episode shows how the failure of an engineered technical affordance of the medium to emerge, despite causing an instance of Virtual Corpsing and a long episode of disruption in the language task activity, brought about extensive foreign language use as other social and technical affordances of the virtual world emerged and were leveraged by the participants as language learning affordances. To conclude, it can be argued that in the case of a foreign language learning activity conducted in the FL, in a virtual world, instances when that language learning activity is interrupted due to technical disruptions,

and its object is temporarily set aside so that the participants can resolve it, the use of the foreign language in the development of the new sub-activity systems, fulfils in part one the original objectives of the language learning activity, namely, the development of the FL and intercultural competence of the learners.

7.6 Summary

Chapter Seven detailed the second phase of the data analysis. The chapter started with an analysis of the affordance related actions that were observed during the focus shift episodes and focused on two main areas of interest that could be detected from the data, namely how the social and technical affordances of the virtual world could be leveraged to offer language learning affordances to its users. The community of the language learning task activity was recognised as an important source of language learning affordances. Further, episodes of *Languaging* were described and analysed and *Languaging* was identified as a language learning affordance offered by the medium. Also, the analysis showed how technical affordances offered by the virtual world can provide the possibility for actions that can promote language learning. Finally, it was argued that even when a technical affordance specifically engineered in a language task did not emerge, alternative affordances were noticed and enacted by the participants in an effort to resolve that particular technical disruption or breakdown through the use of the foreign language. This, despite the occurrence of instances of *Virtual Corpsing*, provided the learners with the opportunity to engage in meaningful foreign language production and, thus, to learn.

Chapter 8 Discussion and conclusions

This thesis presented an activity theoretical investigation of the language learning affordances of virtual worlds, through the study of *SLitaliano*, an Italian language course that was run in the virtual world of Second Life® for a group of Dublin Institute of Technology students of Italian as a foreign language. As such, the study situates itself in the field of applied linguistics and views Foreign Language learning, like any human cognitive activity, as a product of the individual's personal and social history and culture, “dialectically intertwined” with instruction (Engeström, 2015, p. xix), immersed in a cultural, historical and social context, and shaped by mediation. Also, this study positions itself in the current group of research study on virtual worlds, looking into the educational affordances of VWs, with an interest for a structured and theoretically supported pedagogy for these environments.

Chapter Two defined and described virtual worlds. The main features of these environments were identified and the social and cultural psychological constructs of immersion and presence were presented as key to understand performance and learning in these environments. Further, the chapter presented a literature review of research on education in virtual worlds, summarising its positive findings and outlining the critical issues identified by research in the course of the past decade. A particular attention was paid to a new trend in research in virtual worlds, which has shifted its focus to an interest in outlining valid theoretical frameworks that can assist in the study of these environments.

In Chapter Three the construct of affordance, from its introduction in ecological perceptual psychology, to its adoption in the field of Information and Communication Technology educational research was presented and discussed. The chapter presented a literature review of studies in the field of ICT in education, and it was argued that the

concept of affordance is a valuable tool in the analysis of what happens during a learning experience in a computer-mediated environment. A critical review of studies in the educational affordances of virtual worlds shows, however, the lack of a unified conceptualisation of this construct in this field of research. Thus, in order to offer a theoretically sound conceptualisation of affordance, activity theory has been presented as a theoretical framework that can assist in the analysis of learning activities in computer-mediated environments and in the definition of the construct of affordance. The main tenets of activity theory have been presented and the principle of contradictions in activity theory has been introduced and proposed as a useful tool for the investigation of the language learning affordances of virtual worlds. Namely, it has been argued that contradictions in the language learning activity system can manifest themselves in tensions and disruptions in the enactment of that language learning activity, which, once solved, can lead to an expansion in the activity system and possible learning. Subsequently, a conceptualisation of affordance based on the definition of affordance provided by activity theorists in the field of Human Computer Interaction (Kaptelinin & Nardi, 2012) and expanded for language affordances by van Lier (2004) in his theory of ecological linguistics, has been offered. Finally, working definitions of social and educational affordances and affordances for language learning have been provided. It has been argued that the analysis of critical episodes caused by tensions and disruptions in the enactment of the language learning activity, and an investigation of the actions performed by the participants in order to resolve these problematic issues, can provide an insight in the affordances for language learning related to those actions.

Chapter Four outlined the epistemological, methodological and operationalisational considerations that were taken into account in the research design of this study. Firstly, the chapter presented the research questions at the core of the study, grounding them in the previous literature in the field of educational research in virtual worlds, presented in Chapter Two, and in the theoretical framework of activity theory and the construct of

affordance, presented in Chapter Three. The chapter then proceeded to outline the organisational and ethical issues that researchers in virtual worlds are faced with, when conducting research in these environments. Further, the operationalisation of the activity theoretical framework was discussed, as regards the methodological choices relevant to this study: the choice of the minimum unit of analysis and the choice of the level of analysis, and the identification of tensions and contradictions in the activity system chosen as a unit of analysis. The chapter concluded discussing the practical implications that researching in a virtual world and the choice of an activity theoretical framework had for this study, in terms of the four phases of the research design and for the design choices made for the study.

In Chapter Five the pilot course *L'italiano in gioco* and *SLitaliano*, the SL® language course that was analysed in the study, were presented in detail and it was shown how the experience with *L'italiano in gioco* contributed to the design and running of *SLitaliano*. The chapter then proceeded to detail the design, structure and timeline of *SLitaliano*, of its sessions and of each of the language learning tasks performed during the language course. Further, the participants' selection process and recruitment was outlined and the different groups of participants were described in terms of their importance and role for the study. Finally, the procedure followed for data collection, the timeline of data collection and the typology of data were detailed. The approach followed for the encoding of the data was explained and the chapter concluded with two taxonomies created as a result of the encoding: a taxonomy of the Focus Shift episodes observed in the data and a taxonomy of the actions enacted during the Focus Shift episodes. The two taxonomies provided the starting point for the data analysis in Chapter Six and Chapter Seven.

Chapter Six presented the first phase of data analysis. The chapter started with a narrative account of the three sessions of *SLitaliano* chosen for data analysis. The chapter

then proceeded to analyse the focus shift episodes observed during the three sessions and listed in the taxonomy presented in Chapter Five. The three main types of disruptions and sessions that initiated the focus shift episodes observed in the data were identified: disruptions arising from technical issues, initiated by linguistic problems and questions, and/or caused by intercultural questions and information. It was argued that these tensions and disruption may be evidence of underlying secondary contradictions in the language task activity system, and it was shown how these disruptions created a temporary departure from the object of the task activity system and a shift in the focus of the language task. The new sub-activities that were created as a result of the disruptions and the consequent focus shifts were analysed and it was argued that the actions that the subjects performed while being involved in the sub-activities could be useful in the investigation of the emergence of language learning affordances of the virtual world. Finally, an Intercultural focus shift episode, the Health Card episode, was analysed in detail. The episode showed the intricacy and richness of what happens when a disruption occurs during the performance of a language learning task in the virtual world and constituted the starting point for the second phase of the data analysis, presented in Chapter Seven.

Chapter Seven carried the analysis forward and started with an in-depth analysis of the actions observed during the focus shift episodes and listed in the taxonomy presented in Chapter Five. The affordance related actions were described in terms of type, occurrence and who performed them. This contributed to the identification of social and technical affordances of the virtual world acted upon during the focus shift episodes to resolve the disruptions, and emerging as language learning affordances. Further, *Languaging* was identified as a language learning affordance of the medium and episodes of *Languaging* were analysed in detail, as clusters of affordance related actions. Finally, the consequences of the non-realisation of the technical affordances of the medium and of instances of *Virtual Corpse* were investigated. The examples provided, and the in-depth

analysis of the Hover Tips episode, showed the extensive use of the foreign language by the participants during these episodes, through the emergence of alternative affordances of the medium acted upon in order to resolve the technical disruption.

This chapter draws on the theoretical underpinnings argued in Chapter Three and the methodological and operationalisational choices presented in Chapter Four and discusses the empirical analysis of the data, revisiting the research questions in view of those findings. The chapter concludes presenting the limitations of this study and offering ideas for avenues of future research.

8.1 Aim of this study and results

The literature review of educational research in virtual worlds presented in Chapter Two illustrated how recent studies in the field are showing more interest in language teaching and learning in these environments and are moving towards finding an apt pedagogy for these virtual spaces. It was also seen that recent research has developed an interest in the affordances of virtual worlds (Beck & Perkins, 2014) and researchers in the field are arguing for the need for more research that will consider the pedagogical opportunities of virtual worlds (Savin-Baden et al, 2010) with the support of a valid theoretical framework (Panichi & Deutschmann, 2012; Zheng & Newgarden, 2012), which can incorporate the complexity of learning in these virtual environments (Boelstorff, 2015). This study set out to investigate virtual worlds as an educational environment; more specifically it aimed to detect their affordances for language learning with the support of a theory that can handle the complexity of heavily mediated environments such as VWs.

The three questions at the core of the study were the following:

- **Question 1:** What do learners ‘do’ while performing different language tasks set to them in a virtual world? How do learners use the virtual world’s potential to

fulfil the language tasks and how does the virtual world environment affect task performance?

- **Question 2:** Which affordances for language learning emerge while performing the language tasks, and what happens when certain affordances fail to emerge and be noticed by the learners?
- **Question 3:** Through the identification of the affordances for language learning, can we draw ideas of best practice for foreign language educators in VWs, in terms of course design?

In order to answer the research questions, the data collected from an Italian language course in Second Life® were analysed following an activity theoretical approach to investigate the course, the language learning task as unit of analysis, and the students as part of a holistic multidimensional context (see Chapter Three and Chapter Four). The analysis zoomed in on each language learning task, investigating critical incidents of tensions and disruptions in the task and studying each of these episodes as a sub-activity (Chapter Six). The actions that constituted these sub-activities were then analysed as an actualisation of emerging language learning affordances (Chapter Seven). The results of the data analysis and the consequences for the research questions will be illustrated in the next sections.

8.1.1 Question 1

Question 1, enquires about the act of learning a foreign language in a virtual world, and explicitly, about what happens when students perform a language task in the VW environment. According to activity theory, learning is a complex, cognitive social process and is conceptualised as an activity (see Section 3.5.3) integrated “in the context and community that surrounds and supports it” (Jonassen, 2000, p.12). The minimum unit of analysis chosen for this study was the language learning task (as discussed in Section 4.4.5). This choice provided access to a detailed investigation of what happened while the students were engaged in the different language tasks. Each language task was analysed

as a multi-voiced activity, whose subject is the student, involved with others in the common object of successfully completing that task as part of a collective activity. It was argued that mediation and systemic contradictions carry a key role in the development of an activity (Chapter Three), and can shed light on the complexity of a language task activity in the virtual world and on emerging affordances for language learning. Chapter Three (Section 3.5.3) affirmed the key role of mediation in the ontology of activity theory. It was explained how Vygotsky's view of the non-neutrality of concepts, artefacts and techniques, conceptualises every activity as a result of a process of internalisation (internal reproduction of external culture) and externalisation (creation of artefacts that make it possible to transform culture). These new artefacts shape the way human beings interact with reality; the shaping of external activities, in turn, shapes internal activities too. It was seen how Cultural Historical Activity Theory adds a social dimension to Vygotsky's concept of mediation, and sees in the mediation of tools a means for the accumulation and transmission of social knowledge, which influences not only the external behaviour, but also the mental functioning of individuals.

The description and analysis of the *Easter language task*, which was presented in Chapter Four (Section 4.4.5) as an exemplification of how each language task activity system was modelled for data analysis in this study, showed in detail the layers of mediation in the language task activity systems and how the other constituents (community, organisational rules) took part in the activity. This insight into the development of the language activity brought to the fore episodes of tensions and disruptions that occurred while the students were involved in the language task. These tensions and disruptions initiated deviations from the script of the task and shifts in the focus of the task activity. It was argued that these shifts in the focus of the activity may have been caused by underlying contradictions within the activity system and that the actions constituting the new sub-activities would be an indication of emerging affordances. The analysis of the different language learning tasks in the data showed

many layers of mediation in those activities. The following is what was noticed during the analysis.

Mediation in the VW

All mediation influences and shapes the activity, the subject's actions and his/her mental functioning. In this discussion I am going to distinguish between *opaque* and *light* mediation. As argued in Chapter Two, the lower the feel of mediation in an environment, the higher the immersion in that environment and the sense of individual and social presence in it (Section 2.4.1). In line with this argument, I am going to use the term *opaque* mediation to designate a level of mediation that, due to its complexity for the subject, may cause tensions which can bring about a disruption in the activity. It will be argued later that, when mediation was *opaque*, the attempts to resolve the tensions caused by this, resulting in rich language production, may have also resulted in learning. *Light* mediation, on the other hand, does not bear that kind of complexity. The types of mediation identified during the analysis of the language tasks are the following.

One of the mediating artefacts that offered *opaque* mediation at times is the **students' own linguistic production, in the L1 or L2 (Italian)**. The use of the L1 on the part of the students was very limited, as they reverted to it only in 9 instances, as evidenced in Section 6.2.3. The L2, on the other hand, was used continuously during the entire language course. Italian was the language of study for the students, who were not fully proficient in it and whose improved competence was the also object of the language course. Thus, using the L2 during the language tasks caused indecision, questions, and tensions in the development of the task (see Section 6.2.1 for examples), which brought about episodes in which the participants departed from the script of the task to focus on the resolution of a linguistic issue, as was noticed in 59 occasions. Although the opacity of the use of the L2 as a means of mediation can be assumed to be part of every language learning activity, the mediation offered by the use of the hardware

and software is pertinent to an online environment, and the mediation offered by the use of an avatar is specific only to 3D virtual environments.

Mediation was also caused by the **use of the hardware and software**. The literature in the field of education in VWs (Chapter Two) has mentioned the ‘need for higher usability’ of the VW software (Cynthia Calongne, keynote address at the Virtual Worlds Best Practices in Education conference, 2013). Also, the importance of having the right and updated hardware to access the virtual worlds has been highlighted by many researchers, and the steep learning curve when learning how to navigate and act in the virtual world has been mentioned as one of the main technical constraints to the use of these environments for educational purposes (see Table 2-1 Educational potential and critical issues of VWs in the literature). The mediation provided by the students’ hardware, such as personal computer, mouse, or headphones, the internet connection and the SL® software resulted in the data to be *opaque* at times: in 31 instances (as seen in Figure 6-1 Distribution of types of disruption during the three sessions) the participants interrupted the language task to deal with technical issues experienced by one or more of them, only to go back to the task, when the issue was resolved. While the mediation provided by the hardware is experienced by all subjects operating online, the Second Life® software added a further layer of mediation to the online experience. **Scripted objects** placed in-world to add to the immersive Italian experience (see, for instance, the Carnival area in Snapshot 6-6, or the All Saints’ Day area in Snapshot 6-7), or to be used in order to complete a language task (one example was the scripted table in Snapshot 7-7) needed some expertise on the part of the learners, so that they would be able to interact with them and use them. Problems that arose out of the students’ lack of expertise in the use of the software consisted of about half of the technical disruptions recorded (14 out of 31 instances, as shown in Figure 6-4).

The avatar is also an important mediating artefact in activities that take place in a virtual world, as the use of avatars is one of the characteristics that are peculiar to these 3D environments (Section 2.2.3). Avatars can motivate interaction, make communication more efficient and create identification (Talamo & Ligorio, 2001) and provide a link and an extension of our physical environment in the virtual world. This study did not look specifically into the students' handling and experience of their avatars; some of the issues experienced in cases of task disruptions due to a technical problem can however be attributed to avatar use. Instances of difficulties in moving around the VW and rezing one's own avatar, observed in nine cases (Figure 6-4 Occurrence of technical disruptions), would not have occurred in the absence of avatar representation.

Finally, in the case of online educational activities, the physical location of the participants must be taken into consideration. Chapter Two described VWs as contemporary heterotopias, environments that contain different spaces and different times and that intersect with our world, as their users are and operate in both worlds at the same time. In the case of *SLitaliano*, each participant was at home during the SL® sessions, as explained in Chapter Five. This implies that the students had access to their **personal reference material** (books, notes, etc.), the **online material** that they were to work on before each session, and **any other online reference material** they would access at the same time as being in-world. All these mediating artefacts were at their disposal while they were involved in the language tasks.

Community

The community, consisting of the teacher and the other participants (Italian volunteers and other learners in the case of this study) had a pivotal role in the carrying out of the collective language task activity and mediating it. Lévy (2001) sees cyberculture as a space where all differences come in contact with each other and where heterogeneity is the essence. Cyberspace is an environment where all communication is interactive and

reciprocal. Such a wealth of inter-cultural contacts and interaction was provided by the virtual world. The learner (subject of the activity) would be carrying out the language task either individually (see for instance, the Health Office role-play, that took place in Session Eight and was described in Section 6.1.3) or collaborating with other students (as in the *Cooking together* task, that took place in Session Four, and is described in Section 6.1.1) and the community (be it the other students, the Italian participants or the teacher) was constantly involved in the task (as seen in Section 7.2, Figure 7-2). The Italian participants were consulted as a source of reference and support, in Voice Chat and in Local Chat and Ita, one of the four students, reported during her final informal interview that she had often asked the Italian participants for help, using Instant Messaging. As was explained in Chapter 5, the Italian participants came from diverse cultural, linguistic (in terms of dialect and lexical use) environments and were involved in all the sessions and language tasks. They therefore provided a useful source of reference of correct foreign language practice and the students availed of it often (the role of the native speakers will be dealt in detail in my discussion pertaining to Question 2).

Rules

Any learner operates within certain ideologies and rules. The rules identified for the language learning task (Figure 4-1) comprised of the rules pertaining to operating in the virtual world of Second Life®, the rules relative to the organisation of the modules and assessments in the Dublin Institute of Technology, the rules of the particular sim the language task was taking place in, Imparafacile Island, the rules of the SL® course, such as, time of sessions or running of sessions, and the rules related to each task in particular. This latter set of rules varied for each language learning task and consisted of the instructions for the task, the timing of the task, the roles played in the task in case of a role-play, and the rules regulating the specific cultural areas the task was set in. The latter set of rules provided *opaque* mediation in a few cases, during the course of *SLitaliano*. Indeed, during the performance of a language learning task that comprises subjects from

different cultures, the interaction of the different activity systems can create tensions in the activities, which are a result of the different histories and cultural background of the participants. Similar cases were noticed in the Health Card episode (Section 6.4), the Cappuccino episode (Section 6.2.2, Excerpt 6-10), or the *Panna* episode (described in Section 7.2.1). As previously stated for the use of the L2, tension created by this type of rules is not specific to an online environment. In the virtual world, however, it was noticed that these tensions occurred also in the case of learners being exposed to the foreign language culture in the form of objects placed in the VW environment that depicted cultural topics or represented an authentic Italian object. These pictures and objects often raised questions in the students, as was seen in the *Tufara* episode (Chapter Seven, Excerpt 7-1).

To conclude, the answer to: what do learners ‘do’ while performing different language tasks set to them in a virtual world is as follows. The learners move in the virtual world and explore it, interact with objects and other avatars and, in doing so, experience the mediation of the physical and psychological tools that mediate their interactions. Each participant in the language learning task is involved in a complex, multi-layered and multi-voiced activity, which is influenced and shaped by the mediation of many tools and artefacts, some of which are peculiar to the virtual world. Further, the language task activity is also subject to and influenced by a wide set of rules, comprising the VW’s, the institute’s and the task rules, by the division of labour which is specified for every task and by the community who is involved in the task. Thus, these multiple layers of mediation can bring about episodes of tension and disruption that may become sources of language learning, if recognised and aptly leveraged.

8.1.2 Question Two

Question Two is structured in two parts. The first inquires about the affordances for language learning that emerged during the performance of the language learning tasks. The second part relates to what happens in case of the non-emergence of an affordance.

The data analysis showed how the continuous process of mediation, resulting from the multi-voicedness of activity systems, and the interaction between different activity systems caused tensions, disruptions, and, at times, breakdowns in the activity. The disruptions observed during the course *SLitaliano* were 108 (See Section 159). The Hover Tips episode (Section 7.5.2) is an example of a focus shift initiated by a technical problem that occurred during the *Cooking together* language task and which started a temporary sub-activity, with a new object, different from the object of that language task (to solve the technical, linguistic or intercultural issue), on which the participants focused until that object was reached.

It was argued that such episodes may reveal underlying contradictions in (or within) the activity systems and that looking at contradictions can be critical, as the resolution of a contradiction may result in a possible development in the activity (Chapter Three). Also, it was argued in Chapter Three that, if the activity is a learning activity, resolutions of contradictions may bring about possible learning. Following this reasoning, each sub-activity was analysed and the actions that were enacted to perform it were considered as an enactment of the technical and social affordances of the virtual worlds, which had been engineered in the different tasks (See Table 5-9, Table 5-10, and Table 5-11). As these actions afforded language production and language reflection and they were contingent to language and specified in language, they were recognised in this study as *actions in potential that allow the opportunity of language learning*, namely, language affordances as they were defined in Chapter Three. The language affordances that emerged were thus a direct consequence of the enactment of technical, social and

educational affordances engineered in the tasks and can be summarised in the following list as the potential to:

- **Speak, read and write in the foreign language:** the Voice Chat and the Local Chat affordances of the software were extensively used both by the students and the other Italian participants (Section 7.3). Both groups interacted in the foreign language, the students usually asking for help on linguistic problems, and the Italian participants providing help in Voice Chat. Voice Chat was also a vehicle for intercultural exchanges between the two groups and for the Italian volunteers to give students information about Italy and Italian traditions and habits (see Figure 7-8). The Local Chat was mostly used by the teacher as a means of supporting students' understanding of what was happening in Voice Chat and to highlight particularly important information that was being exchanged in the course of the voice interaction, in the foreign language (see Excerpt 7-5 and Excerpt 7-6 as examples). This use of the Local Chat was highlighted as an interesting pedagogical affordance for language learning. Students used the Local Chat as well, but only when they wanted to catch the group's attention, without interrupting the spoken interaction, or to ask for help regarding technical, linguistic or intercultural issues (as in Excerpt 7-9).

- **Interact in the foreign language with native speakers, using varying registers and semantic areas:** this language learning affordance was clearly noticed in the data analysis. As stated above, both students and Italian participants interacted in Voice Chat and in Local Chat. The community of native speakers provided continuous support in case of language issues, whether morphological (as in the *Garlic* episode, Excerpt 6-6), or lexical (in the *Cenci* episode, Excerpt 6-3). The Italian volunteers also provided students with direct access to the foreign language culture and mores (as, for instance in the *Al dente* episode, in Excerpt 6-12, or the *Women's Day* episode, in Excerpt 6-9) and to FL regional phonetic and lexical variations (See Figure 7-2). The different language task

design and specifications set the register and semantic areas to be used during the performance of the tasks (as shown in Table 5-9, Table 5-10, and Table 5-11).

• **Interact in an authentic environment and with authentic objects:** the authenticity of the environment was in part due to the presence of the native speakers. The set-up of the sim (for landscaping see, amongst other, the Italian hospital in Snapshot 6-8), rezing of scripted objects, and the uploading of images of authentic documents contributed to make the experience in the virtual world more authentic. The scripted objects in particular, which allow the participants to manipulate, interact and construct, provided further authenticity to the virtual world environment (See Snapshot 7-4).

• **Operate within the foreign language culture and be involved in intercultural exchange:** being immersed in an authentic looking environment, with native speakers, offered the learners the affordances provided by being in a FL cultural environment and being involved in intercultural exchanges. The learning objectives of each task were intercultural as well as linguistic, as the students were preparing for their Erasmus year in an Italian academic institution. Engineered and non-engineered intercultural exchanges occurred often during the course, and were particularly noticeable when curiosity about certain aspects of the other's culture, exchanges about different ways of doing things in different cultures, or information about FL habits and mores caused deviations from the script of the task and new activities whose new object was centred around the intercultural question/issue. Intercultural episodes went from short focus shift episodes on how to cook pasta properly (See Excerpt 6-12), to longer exchanges on the right time to drink cappuccino (See Excerpt 6-10), the meaning of International Women's day and how it is commemorated in different countries (See Excerpt 6-9) or on how to deal with the Italian Public Health System (See Section 6.4).

• **Collaborate and co-construct in the foreign language:** the technical and social affordances of the virtual world favoured collaboration and co-construction in the FL. The high number of identified actions that indicate native speaker support and input

shown in Figure 7-1, where A05.Native Speaker Input in Local Chat is recorded 79 times, A16.Native Speaker Language Support in Local Chat 73 times, A15.Native Speaker Language Support in Voice Chat 47 times, A06.Linguistic Reflection in Vocal Chat 43 times, and A.10.Intercultural Exchanges in Voice Chat is recorded 26 times, show how rich the interaction in the foreign language was. The detailed analysis of the episodes highlighted instances of co-construction of knowledge as in the *panna* episode (See Network 7-2) and examples of collaboration at solving a problem, as in the Hover tips episode (See Section 7.5.2). These episodes of collaboration and co-construction drew attention to a further language affordance of the virtual world, the potential to:

- **Language in the foreign language:** Episodes of long interactions in the FL, during which the participants enacted many actions aimed at resolving disruptions in the language tasks were encoded as *Languaging* which was observed in 54 cases and was used to work out linguistic, intercultural and technical issues. An episode of *Languaging* to resolve a technical issue was analysed in the Hover Tips episode (See Section 7.5.2, Excerpt 7-13, Excerpt 7-14, and Excerpt 7-15). An example of participants resorting to *Languaging* to clarify an intercultural issue was seen in the Health Card episode (Excerpt 6-8). At times, *Languaging* episodes gave rise to further linguistic tensions that were again resolved by the community as a collective activity, as seen for the Hover Tips episode.

- **Reflect on the foreign language:** actions specifically associated to a reflection on the semantic, morphological and structural organisation of the FL were recorded 58 times (see A.06, A.07 and A.08 in Figure 7-1). It was noticed that *Languaging* episodes usually started with an action of *Linguistic Reflection* and proceeded, or were resolved, by means of actions aimed at supporting and clarifying the initial action of *Linguistic Reflection*, as was seen in Section 6.2.1 and in Chapter Seven, Section 7.2.1.

An analysis of the non-emergence of engineered technical affordances in the language tasks showed in 18 episodes, caused by different technical issues. In all cases but one, relative to an episode of crashing, the participants collaborated and languaged to solve the technical issue. Those episodes were all identified as cases of Virtual Corpsing, namely, a sudden loss in immersion in the medium, which can decrease the sense of presence (Marsh, 2001, 2003 in Chapter Two). It was argued in Chapter Two that Virtual Corpsing leads to a less successful use of the medium and may lead to a diminished possibility for learning (Riva, 2004). The data analysis in this study, however, shows that in all the recorded instances of Virtual Corpsing, but for the one instance of crashing, the non-emergence of the technical affordance, thus the impossibility to perform certain actions, led to a collective sub-activity, during which the community communicated in the FL to resolve the technical issue. The analysis of the longest episode of Virtual Corpsing: the Hover Tips episode (See Section 7, Figure 7-11) highlighted how the action enacted during the episode favoured linguistic disruptions and the emergence of sub-activities within the Hover Tips focus shift activity. It was clear from this data, and from the data analysis of all other focus shift episodes initiated by the non-emergence of a technical affordance (see Section 7.5) that episodes of Virtual Corpsing in a language learning activity can bring about rich foreign language interaction and, therefore, a possibility for learning.

8.1.3 Question Three

Question Three has a pedagogical focus, which is a consequence of the researcher being a foreign language teacher and a teacher trainer. The question looks for pedagogical advice to future language educators who are interested in operating in virtual worlds. I have structured my pedagogical and instructional considerations in the following two points:

(i) considerations of best practice on how to exploit the language learning affordances of the virtual world that are built on technical affordances and (ii) considerations of best

practice on how to exploit the language learning affordances of the virtual world that are built on social affordances.

How to exploit the virtual world language learning affordances that are built on the technical affordances of the medium

The focus of this study was to analyse in detail each the language task performed during the SL® language course and to zoom in onto the micro analysis of the sub-activities that occurred in cases of focus shift episodes in the activity. A macro analysis of the context in which the SL® language courses were held was therefore not of interest to this study on the affordances for language learning of virtual worlds. The context, however, had a substantial impact in the organisation and the running of the language course. Chapter Four described the macro context of the research study, the IBL degree course run by the Dublin Institute of Technology (DIT) and its rules. Designing and running the SL® language courses, *Italiano in Gioco* and *SLitaliano*, meant working in that context, which not only influenced the way the courses were integrated in the existing degree, but also in the location and times of the courses and, particularly, in the number of students who took part in them. The pilot course, *Italiano in Gioco*, could not be held during class time as, at the time it was run the computers in the computer laboratory used by the School of Languages did not support the SL® software. *Italiano in Gioco* could therefore not be introduced as an integral part of the module to all students in the class, which had repercussions in the number of students who could take part in it so that only three out of a class of nine students took part. Similarly, *SLitaliano* was initially accepted by eight students. At the time the computer laboratory had acquired new computers; however, the School technician refused to download the SL® software, so that *SLitaliano* was offered outside class time and it was soon clear that three of these students did not have a suitable computer. DIT students have access to laptops provided by the DIT library; unfortunately, the library technicians' refusal to download the SL® software on those

laptops made it impossible to find a suitable alternative to the students' own machines.

Eventually, *SLitaliano* was run with four students. continue

This experience of this study aligns with previous studies (Vogel et al., 2008; Dalgarno et al., 2011; Özen et al., 2014) and it stresses the importance for us educators, to be aware of the constraints that can be placed by the institutions and by the community we operate in. Every step to be taken **should have institutional support**, so as to make sure that the needed software or hardware are available if the VW courses are to be held during class time.

If a decision is made to run the VW course outside class time, the time spent to train students to operate in the virtual world will have to be organised differently. The data analysis in this study has shown how important mastering the technical affordances of virtual worlds is for the emergence of language affordances and the educator may not have the chance to instruct all students in the computer lab, at the same time. It is therefore important to make sure that each student has **access to the required hardware** and that they receive a **full in-world training, especially on the technical features of the medium they will have to master during the language course**. Chapter Five mentioned that the experience with the pilot course had highlighted the need to allocate more time to students' training in SL®. The amount of technical disruptions due to poor technical expertise in the use of the software and hardware during the language course shows that, despite the longer training time allocated for *SLitaliano*, there would be a need for more instruction.

Further, the **choice and set up of the virtual space** is crucial if we want our students to feel immersed in a foreign language environment. The virtual world technical affordances make it possible to create spaces that afford interaction in an authentic looking environment and exchanges in the FL culture. Educators do not need to be skilled in-world builders to set up an authentic looking environment, as importing pictures of

objects of the FL culture, or providing links to videos or other FL material can be enough. Also, educators can rely on access to a number of free sims (the two used for this study, Edunation and Imparafacile Island are just an example). Such sims are usually run or populated by active communities that may offer support in landscaping and the recruiting of participants.

How to exploit the VW language learning affordances built on social affordances:

Chapter Four mentioned how important it is for the researcher to **be part of a community** before embarking in a research study. This can be extended to teachers who want to run a virtual world course on an open sim. Access to native speakers was one of the language learning affordances identified in the data analysis; being part of a VW community can help in forming ties with other educators and like-minded residents, and may help **to find willing native speakers for the language tasks**.

Also, it is essential **to engineer affordances for interaction and socialisation** amongst participants in the language course. Promoting socialisation will render the experience more pleasant to everyone involved and will help to create a connection between students and native speakers. Designing time slots and/or language tasks that encourage superficial (or even more personal, when possible) chat can lead to rich interaction. This was noticed in some of the tasks that were performed during the sessions not analysed for this study.

In order to make the FL interaction flow and leverage the social and technical affordances of the virtual world, **task instructions have to be very clear and specific**. Participants need to be able to perform the language task successfully, which requires them know what is expected of them, the context of the task and the time allocated for each task. Also, it can be useful to design distractors in the tasks (contradictory information given to the participants in a role-play, or inexact cultural information) that can spark intercultural exchanges.

Time management is crucial in ICT for education, and it is especially important when teaching/learning in a virtual world, where technical difficulties are often experienced. The disruptions evidenced in the data analysis had an impact on the running of each session. In some of the sessions that were not part of this study, some of the language tasks designed for the session could not be performed due to time delays. It is thus important for the educator to prepare alternative class outlines, so as to be able to adapt the running of the session, if needed.

Finally, it is important to highlight again that an in-depth analysis of the language task in the virtual world showed that episodes of disruption in the undertaking of the tasks often caused the emergence of language learning affordances, and resulted in a high level of linguistic, mostly spoken, interaction. Knowing this can help language teachers to **engineer language learning affordances** in their task design, consciously designing possibilities of disturbance in the task activity and supporting students while they work at resolving them. An awareness of how this environment works will help get students to “articulate the ‘otherwise unarticulated’” (Bødker, 1996, p. 3).

8.2 Original contributions and limitations of this study

Recently, researchers in the use of virtual world for education have advocated the need for more empirical research in the field (Beck & Perkins, 2014), for studies that are based on a valid theoretical framework (Panichi & Deutschmann, 2012), that can incorporate the complexity of learning in these environments (Boelstorff, 2015) and that look at what these spaces can offer in terms of pedagogical opportunities for language learning (Hunsiger & Krotoski, 2010; Savin-Baden et al. 2010). This study offers a response to the gaps identified in the research. The study makes three main contributions: (1) it proposes a conceptual model for the study of learning activities in three dimensional virtual environments and applies it on an empirical research; (2) it analyses how language

learning activities unfold in virtual world and identifies VW affordances for language learning through this analysis; (3) it offers ideas for leveraging those affordances.

(1) Activity theory has proven an effective framework for the analysis of a complex, heavily mediated environment such as a virtual world. This theory has been previously used in the study of online environments (see Chapter Three), but it has not been applied to research in VWs, except for a handful of studies (Diehl & Prins, 2008; Cahalane, Feller, & Finnegan, 2010). In this study the activity theoretical framework has allowed the researcher to analyse the language learning activity in detail and, at the same time, to frame it in its historical and cultural context, and in its relation with other activity systems. This case of the successful application of the activity theoretical framework to a research study in Computer Assisted Language Learning (CALL) and, more specifically, in FL learning in virtual worlds can provide an example for further research in the field.

(2) Focusing on the learning activity has allowed the researcher to consider the multiple voices that contribute to that activity, from the mediation offered by the tools and artefacts used during the language task, to the constraints or support provided by the community taking part in the activity and the rules regulating it. It is clear in the study that virtual worlds are complex and multimodal environments. The activity theory lens allows researchers and educators to look through this complexity at the unfolding of the learning activity. Subsequently, the conceptualisation of emerging tensions and underlying contradictions in the activity provided a valid theoretical support for the identification of the language learning affordances of the medium. While research in the field has pointed at the educational affordances of these environments (Chapter 3), a specific list of language learning affordances had not been compiled prior to this study. Using a clear and theoretically grounded definition of affordance and being aware of the specific language learning affordances of the learning environment will help researchers and practitioners in this field to expand the investigation of the educational affordances of virtual worlds and to design more effective language tasks.

(3) The identification of the language learning affordances of the virtual world, and of the technical and social affordances that can be engineered in the language task, so as to favour the emergence of language learning affordances, has given this researcher the opportunity to share ideas of best practice with foreign language educators who have an interest in teaching in virtual worlds. The novelty of this list of ideas of best practice consists in highlighting the pedagogical effectiveness of focusing on how to best leverage the affordances of the virtual world for a successful teaching and learning experience.

The second part of this section concerns limitations and this study has four main limitations: the first limitation is due to the dual role of the researcher/teacher and the other two limitations are linked to the methodological choices made for this study.

Firstly, Chapter Four presented the multiplicity of roles in virtual world research as one of the specificities of conducting research in these environments. In the course of the analysis it was often mentioned that the researcher/teacher role was orchestrating and recording the sessions, conducting the research, and, at the same time, supporting the learners in Voice Chat and Local Chat. It has to be noted that the teacher's presence and support influenced students' production and may have also influenced the conduct of the Italian volunteers.

Secondly, the data analysis in this study was conducted at micro level, on the language learning task activity and on the sub-activities caused by the disruptions occurring during the performance of the language learning tasks. This conscious choice allowed the researcher to investigate each action and the language learning affordances of the virtual world. The micro level analysis, however, had to disregard the relation of the language course activity to its macro historical context, identified in the degree course the language course was part of, the institution the degree was run in and the rules and community of this macro activity system. It was mentioned earlier how relevant the context was to the running of the SL® language courses, and an analysis of this kind,

could have investigated the tensions and disruptions emerging from the introduction of a language course such as *SLitaliano* in a third-level degree course. However, this type of analysis would require a longitudinal study and more resources.

Thirdly, the small size of the group of learners may have impacted on the data.

Also, it is evident that the choice of Italian participants who were very familiar with the virtual world caused an asymmetry in terms of technological proficiency, as the language learners were novices to Second Life®. The more proficient participants, however, were a source of help when technical problems occurred, and their presence emerged as one of the affordances for language learning of the virtual world.

Further, as this study is limited to data collected in Second Life®, it provides an instance of one 3D virtual environment. The data might be slightly different if recorded in a different virtual world.

8.3 Future research perspectives

As the data analysis progressed, some interesting areas of study were noticed. It was mentioned that various reviews of the literature in the field and other studies have pointed to the lack of institutional support for the development of virtual world courses and to the various constraints and difficulties met by practitioners in the field. This researcher also described how the disinterest and lack of support at institutional level caused her to change the organisation of the SL® course and, by doing so, impacted on the number of students who could attend the course. As mentioned in the previous section, this study did not investigate the macro level of which the SL® course was part. As activity theory research has been conducted on introducing technology in higher education (Issroff & Scanlon, 2002) and schools (Lim & Hang, 2003), a line of research could explore the effects and reactions to the introduction of virtual world technology in one or more educational institutions, pointing at the sources of contradictions in the system and at the

modalities chosen to deal with them. A similar study would require a longer timeframe and a longitudinal approach. It would also be of interest to conduct a longitudinal research following similar premises to the ones in this study, allowing the learners more time to get acquainted with the virtual environment and investigating possible changes in the emergence of the language learning affordances.

Also, the decision to run *SLitaliano* in the evening, while the participants were at home, affected the running of the learning activity, as the learners had a different set of tools at their disposal. Moreover, as argued in Chapter Three, a virtual world user is placed in two worlds at the same time, the virtual world and his/her physical world. Would being in a different physical world, such as a language laboratory in the university, have caused a different type of learning affordances to emerge? Indeed, attending a VW course while sitting in a computer laboratory with fellow students is a different experience from being home, alone, in one's room. This influences the sense of presence in the virtual world, and the learning experience. A study comparing findings of similar courses held with learners in different physical locations would shed light on how to best use virtual worlds for language learning.

It has to be noted also that co-ordinating the language tasks, the participants and the communication between students and native speakers constituted an important part of the role played by the teacher/researcher in this study. One avenue of research should investigate the relationship between the teacher, who is orchestrating and running the in-world language course, and his/her helpers and the communication that takes place (often in IM) between these participants, who are playing different roles in the language course.

Further, it was mentioned that one of the limitations of this study is due to the data being collected only in the VW of Second Life®. Recently, new bespoke virtual worlds are being created and used, and some virtual worlds can now be accessed on mobile technology. As McDonald et al (2014, p. 165) write:

There is unlikely to be one virtual world product that meets all of the needs of educators. It is more likely that there will be a variety of bespoke virtual worlds built for a specific function common to the needs of certain cohorts.

More research is needed in the language learning affordances of different varieties of 3D virtual environments.

Finally, it was mentioned in the discussion of Question Two that the avatar is an important source of mediation in a virtual world. It was not the aim of this study to investigate the relationship between foreign language production and avatar manipulation, however, we know that avatars interact differently depending on their shape, size and clothing (Chapter Two). Would that affect foreign language interaction? Could different looks provide different affordances for language learning? These questions would constitute an interesting start for a study on whether and how avatar manipulation may favour the emergence of language learning affordances.

To conclude, the ideas for future research presented in this section are an indication of the long road we still have to travel to understand the virtual world experience and the impact it has on our learning. I hope that this study has added a stepping stone to this road.

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Appendix A

Plain Language Statement

The study will be undertaken by Susanna Nocchi as part of her PhD research study: The affordances of virtual worlds for language learning. The research aims at studying the potential of virtual worlds like Second Life® (SL®) for language learning and for the development of Intercultural Awareness. This study will be done through the analysis of the following data:

- a. The recordings of the SL® unit of learning you have chosen to attend
- b. A questionnaire re. your experiences online and expectation regarding the learning unit
- c. A reflective diary with your thoughts and impression about your experiences during the learning unit
- d. Recordings of a short final interview with the researcher

Your part in the study will be to:

1. answer a short questionnaire in writing about your experiences online and your expectations regarding the course. The questionnaire should not take over 10 minutes to complete
2. write a reflective diary with your thoughts and impression about your language and online experience. The diary can be in English
3. take part in a short informal interview with the researcher. The interview will be recorded and will be used to clarify a few points that may have arisen during the course of the study, ask your opinion about the experience, answer your questions and go through some of the recorded material so that you can revise it before you agree again on its use for research.

None of the above will be part of your formal assessment for this module. Your data will only be accessed by the researcher and her supervisor, by you, if you wish to, and by the PhD examiners, if they require to, for examination purposes. Your anonymity will be safeguarded at all times, as neither your name nor your avatar's name will appear in any published materials. A code or nickname will be used to refer to you.

You may withdraw from this research study at any point. There will be no penalty for withdrawing.

Be aware that the small size of the group of students may have implications for privacy/anonymity and that the confidentiality of information provided can only be protected within the limitations of the law.

Informed Consent Form (for Italian volunteers)

Lo studio in questione fa parte del dottorato di ricerca intrapreso dalla Dott.ssa Susanna Nocchi presso la School of Applied Languages and Intercultural Studies (SALIS) a DCU (Dublino, Irlanda). Il titolo della tesi di dottorato è: The affordances of virtual worlds for language learning. Relatrici della tesi sono la Dott.ssa Françoise Blin e la Dott.ssa Vera Sheridan.

Scopo della ricerca è l'identificazione delle potenzialità dei mondi virtuali (in particolar modo Second Life©) per l'apprendimento delle lingue straniere. Lo studio si svolge attraverso l'analisi delle interazioni che hanno luogo durante lo svolgimento di un'attività didattica di lingua straniera, in modo da arrivare a comprendere meglio 'come' si apprende nei mondi virtuali. I dati offerti dallo studio potranno fornire materiale utile a chiarire alcuni meccanismi particolari che si evidenziano durante tali interazioni in ambienti virtuali e portare ad individuare modalità in cui poter sfruttare al meglio le potenzialità didattiche di tali ambienti.

La partecipazione a questo studio è del tutto volontaria e i partecipanti possono decidere di ritirare la propria adesione in ogni momento. Tale decisione non verrà penalizzata in modo alcuno.

Ogni trascrizione o brano tratto dalle registrazioni su SL© verrà disseminato in forma totalmente anonima. La ricercatrice fornirà un nickname o un codice ad ogni partecipante, in modo da garantirne l'anonimità. Tale confidenzialità può comunque essere garantita solo conformemente ai termini prescritti dalla legge. Si desidera sottolineare anche che un numero limitato di partecipanti potrebbe implicare conseguenze per la privacy. Tutti i dati raccolti verranno distrutti cinque anni dopo il completamento della ricerca.

Si prega di scegliere Sì o NO

<i>Ho letto il Plain Language Statement fornito agli studenti irlandesi</i>	<i>Sì/No</i>
<i>Ho compreso le informazioni fornite loro nel Plain Language Statement</i>	<i>Sì/No</i>
<i>Ho avuto l'opportunità di chiedere delucidazioni sullo studio in questione</i>	<i>Sì/No</i>
<i>Ogni mia domanda ha ricevuto una risposta soddisfacente</i>	<i>Sì/No</i>
<i>So che le sessioni su SL© verranno registrate</i>	<i>Sì/No</i>
<i>So che le registrazioni delle sessioni verranno analizzate dalla ricercatrice</i>	<i>Sì/No</i>
<i>So che lo studio non verte principalmente sui parlanti nativi italiani, partecipanti secondari, ma piuttosto sui partecipanti primari, studenti di italiano come lingua straniera</i>	<i>Sì/No</i>
<i>So che i dati dello studio verranno disseminati in forma anonima e saranno utilizzati per una tesi di dottorato, pubblicazioni e presentazioni a convegni</i>	<i>Sì/No</i>

So di poter far richiesta di accedere ai miei dati personali

Sì/No

So che la mia anonimità verrà garantita in maniera totale

Sì/No

Ho letto questo documento e l'ho compreso in ogni sua parte. La ricercatrice ha chiarito ogni mio dubbio e ho una copia di questo documento. Consento quindi a prendere parte allo studio in questione

Nome: _____

Data: _____

Informed Consent Form (for DIT students)

Researcher's Name: SUSANNA NOCCHI	Title: MS.
<p>Title of Study: The affordances of virtual worlds for language learning. The study is going to take place with DIT students. The school involved in DCU is SALIS. This research is going to represent the study for my PhD research, on possible affordances of virtual worlds (in this case Second Life) in the attainment/increasing of foreign language competence in students of a foreign language (in this case Italian).</p>	
<p><i>Participant – please complete the following (Circle Yes or No for each question)</i></p>	
Have you been fully informed/read or had read to you the Plain Language Statement about this study?	YES/NO
Do you understand the information provided?	YES/NO
Have you had an opportunity to ask questions and discuss this study?	YES/NO
Have you received satisfactory answers to all your questions?	YES/NO
Are you aware that the classes will be videotaped?	YES/NO
Are you aware that the scripts of communication taking place during these classes will be printed out and researched?	YES/NO
Do you understand that you are free to withdraw from this study?	
<ul style="list-style-type: none"> • at any time • without giving a reason for withdrawing • without affecting your future relationship with the Institute 	YES/NO
Do you voluntarily agree to take part in this study the results of which are likely to be published?	YES/NO
Have you been informed that this consent form shall be kept in the confidence of the researcher?	YES/NO
Have you been informed about the arrangements that are going to be made to protect confidentiality of subjects and of data?	YES/NO
Are you aware that, due to the small size of the group, there may be implications for privacy/anonymity?	YES/NO
<p>I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project.</p> <p>Participants Signature: _____</p> <p>Name in Block Capitals: _____</p> <p>Witness: _____</p> <p>Date: _____</p>	

Appendix B – Transcripts

Session Four: Si mangia!

Introduction

Time	Scene description. Local chat and IM	Voice chat
00.00	<i>SU, ANN and ITA are standing in front of a building, the restaurant. They are meeting before the session starts. SU is teleporting the students.</i>	
00.26	<i>GEA arrives. DUB arrives.</i>	
00.27	<i>ITA appears as a cloud on Su's screen.</i>	<p>SU: eccoci qua. ehm, io vedo ITA ancora a nuvola. ANN: no, io la vedo bene. SU: ah sì? anch'io prima la vedevo bene, lei ha un po' di problemi oggi.. SU: ITA tu ti vedi ora? ITA: Sì, adesso sì SU: Ora io non ti vedo bene e tu sì ((laughter)) ITA: ((laughter)) BEA: ((laughter)) ANN: io vedo tutti bene e chiaramente. SU: ciao Gea! ITA: ciao Gea! GEA: Buonasera! ciao a tu+1tti!*</p>
01.52	<p>HEL: (IM) caduta ritippa <i>Su sends Helenita a teleport.</i></p>	<p>ANN: +1ciao Gea, +2ciao DUB*! DUB: +2buonasera! ciao! GEA: cia+1o!*</p> <p>SU: +1manca* Bea, +2che*. a cui ho mandato il teleport,boh. e anche Hel+3enita che che-* sì. ITA: +2sì*</p> <p>ANN: +3lei è anche un po'*, è ritardata ogni tanto. SU: sì. Bea ha sempre un po' di problemi ANN: [English] land SU: sì quando poi arrivano (XXX) già siamo un po' in ritardo. e. Helenita-dovrebbero esserci anche Dax che non è ancora arrivato e arriva dopo e Helenita che, che è appena +1caduta* GEA: *1entrando* sì SU: (XXX) GEA: io non vedo né SU né ITA.. vedo due uova. SU: due uova? ANN: ah*1sì*</p> <p>GEA: +1sì*.vi vedo ovoidali ((laughter)) SU: (XXX) parliamo di cose da mangiare GEA: ecco, state bene così SU: ((laughter))...</p>

02.42	HEL: (IM)ci sono puoi ritippare o mandare LM <i>Su sends Helenita a second TP</i>	SU: è strano che ... come si fa ehm, a [ENGLISH] rebake? ANN: cioè? GEA: +1eccola* SU: +1rebake*.quello che-non lo so come si chiama in italiano.per vedere le persone meglio.da qualche +2parte* da qualche parte c'è scritto rebake.ecco A!la nostra Barbie.guarda che carina (XXX) ANN: +2no.non so niente* SU: (XXX)...
02.48	DAX: (IM)ciao eccomi pronto	
03.05	SU: (IM to HEL) ti arrivano? <i>Helenita arrives</i>	
03.12	<i>Su sends Daxim a teleport</i>	SU: eccola.ciao!ciao Helenita! HEL: buonasera.ciao! GEA: ciao! ANN: +1ciao* HEL: *1oh Gea,ciao!buonasera! GEA: ciao ciao HEL: ciao ciao.ciao a tutti!...aspettate che carico perché non vedo-non vedo tutti. ANN: ecco Dax SU: ITA aspetta un attimo che ITA: ((laughter)) SU: ci siamo tutti.BEA ci senti?tutto bene? DAX: sera a tutti. BEA: sì HEL: +1ciao*Dax.buonasera. ANN: +1ciao*Dax GEA: +1ciao*Dax SU: allora, vi presento una nuova amica, Helenita Janus.+1(XXX)* HEL: +1Arriaga sarebbe proprio* il ((laughing))il mio +2cognome*. SU: scusa DUB è caduto. ITA. ((laughter)) HEL: ah ecco.visto? ((laughter)) GEA: s'è spaventato ((laughter)) HEL: ((laughing))ecco.capita,guarda.qualche volta faccio quest'effetto. ((laughter)) GEA: sì ((laughing)) ai ragazzi specialmente. HEL: ((laughing)) sì sì.restano scioccati e vanno via. GEA: ((laughter)) SU: ragazzi, volete presentarvi a,a Helenita?...
03.16	<i>ITA goes towards the restaurant door</i>	
03.28	<i>Daxim arrives - ITA opens the restaurant door</i>	
03.40		
03.41		
03.54	<i>Loud voices from someone's microphone</i>	
04.18	DAX: (IM)beh questa sera non devo fare nulla ☺ SU: (IM to DAX) ☺ farai i commenti sulla loro ricetta ☺ da gastronomo	ITA: ciao, mi chiamo ITA HEL: ciao!...e non mi puoi dire nient'altro?... o non mi +1senti*.mi si sente no?penso. ITA: +1cosa* BEA: sì sì.ciao, mi chiamo BEA. HEL: ciao BEA! SU: ciao BEA! +1(XXX)*
04.53	ANN: sì benissimo	

05.06	DAX : (IM)ok	<p>BEA: +1ciao, piacere*</p> <p>HEL: piacere mio..poi chi c'è altro?</p> <p>SU: eh.c'era DUB che è caduto</p> <p>HEL: eh.e poi c'è Annette?</p> <p>SU: Annette?</p> <p>ANN: ciao, piacere.ma io sono italiana</p> <p>HEL: ah.ok.allora va be+1ne*non ci sono problemi.ci presentiamo lo stesso però +2((laughter))*</p> <p>ANN: +1quindi son* +2((laughter))*</p> <p>GEA: +2((laughter))*</p> <p>ANN: ((laughing)) io sono italiana, toscana.tu+1di dove sei?*</p> <p>HEL: +1ah.ecco, allora guarda*eh, io sono, sono cresciuta in Toscana in realtà.però da molti anni vivo in Puglia, in Salento, anzi.per essere +2precisi*</p> <p>ANN: +2uh, bellissimo!*</p> <p>HEL: sì</p> <p>SU: ma si sente +1l'accento toscano*</p> <p>ANN: +1bellissima area!*</p> <p>HEL: eh sì.non l'ho perso del tutto, ma insomma, dipende, un po' ((smiling))*1un po' ho perso*</p> <p>ANN: +1qui siamo tutti toscani!*((laughter))</p> <p>GEA: Su, l'avevo detto che tu avevi capito, eh? ((smiling))</p> <p>HEL: eh già!infatti me l'avevi detto, sì è vero</p> <p>SU: +1(XXX)*</p> <p>GEA: +1sì era stata lei che aveva scoperto*</p> <p>SU: (XXX) l'orecchio per l'accento toscano</p> <p>HEL: ebbè c'ho eh sì insomma</p> <p>GEA: insomma +1abbastanza*</p> <p>SU: +1(XXX)* mi sono sbagliata perché pensavo che lui (XXX) io comunque credevo che fosse milanese</p> <p>DAX: addirittura!</p> <p>SU: scusami</p> <p>DAX: per un valdostano sentirsi dare del milanese è proprio un' offesa</p> <p>SU: eh</p> <p>HEL: ((laughter))</p> <p>GEA: è vero?</p> <p>BEA: scusi Susanna, mi dispiace.il tuo microfono è basso</p> <p>SU: è troppo basso il mio microfono?allora lo alzo</p> <p>BEA: sì sì</p> <p>SU: sì sì non ti preoccupare.hai provato ad alzarmi tu anche?</p> <p>BEA: scusi?</p> <p>SU: hai provato ad alzare il mio microfono vicino a [English] talk?..</p> <p>BEA: uhm</p>
06.13	<i>Dub is back</i>	
06.21 06.22		

Appendix B – Transcripts

06.59	<i>Su is increasing the volume of her microphone in the SL settings</i>	SU: se-lo vedi dove hai [English] talk?... SU: un attimo che lo alzo, eh, comunque...
07.21	BEA: (IM) non ti sento	SU: mi senti meglio? BEA: sì sì GEA: è meglio sì, anch'io senti+1vo*sì HEL: +1sì ti sento* anch'io meglio ti sentivo anch'io un po' lontana invece GEA: è più chiaro sì HEL: va decisamente meglio BEA: grazie SU: sì sì.ciao Dub!...Dub ci senti?... ... Dubbino? DUB: ciao ciao.buonasera SU: hai avuto, sei caduto? DUB: sì ((laughter)) SU: ti sei fatto male? DUB: no. SU: bene HEL: meno male DUB: +1fatto bene* ((laughter)) SU: +1no avevamo presentato Helenita che è una nuova amica DUB: ciao Helenita HEL: ciao.buonasera DUB: buonasera SU: vuoi presentarti Dub? DUB: mi chiamo Dub, sono brasiliano e vivo a Dublino HEL: studi a Dublino, immagino. DUB: sì.anche SU: anche? ((laughter)) HEL: ((laughing)) anche perché,posso chiedere cosa fai anche a Dublino?lavori anche? DUB: sì.studio, lavoro HEL: e impari l'italiano DUB: e parlo italiano, sì ((laughter)) HEL: ((laughing)) perfetto! GEA: la tua, la tua famiglia è a Dublino?anche? DUB: no no.la mia famiglia è in Brasile GEA: +1(XXX)* HEL: +1è in Brasile*ecco. GEA: +1ah*ho capito DUB: e tu da dove sei? HEL: io sono, sono, sono cresciuta in Toscana e..ho vissuto per molti anni a Livorno, a Pisa e ultimo a Firenze, dove ho passato il periodo più lungo e dove ancora tuttora ho la mia famiglia, i miei genitori e i miei fratelli.io invece vivo in Puglia, ,non so se la conosci, è una regione al sud dell'Italia eh- è proprio il tacco dell'Italia praticamente e abito proprio nella parte più a sud, in una regione che si chiama, in una sub-regione
07.27 07.29		
07.59	ANN: Caduta virtuale ☺)	
09.25	SU: IL TACCO	

Appendix B – Transcripts

09.29 09.31	ANN: Regione bellissima! SU: il Salento	che si chiama eh Salento... HEL: sì è un posto molto bello, è +1 un posto che ho imparato ad ama* DUB: +1ok, piacereb* SU: +1sai che* HEL: dimmi SU: ho visto oggi dei video sulla pizzica. la pizzica è salentina +1ma è bellissima!*
09.54 09.57 10.02	SU: sapete cos'è la PIZZICA? ANN: la 'pizzica' ANN: e 'la taranta'	HEL: +1sì. la pizzica è salentina* sì sì eh ma la pizzica è legata a alle alle leggende legate alla taranta, al ballo della taranta...e che erano praticamente, nascono si muovono è tutto come dire una ... eh una serie di manifestazioni tipo proprio etnografico, popolare, folclorico eh ... +1che nascono* SU: +1è una musica meravigliosa* HEL: sì sì. molto coinvolgente anche SU: ve la faccio vedere la pizzica, è veramente bella, la guardavo proprio oggi.
10.22 10.23		SU: bene, direi che possiamo-allora, Dax mi scuso di nuovo per averti pensato milanese e ...
10.37	<i>A very loud whistling noise comes out of someone's microphone for over 1 minute</i>	GEA: ((laughing)) un'onta da lavare DAX: per questa volta ti perdono ((laughther))
10.49	<i>Everybody walks into the restaurant</i>	SU: (XXX) ok possiamo andare DAX: andiamo a mangiare, su! HEL: prima a cucinare, andiamo prima a cucinare ((laughter)) GEA: ((laughter)) poi [ROMAN DIALECT] magnamo HEL: +1noi dove ci dobbiamo mettere?*
11.08 11.09	SU: c'è un fischio molto forte	DAX: +1ho capito. anche stasera* mi tocca lavare i piatti HEL: eh lo vedi che lo sai ((laughter)) DAX: porca miseria! HEL: sì. anch'io sento un fischio di qualcosa GEA: non è il mio
11.28	SU: chiudiamo tutti i microfoni tranne Gea	
11.43	ANN: sarà la lavapiatti	SU: ma, era il bollitore? Cosa HEL: o una centrifuga di lavatrice GEA: che sollievo, non sono io ((laughter))+1io coi microfoni*
	<i>The students and the Italians are now inside the restaurant. The room has tables and a bar area, pictures on the walls and a long table covered with food and cooking tools.</i>	HEL: +1avevo paura di essere* io ho spento tutto per sentire se era la mia lavatrice ((laughing)) +1invece non è* GEA: +1((laughter))* DAX: giuro che io non sto lavando HEL: ((laughing)) anche perché tu devi lavare a mano quindi DAX: ecco, appunto HEL: eh lo vedi
12.04		

Task One: An easy recipe

Time	Scene description. Local chat and IM	Voice chat
12.05		SU: ok allora cominciamo quindi sarà la nostra Gea.Gea se puoi metterti dietro a questo tavolo imbandito e +1poi il* tavolo lo passeremo ai ragazzi, ci lavoreranno loro però intanto tu puoi metterti lì.e ho già spiegato ai ragazzi quindi che Gea vi darà, vi spiegherà una.una ricetta e penso che ne faremo, ne faremo solo una quindi sai Helenita perché +2(XXX)* ma va benissimo GEA: +1quello lungo* HEL: +2va bene, mi metto a disposizione*
12.49	<i>Everyone is facing Gea and the table.</i>	SU: e ...quindi voi se c'è qualcosa che non capite chiedete pure e dopo vi farò lavorare a voi su una ricetta.prego Gea. GEA: sì.allora.eh..cucineremo la pasta aglio.olio.e peperoncino..questa è una pasta molto semplice, molto facile da preparare e per questo la fanno tutti.tutti la sanno fare.di solito la si prepara in fretta, all'ul- ((laughter)) all'ultimo momento, la notte, quando si torna da una serata fuori con gli amici perché così si mangia qualcosa insieme e si-e si aspetta la mattina e si sta insieme fino alla mattina.per la riuscita della ricetta è importante che la pasta sia buona, che sia cotta bene e che l'olio sia particolarmente profumato..allora io vi dò gli.ingredienti.per.due persone.quindi se la pasta è da preparare per due persone prendete eh centosessanta grammi di spaghetti, due spicchi d'aglio, +1dell'o*
13.02	HEL: buona!	ITA: +1due cosa?*
13.12	SU: GNAM!	GEA: come?
14.13		ITA: cosa hai detto, due..?
14.20	SU: spicchi d'aglio	GEA: spicchi uhm conosci l'aglio?
14.24	SU: SPICCHI	ITA: ((laughing)) sì ah ho capito GEA: sai che è fatto di tanti pezzetti l'aglio, di tanti- che si chiamano spicchi ITA: ok GEA: bene? +1poi*
14.40		ITA: +1sì, grazie*
14.42	SU: LO SPICCHIO	GEA: prego.poi serve olio extravergine d'oliva, due o tre.peperoncini.piccanti.e.del sale.grosso.a chicchi grossi.allora, per la preparazione mettete a bollire una pentola d'acqua.quando l'acqua bolle, buttate dentro il sale grosso.intanto tagliate.l'aglio.gli spicchi dell'aglio e mettetelo in una padella con l'olio e i peperoncini tritati.quando l'acqua bolle eh potete buttare dentro la
15.01	HEL: molto piccanti!	
15.07	SU: :D	
15.35	SU: tritati	

15.42	SU: rosolare	pasta..tre.o.quattro.minuti prima che la pasta sia cotta, quindi sia pronta, fate rosolare appena appena l'aglio.nella padella.fate attenzione.l'aglio deve.prendere colore.rosolare vuol dire quello, e non friggere.e soprattutto non bruciare ((smile)) scolate gli spaghetti e buttateli nella padella con l'aglio e il peperoncino.girate bene la pasta in modo che l'olio la ricopra tutta per bene e così la pasta è pronta da servire.eh, un'ultima cosa perché la ricetta riesca.l'olio è molto importante.per questo piatto ci vuole un olio buono.non troppo leggero.il colore della pasta eh è bianco eh molto bianco, perché non c'è pomodoro quindi se uno vuole un po' di colore ci può mettere del prezzemolo nell'olio, prima di ... metterci dentro la pasta.e cosìiì è pronta la nostra ricetta.
16.12	SU: :D	
16.16	ITA: cosa significa rosolare?	
16.37	SU: ROSOLARE: CUOCERE NELL'OLIO FINO A CHE DIVENTA GIALLO DORATO	
17.00	SU: prezzemolo	
17.12	<i>Su claps</i>	
17.20		
17.26	SU: PENTOLA	avete capito?avete delle domande? DUB: sì,cos'è, cosa è penDola? GEA: la pentola è..= DUB: penTola GEA: pentola eh .. tu quando metti a bollire l'acqua cosa usi? DUB: però, però tu hai usato un'altra parola no? GEA: no, dopo +1dunque* DUB: +1per l'aglio* GEA: sì esatto, perché l'aglio, dunque nella pentola eh che è quella con.i bordi.alti con le pareti alte +1ci va la* DUB: +1questa è la* pentola GEA: quella è la pentola e ci va l'acqua per cuocere gli spaghetti.da un'altra parte si prende una padella DUB: padella? GEA: la padella è come la pentola però è più bassa, molto bassa.quando friggi le uova, le friggi le uova te? ((smiling))
17.48	SU: PADELLA	DUB: padella come ah padella sì, sì, sì
17.59	<i>DAX indicates/points to the spaghetti pot using his mouselook crosshairs</i>	GEA: padella sì
18.08	SU: te la indica Dax	DUB: grazie
18.11	<i>DAX indicates/points to the frying pan using his mouselook crosshairs</i>	GEA: quindi è come una pentola però..diciamo come una pentola però co-bassa
18.15	SU: PADELLA	DUB: sì.ho capi+1to*
18.16	SU: per friggere ITA (IM) pentola vuol dire [INGLESE] kettle or pot?	GEA: +1con* hai capito?come si dice in inglese?non lo so ((smiling))
18.18	SU: le patate	DUB: frying pan?
18.26	HEL: larga e bassa	SU: sì sì.
18.26	SU: (IM to ITA) pot ☺	DUB: sì
		SU: bravo
18.42	ANN: inglese proibito!	GEA: ecco.
		SU: vedi Dub, se hai le hover tips attive, passi il mouse sugli oggetti che sono sul

19.10	<i>DAX indicates/points to the frying pan using his mouselook crosshairs</i>	tavolo di fronte a Gea, l'ultimo a destra c'è scritto la padella..non so se lo+1 vedi* DUB: +1ah, io* penso che, io penso che no è attivo BEA: no anche me GEA: comunque, comunque la vedi, vedi c'è la pentola e la padella, una accanto all'altra.quelle bianche DUB: sì.però io ho capito.lo so adesso GEA: sì eh sì sì
19.25		SU: altre domande ragazzi?
19.25		GEA: altre domande?...sale grosso +1avete*capito sì?grosso BEA: +1sì*sì e come tu ehm usa il peperoncini?... GEA: cosa sono?i peperoncini?+1o come*si usa BEA: +1sì*come si usa GEA: sì deve fare a, a..sì deve trita- fare a pezzettini.. BEA: oh sì
19.49	DAX: tritati fini fini	GEA: quindi sì, li devi tritare li devi spezzettare, pezzetti piccoli piccoli.. DUB: io ho un'altra domanda GEA: vai!..di' pure Dub. DUB: pe-pe-penso che tu hai detto accotta?.. GEA: co+1ta*? DUB: +1pri*ma di, prima di parlare sulla ricetta, hai detto accotta, accot*1ta* GEA: +1sì* ((smile)) ho detto che la pasta deve essere eh cotta. DUB: +1co-co*tta
19.55	SU: tritare: piccoli piccoli piccoli pezzi	GEA: +1cioè* deve..cotta bene, cioè non deve essere DURA..veramente neanche troppo morbida, però ((laughter)) deve..deve avere il tempo di ammorbidire, cotto vuol dire quello
19.58		DUB: sì sì ah sì
20.01	SU: MINUSCOLI	GEA: ecco DUB: sì sì sì sì io ho capito eh ((smiling)) GEA: hai capito?eh uh e infatti Annette ha scritto 'al dente' perché la pasta deve essere uh non troppo cotta, non troppo dura DUB: sì GEA: e in italiano si dice 'al dente'..cioè che il dente la deve sentire, capito? ((smiling)) DUB: sì sì sì ((smiling)) ITA: anche in inglese si di- si dice, +1ma* SU: +1è vero* si dice GEA: sì? ITA: sì. GEA: +1ah.non lo sapevo*
20.29	SU: COTTA	
20.38	SU: CUOCERE: COTTO	
20.40	HEL: e nemmeno troppo cotta	
20.45	ANN: al dente HEL: cioè scotta	
20.46		
20.47		
21.08	SU: AL DENTE	

21.58	SU: COTTA BENE	<p>ANN: +1 vie- viene dall'italiano*comunque ((smile))</p> <p>GEA: certo perché la pasta ((laughter))è nostra</p> <p>ITA: +1((laughter))*</p> <p>GEA: +1((laughter))*</p> <p>SU: ok.altre domande ragazzi?</p> <p>GEA: eh guarda. ((laughing)) la musica, la pasta</p> <p>DUB: ((laughter))</p> <p>SU: brava Gea!</p> <p>GEA: comunque</p> <p>SU: no, scusami</p> <p>GEA: +1prego*no no, mi sembra, avevo detto cotta bene.hai capito Dub, vero? perché chiedeva cosa voleva</p> <p>ITA: +1grazie*</p> <p>GEA: prego.andate avanti</p> <p>DUB: ah cotta bene.sì sì sì</p> <p>GEA: cotta bene.</p>
22.02		

Task Two: Cooking together

Time	Scene description. Local chat and IM	Voice chat
22.03		SU: benissimo.allora ora sta a voi ragazzi.il tavolo, potete usare il tavolo che ha davanti Gea, ci sono gli ingredienti sul tavolo. Se non avete le hover tips attive, vi ripeto che erano su View, Hover Tips, Show
22.22	<i>The students move closer to the table</i>	Tips..comunque, potete anche fare lo zoom sugli ingredienti.se c'è qualche ingrediente che non capite cos'è ve lo diciamo noi.e dovete decidere insieme,
22.53	<i>We can hear ITA snorting in her microphone</i>	voi tre, parlando in italiano, noi siamo qui per aiutarvi se avete bisogno, eh quale ricetta, che cosa preparare con questi ingredienti.e poi fra-vi dò..vi dò ehm dieci minuti circa, da dieci a quindici minuti, ci dite la vostra ricetta e noi vi diciamo se va bene.se ci piace potete cucinarla +1per noi*.tutto chiaro?
23.05	<i>Daxim is not facing the table. Helenita moves closer to the students.</i>	ITA: ((mumbling to herself)) no ha detto DUB: sì però il mio +1hover tips* non funziona. BEA: +1sì.non funziona*. No. SU: fate lo zoom.
23.13	<i>The students move opposite the table. Quite close to it.</i>	BEA: zoom non funziona.le +1cose* è molto piccolo e non chiaro ITA: ((snorting))
23.24	ITA: Come non avete i hover tips attiva??? Su ha scritto sulla wiki!!!!	SU: Bea, tu hai un mouse con una [INGLESE]wheel, una ruota, no? BEA: sì. ((sighing))+1lo so, lo so zoom*.(sigh)ma zoom non bene. SU: +1(XXX)*ah ITA: ((snorting and sighing)) ah!
23.34	SU: GRAZIE ITA	

Appendix B – Transcripts

24.00 24.01		BEA: non funziona bene. SU: no allora va bene. eh.. Ita a te funzionano le hover tips vero? ITA: sì. SU: eh bene.allora puoi aiutare gli altri ITA: ok.cosa vuo-vuolete sapere? +1Dub*? DUB: +1ah*..c'è c'è carne? sulla tavola? No...
24.19 24.23	SU: SI SU: MACINATO	ITA: non lo so. DUB: vedi carne?
24.27 24.28	SU: SI SU: MACINATO	ITA: sì. DUB: sì?possiamo fare la lasagna.. ITA: sì?
24.49	SU: NON C'è LA PASTA PER LE LASAGNE	DUB: sì?... cos'è ... Ita. ITA: a-aspetta, il mio hover tips non funziona adesso. ma prima sì.
25.00	<i>Su uses the LAUGH gesture. We can see that Daxim and Annette are trying to look at the objects.</i>	
25.09	SU: c'è	ANN: comunque, scusate, se mettete il mouse sui vari oggetti e poi cliccate con il tasto destro del mouse e fate EDIT, scegliete EDIT, vedete il nome degli oggetti.provate un po'?...
25.21	SU: (IM to Annette) NOOOO. FANNO UN CASINO ☺ <i>The students do not move.</i>	
25.32 25.35		GEA: è una buona idea. ITA: cosa significa mezzaluna? GEA: mezzaluna? ((whispering to herself))
25.50	BEA jumps (probably a mistake)	HEL: la mezzaluna è una specie di, di coltello curvo che ha alle estremità come dei manici in legno o in plastica e siccome ha questa forma stondata si può mettere l'ingrediente da tritare su un tagliere e poi con la mezzaluna si taglia facendola dondolare praticamente sul piano. ITA: ok grazie. HEL: prego.
26.02	ANN: (IM) Ora però leggono i nomi! SU: (IM to ANN) ☺ spero lo sappiano gestire ☺	
26.20 26.25	ANN: (IM) Neppure a me funzionano le hover tips ANN: (IM) scusa SU: (IM to ANN) no ottima idea solo che ho paura di fargli fare 'ste cose ;))	DUB: ITA.dimmi cosa c'è sulla tavola.+1per piacere* ITA: eh c'è, c'è due uova, e ... BEA: latte?si? DUB: latte, sì. ITA: ((laughing)) DUB: e c'è una cassa, vicino al latte.cos'è?...una cassa piccola. ITA: ((sighs)) è... BEA: di che cos'è ?...
26.50 26.54	SU: panna SU: PANNA ANN: (IM) devono imparare, mammina lol	DUB: oh.panna!+1cos'è panna* GEA: +1zucchero*?panna?ah sì sì sì accanto ... la panna è accanto al latte. la

27.19	SU: LATTE CON CUI SI FANNO I DOLCI ☺	panna, ((to herself)) oddio cos'è la panna? ITA: c'è le olive. olive. DUB: oliva, ok.
27.28	SU: LA PANNA LA METTI SUL GELATO	ITA: ((snorts in impatience)) DUB: su-, sui piatti. ITA: sì ma, il hover tips non funziona!..no.i pinoli.cosa significa i pinoli?pinoli?boh!
27.45	SU: pinoli	HEL: pinoli sono un frutto secco.il frutto della pigna.la pigna cresce sui pini.vero?
27.50	SU: I FRUTTI DEL PINO	((laughing)) Dax aiutami.sui pini no?voi ne avete tanti in Val d'Aosta.
27.53	SU: I SEMI	
	SU: SONO SEMI	
27.59	SU: CON CUI SI FA IL PESTO	
	ANN: esatto	
28.02	SU: CONOSCETE IL PESTO?	ITA: +1e cosa significa pino*? DAX: +1non si trovano sui nostri pini*. Generalmente sono eh i pinoli, è è un +1pino particolare. mi sembra sia un pino mediterraneo, il pino marino*.
28.09	SU: PINE NUTS	HEL: +1mediterraneo, no? forse mediterraneo, sul mare* GEA: +2sul mare, sul mare*. DAX: +2(XXX)* HEL: +2pino mediterraneo infatti noi li* abbiamo.quelli noi li abbiamo.pini mediterranei +3li abbiamo*, fanno la pigna e +4all'interno ci sono i *pinoli. GEA: +3 (XXX)* ITA: +4c'è il peperoncino* DUB: peperoncino e ... ITA: sì. DUB: prezzemolo? ITA: eh ... GEA: prezzemolo sì. DUB: prezzemolo ((pronouncing it correctly)) GEA: il prezzemolo è un .. un'erba +1aromatica*. DUB: +1sì lo so*. GEA: ok..((inglese)) parsol BEA: quali verdure ci sono?... ITA: ((mumbles)) DUB: carote, macinato, pepe, sale, sedano...
28.25	ANN: anche qui a Viareggio	
28.33	SU: SI BRAVO	
28.36	SU: PREZZEMOLO PASTA SEDANO PINOLI PANNA LATTE CAROTE MACINATO PEPE SALE	
28.57	SU: SEDANO CAROTE	
29.12	ITA: cosa significa mezzamolo?	DUB: cosa significa mezzam-.basilico
29.16	SU: BASILICO	
29.21	ANN: 'prezzemolo'	ITA: ((laughter))
29.28	SU: PREZZEMOLO	
29.28	ITA: prezzemolo scusa	DAX: prezzemolo.
29.31	SU: FORMAGGIO ACCIUGHE PEPERONCINO	
29.32	<i>The breathing coming from Daxim's microphone is quite loud. His microphone is open and Su's volume is quite low, which makes it quite difficult to understand. There is an echo due to the microphone being open</i>	ITA: ((laughing and mumbling)) [ENGLISH]what the DAX: insomma c'è, c'è tutto per fare una buona, una buona ricetta. SU: ok ragazzi.come vedete avete tutto:avete le acciughe, il

	<i>while Su is talking.</i>	peperoncino,spinaci, carote, sedano, sale grosso, latte, pasta, panna, olio, pomodori pelati, olive, (XXX) ITA: ((sighs)) sì sì SU: appunto decidete (XXX) il problema è decidere cosa preparare ATI: ((laughter)) DUB: sì ANN: problema fondamentale ((smiling)) DUB: dai facciamo una una pasta con..una come sì, come si dice uhm una salsa de tomate, pomodori? ITA: pasta al pomodoro? DUB: pasta al pomodoro, sì. ITA: ((laughter)) DUB: cosa facciamo adesso ITA: boh, non lo so DUB: dobbiamo iscri-scrive la ricetta o? DAX: una buona pasta alla..?ci son tutti gli ingredienti. DUB: forse prima taglia-tagliamo.. BEA: pasta, pasta con (XXX) DUB: sì pasta con il pomodoro... ITA: ((short laughter)) BEA: ((short laughter)) ITA: io non so come si fa pasta al pomodoro, quindi, Dub? DUB: forse tagliamo ah le cipolle? ITA: ((laughing)) DUB: ((laughing)) le cipolle e...gli agli?come si di-co-com'è il plurale di aglio, Ita. GEA: sì.gli agli ITA: gli agli DUB: gli agli, agli.gli agli e dopo...uhm ah... mettiamo un, un po' di...olio di oliva?sulla..la padella?e... ITA: ok ((laughing)) DUB: fri-fri-frittiamo?non lo so come dice ah ... per friggere..ITA?aiutame ITA: sì?cosa, cosa ((laughter)) BEA: ((smiles)) DUB: per friggere?frittiamo?come si di+Ice* ITA: +Ifriggere*frigghere...frigghere.non lo so come ((laughter)) DUB: frig-frigghe-frighiamo? ITA: frighiamo. DUB: frighiamo per fare eh dorato,sì? ITA: cosa significa dorato DUB: dorato.per fare..no bruciate e no bianco ((laughter)) ITA: ah.sì sì ho capito ((laughter)) DUB: e dopo che è dorato, chi chi dopo che sono dorati?ah..possiamo me-no mettia-mettiamo mettiamo o mettemo?mettiamo?
30.20		
30.23	<i>Daxim breathing is quite heavy in the microphone</i>	
30.28	<i>The starting music of Giallozafferano, a YOUTUBE Italian cooking website , is audible by everyone. Someone opened it.</i>	
30.44	SU: MUSICA	
	<i>The sound from the website is still in the background.</i>	
31.35	<i>Su uses the laughing gesture</i>	
31.49	SU: gli agli	
31.50	HEL: no, ti prego! SU: bravi	
31.57	SU: shhhh italiani HEL: aglio e cipolla insieme? HEL: ahaahahaahahahh ok	
32.02	SU: per favore italiani lasciateli lavorare	
32.21	SU: friggiamo ANN: friggiamo	
32.28	SU: FRIGGERE	
32.41	SU: FRIGGERE FRIGGERE FRIGGIAMO	
32.50	SU: FRIGGIAMO ggiampo	
33.09	SU: BRAVO!!	

33.34 33.41 33.42	SU: Ma Bea??? tu?? Non cucini???	ITA: mettiamo. DUB: mettiamo, mettiamo ah...non lo so se un po' di prezze-prezzemolo?...Ita? ITA: sì?cosa DUB: cosa vuoi ITA: boh.non lo so! DUB: Bea Bea,oh pomodoro!grazie Daxim ITA: carne?no? DUB: no.io sono vegetariano ITA: ((laughter)) BEA: ((laughter)) ehm, DUB: Bea? BEA: sì sì. eh..secondo me eh messo un po' di pane ehm.. DUB: pane per fare bianchi, bianco.sì?cos'è panna, Ita. BEA: sì. DUB: panna
34.30	SU: PANNA	ITA: non lo so!non lo so
34.33	SU: LATTE	DUB: Bea, cosa è panna BEA: eh pane è stile di latte il il grasso di latte DUB: sì sì sì ho capito BEA: sì per una salsa per la pasta DUB: ok.sì però panna e pomodoro non va bene.penso io. ITA: ((laughter)) BEA: ((laughing)) è funziona.con con vino è molto è+1molto buona* DUB: +1deve essere, deve essere* rosso o bianca ((laughter)) ITA: ((laughter)) DUB: io cambio restorante ((laughter)) BEA: secondo me è va bene insieme ITA: uhg che schifo! DUB: ok facciamo, facciamo insieme ITA: sì
34.49	SU: SUL GELATO	ITA: ah c'è-non agh no va bene BEA: avevo vinto tre competizione di cucinare DUB: ullallà
34.52	DAX: ☹ io cambio ristorante	BEA: sì ((laughter))è va bene insieme ((laughing)) DUB: ok cuciniamo la pasta per dieci minuti?va bene così? BEA: eh, sì con con buona pasta ma il la pasta di supermercato è un bisogno di più lunghe.. DUB: quanti tempi quanti BEA: non lo so ITA: dieci minuti va bene BEA: sì.dieci dieci ITA: e dopo mettiamo la passata di pomodoro? DUB: ma quanto di pasta?duecento grammi BEA: eh...
35.07	SU: :D	
35.17	SU: anche secondo me	
35.38 35.40		
35.47	SU: (IM to BEA) BRAVA sono d'accordo con te	

36.37	SU: anche io	DUB: io ho fame BEA: ((laughing))va bene DUB: quanto?
36.40		BEA: per tre +1persone*
36.40		DUB: +1quanto o quanti?*quanto o quanti?quanto..
		BEA: quante
36.48	SU: quantA	DUB: quante...quanta.quanta pasta.
	SU: quantA pastA	DUB: quanta pasta ((smiling)) pasta singolare...no?non plurale
37.00		BEA: sì.non lo so
37.01		DUB: ok cuci-cuci-cuciniamo?cuciniamo per dieci minuti e dopo?
		BEA: eh...uhm...per rosolare ehm i come si dice non ricordo, oliva oliva ehm+1con* eh il salo grasso?
37.03	SU: no	DUB: +1olio*?
37.37	ITA: cosa no??	ITA: sì BEA: con ehm DUB: ho dimenticato di sale ((smiles)) BEA: sì...e...ehm.+1(XXX)aglio e pomodoro...
37.56	DAX (IM) visto che si danno da fare poi dovremmo dire la stessa ricetta in modo semplice DAX (IM) così imparano SU (IM to DAX) se capiamo che ricetta vogliono ☺ ☺ SU (IM to DAX) dilla tu quando hanno finito ☺ DAX (IM) è una semplice pasta con pomodoro ☺ SU (IM to DAX) direi di sì ☺ SU (IM to DAX) ok ... fra un pochino li fermo ☺ che mi fanno morire :D :D :D DAX (IM) ha ha ok quando tu me lo dici	DUB: +1(XXX)mette-mett*...però come si dice la..((sighs)) (XXX) è creme..la salsa? ITA: sì, ma +1c'è*, c'è già la la passata di pomodoro +2nella bottiglia* BEA: +1sì* DUB: +2sì ma come* si chiama quello là che che che...che ci prepariamo.che, che prepara-che prepa-che preparia-che prepariamo...ITA ITA: cosa!what.sorry.scusa?((laughter)) DUB: la crema, la +1crema di pomodori*((laughing)) e tutti che prepariamo adesso.come come si chiama quello là in italiano BEA: +1((laughter)) ITA: passata di pomodoro. BEA: sì DUB: passata di pomodoro?ma con la +1panna*? BEA: +1sì*e..il sale di pomodoro, per cucinare ITA: ((sigh)) DUB: adesso mettiamo la pasta lì, o mettiamo sulle su i piatti e dopo mettiamo la passata sulla pasta e come facciamo ITA: aspetta che io non lo so come si dice...dove mettiamo la pasta dopo abbiamo fatto...cosa significa padella?ah.qualcuno? mi può DUB: padella è quella bassa per friggere, friggere.friggere ITA: e dopo mettiamo nella...Dub Dub vedi vicino la padella c'è qualcosa giallo DUB: sì, cosa
39.10		
39.13		
39.34	SU: PADELLA per friggere	

Appendix B – Transcripts

40.01	SU:	LO SCOLAPASTA	ITA: come si dice...
			DUB: lo sc
40.09	SU:	LO SCOLAPASTA	ITA: dobbiamo mettere la pasta dentro lo,
40.12	SU:	LO SCOLAPASTA	lo, lo +1sco.lapa*.sta
40.14	SU:	LO SCOLAPASTA	DUB: +1scolapasta*
40.16	SU:	☺	BEA: sì
			ITA: sì?
			DUB: sì.e dopo mettiamo la pasta sulla
			padella con la crema o o o no
			BEA: sì per a bollire il la pasta
			DUB: no no no ma dopo lo scolapasta già
			è bollito, già è bolli-già è cotta, è cotta.
			BEA: eh...
			DUB: per servire, mettiamo
40.49	ANN:	bravo!	ITA: sì lo so ma non lo so come si dice
40.52	SU:	nel piatto?	
			DUB: mettiamo su, mettiamo nel piattl?o
			ah..misturiamo?come si dice.mettiamo
			tutto insieme...ehm...
41.05	SU:	MESCOLIAMO	BEA: sì+1mettiamo* tutto gli ingredienti
			nel padella per dieci minuti per rosolare
			e...((laughter))è non non difficile... e
41.10	SU:	CONDIAMO LA PASTA	dopo dieci minuti ehm..mettiamo eh..la
41.35	ITA:	(IM) a big bowl?help!	sal, la sale di pomodoro con la pasta
41.42	SU:	(IM to ITA) zuppiera	ITA: +1((laughter))*
			DUB: ok.e mescoliamo tutto insieme e
			dopo servimo..
41.58	SU:	BUON APPETITO :D	BEA: sì.e.e..dopo di che.eh..mettiamo il
			formaggio
42.04	SU:	zuppiera	ITA: mettiamo nella
			zuppiera.zupplera.((smiling))
			BEA: cosa zuppi.zuppiera
42.14	SU:	dove mettere la pasta	ITA: dove posso meschiamo tutti gli
			ingredienti
			DUB: dove mettere la pasta.con la crema
42.24	SU:	custard????	BEA: +1no no!*
			ITA: +1con*.. la passa.la passata di
			pomodoro!
			BEA: sì
42.30	ANN:	salsa	DUB: ma non è che.quello voglio.non lo
42.31	SU:	panna	so come dire.la salsa!
42.35	SU:	salsa	BEA: sì.salsa
			ITA: sì.ma c'è già la salsa!!vicino
			olio.come si chiama.passata di pomodoro
			((snorts)) ohh!!
			DUB: sì ma
42.46			SU: ((laughter))ragazzi.siete stati
			bravissimi ma non ho ben capito cosa
			mangeremo questa sera a cena
			((laughter))
			DUB: ((laughs))
			ITA: ohhh ((sigh)) anche io
43.00	GEA:	Dax è svenuto ahahahahah	SU: (XXX)
	HEL:	ahahahahah	
	ANN:	piatto interessante!	
43.13			DAX: cambio ristorante.no, allora,
			pretendiamo troppo da loro.

43.27		SU: adesso Dax ci darà una sua ricetta fatta con (XXX) poi andiamo a fare l'altro gioco
43.39	ANN: io conosco una salsa con pomodoro panna e vodka	DAX: poi andate a mangiare.allora.semplicissimo.si prende la padella si mette sul fuoco, si trita un po' di cipolla un po' di aglio e si mette nella padella.si aggiungono due acciughe, per la famosa pasta alla puttanesca come la preparo io.si fa rosolare il tutto, dopo che le acciughe si sono sciolte, si aggiunge del pomodoro e si porta e si fa cuocere.nella pentola alta si mette l'acqua, si mette sul fuoco, quando l'acqua bolle si butta la pasta, tendenzialmente se non sbaglio si mettono ottanta grammi a persona, dai sessanta agli ottanta grammi, dipende la fame.quando la pasta è cotta, si butta nella padella dove avete fatto rosolare la cipolla l'aglio il pomodoro le acciughe, potete mettere un po' di prezzemolo mescolate il tutto e servite.si può servire anche con un buon pecorino.o sbaglio.io uso pecorino anziché parmigiano.
44.11	SU: ACCIUGHE (pesci)	SU: tutto chiaro ragazzi?
44.29	ITA: voglio provarla Annette ☺)	ITA: sì ((laughter))
44.43	SU: 80 GR A PERSONA DI PASTA	BEA: sì
44.47	HEL: 60 sono pochi Dax!	DAX: è la ricetta che avete fatto voi prima detta molto più semplicemente
44.51	SU: SCOLARE LA PASTA	SU: ma loro erano partiti bene
45.03	SU: PREZZEMOLO MESCOLORE SU: SERVIRE BUON APPETITO	DAX: molto bene.Dub può aprire un ristorante
45.13	SU: pecorino	ANN: magari dieci minuti sono pochi
46.09		BEA: io sono stressata dopo di che ((laughing))io non vorrei cucinare con Daxim ((laughter))
		DAX: ah no?
		BEA: è molto complicato ((laughter))
		DAX: è semplicissimo
		GEA: no.era facile he he
		BEA: è facile quando solo
		GEA: quando si sa fare vero?
		BEA: sì

Task Three: The Opinionator game and Wind-down part

Time	Scene description. Local chat and IM	Voice chat
	<i>At first everyone has to move out of the restaurant and to the area where the opinionator has been rezzed. Picture of the Opinionator. Bea is still talking while probably moving over to the Opinionator area. Su teleports the students to the area as they have problems moving. ITA flies over.</i>	

	<i>The opinionator is in a field, in front of a low wall. Behind the opinionator is a screen that will show pictures of different foods and drinks.</i>	
47.00	<i>Getting everyone to the area</i>	SU: ragazzi, se vi mettete-, mi sentite? BEA: +1sì* DUB: +1sì* ITA: +1sì*
47.44	<i>Dub is standing next to the wall the other two are scattered around.</i>	SU: Bea e Dub.sì.allora venite.vedete qui dove c'è questo muretto?i ragazzi del muretto.venite qua al muretto...ci siete?no...ah sì.Dub... quindi qui vicino al muretto per favore.ITA, il muretto è qui.e tu sei lì ITA: sì? ((laughter))
48.06	<i>Ita moves towards the wall</i>	SU: perfetto.invece Annette tu poi andare forse al..vicino allo schermo se vuoi ANN: vediamo come va SU: allora Bea, ti stiamo aspettando BEA: sì SU: lo so che sei là, ma io ti voglio qua ((laughing)) ITA: ((laughter))
48.41	SU: Bea vai al muro ☺	SU: dunque, questa è una-partite dal muretto, tutti e tre.al muretto Bea!...
48.45	SU: non barare	ITA: ((laughter))...Bea vieni qua...vicino a me. SU: non barare..allora.vi spiego cosa dovrete fare.sapete correre? ITA: sì DUB: sì SU: perfetto!non nella vita reale eh.qui su Second Life.allora, io dirò delle parole di piatti italiani come lasagne o pasta, ok?e voi, vedete questo questo questo ... coso nel centro? ITA: sì SU: con questi colori blu rosso giallo, vedete che c'è antipasto, primo, contorno, secondo o fine pasto, cioè alla fine del pranzo o alla fine della cena.voi dovete correre sulla parte del pasto, del pranzo, quando si mangia quella cosa che io vi dico.ok?è chiaro? ITA: ((laughter)) ok DUB: sì, ma non lo so come +1fa, come* corre, come corro BEA: +1mi dispiace* SU: +1Bea vieni qui per favore*scusa Dub, ripeti DUB: non lo so come corro qua su Second Life SU: e cammina non importa, non importa DUB: ah ok ok SU: perché tanto non è importante che

50.14		arrivi primo o secondo. l'importante è che tu risponda correttamente.ok? DUB: ok SU: quindi, Bea, se vieni devi partire da qui ITA: ((laughter)) SU: (XXX)
50.25	<i>Bea is still standing far from the wall, in the middle of the field. Su walks close to her to explain the game again.</i>	SU: Bea, hai capito? (XXX) quando io dico che ne so pasta al pomodoro, tu devi andare su questa casella gialla qui al centro.vedi questo, cos'è, questo coso al centro, lo vedi? BEA: sì.sì ITA: ma io non vedo le parole SU: com'è possibile che tu non veda le parole.sono enormi.rosso antipasto, secondo blu, azzurro, un esagono grazie ((laughter)) contorno azzurro, fine pasto verde, primo giallo.vedete le parole? ITA: sì.no.vedo le colore, ma le parole no. SU: vedi i colori ma le parole no. ITA: sì +1per* favore dimmi le parole BEA: +1sì* SU: ok.rosso è antipasto. ITA: ok SU: il giallo è il primo ITA: ok SU: il verde è..la fine del pasto ITA: ok SU: l'azzurro, il celeste è il contorno ITA: scusa? SU: contorno, tipo l'insalata, i pomodori, sai? ITA: sì, sì, ok SU: e il blu è il secondo..rosso antipasto, giallo primo, blu secondo, azzurro contorno, verde fine pasto.tu Dub li vedi, i nomi? DUB: solo la colore non la parola, no. SU: ma voi, li vedo solamente io ragazzi? HEL: io li vedo eh i nomi. ITA: ah sì.ma perché tu sei vicino. SU: ma fate lo zoom!ma a parte io li vedo anche da lontano.allora+1andate più vicino*va bene, no, non c'è bisogno che stiate al muretto ITA: ahhh! ANN: +1io li vedo da lontano* DUB: ma non va lo zoom.ha! ITA: Ha.adesso sì. DUB: +1adesso sì* BEA: +1sì* ITA: +1va bene* ((laughter)) SU: va bene, allora, facciamo una prova? ITA: ok SU: per esempio, se io dico...ehm...tiramisù
51.01	HEL sembra un esagono	
51.11	ANN: facciamo una prova	
51.19	HEL: io sì	
51.39	<i>Annette is walking on the different colours while Su is calling them</i>	
52.33	<i>Bea moves closer to the Opinionator</i>	
52.36	DAX (IM) si vedono ma di fianco	
52.53	<i>They all move closer to the Opinionator</i>	
52.54		
53.07	<i>Dub and Ita are moving, Bea is standing still.</i>	

	<i>Dub is on secondo, Ita is on antipasto, Bea is outside</i>	DUB: tiramisù, non lo so, primo, anti-
		BEA: la dolce ((smiles)) sì?
		DUB: secondo no?
		BEA: Ehm
53.37	<i>Bea and Dub are on secondo and Ita is moving</i>	SU: Bea, devi andare anche tu
		BEA: sì eh...uhm
		SU: quindi abbiamo due secondi e?Ita è andata
53.48	<i>Ita is on Fine pasto</i>	DUB: Ita ((laughing))
		SU: Ita dove sei andata?
		ITA: sono qua
		SU: ecco.brava Ita, si mangia, è un dolce no, fine pasto!
		DUB: ah sì fine pa+1sto*
		BEA: +1sì*
53.58		SU: ok adesso cominciamo sul serio
53.58		SU: ok.adesso cominciamo sul serio.va bene?rimettetevi fuori.perché se rimanete sul punto vedete che fa il colore.mettetevi qui fuori adesso se non siete sicuri di cosa sono potete guardare lo schermo, se lo vedete, perché ci sono le fotografie
		ITA: ma io non sicura del, cosa significa secondo
		SU: e brava!non te lo dico mica.è quello che viene dopo il +1primo*il secondo viene dopo il primo
		ITA: +1cosa?*il primo cosa, il primo...((sigh))no.
		SU: Ita non ti posso dire cosa si mangia esattamente
		ITA: no.+1ma il primo*
		SU: +1dopo l'antipasto si mangia*
		ITA: il primo significa colazione?
		SU: no.nel pranzo c'è l'antipasto, poi il primo, dopo il primo si mangia il secondo, con il contorno, e poi alla fine si mangia qualcos'altro, quindi +1non colazione* parliamo di pranzo o cena
		ITA: +1ah, ok*oh.ok.adesso ho capito.scusa
		SU: è chiaro Bea e tu Dub?
		DUB: sì, sì sì
55.19		BEA: sì
55.20		SU: cominciamo?
		BEA: sì
		SU: siete pronti?
		ITA/ BEA: sì
		SU: riscaldati?
		DUB: sì
55.45	<i>Dub and Bea are on antipasto, Ita is moving from secondo to primo. Bea starts moving to primo.</i>	ITA: ((laughter))
55.46		SU: zuppa di pesce!...
		SU: basta non c'è più tempo!veloce Ita deciditi subito.Ha vinto Ita!è un primo
		BEA: sì!!

Appendix B – Transcripts

56.09	SU: CAFFÈ	SU: non è un antipasto.eh Bea dovevi decidere prima.mah
56.12	<i>Bea and Ita are on fine pasto and Dub is on primo</i>	ITA: ((laughter)) SU: numero due.caffè!...
56.24	SU: POLLO ARROSTO	SU: hanno vinto Ita and Bea.eh.si prende dopo il pasto il caffè.brave.
56.32	<i>The students are walking around.</i>	SU: numero tre.pollo arrosto...se non sapete cos'è potete guardare le foto.
56.40	<i>Bea and Ita are on secondo and Dub on primo.</i>	SU: è un secondo.brave Ita e Bea...
56.47	SU: FAGIOLI <i>Dub is on primo</i>	SU: numero quattro.fagioli. BEA: fagio- ITA: scusa? SU: fagioli.l'ho scritto. ITA: ((whispers)) fagioli SU: c'è la fotografia. ITA: dove SU: nello schermo di fronte a te ITA: ma dov'è le fagioli SU: nella fotografia...ha vinto Bea!contorno brava.i fagioli sono un contorno.avete la foto nello schermo di fronte. ITA: ahhhh BEA: ahhhhh! ITA: ((laughter))
56.57	<i>Bea is in the centre and Ita is on secondo</i>	SU: numero 5 caprese...caprese
57.04	<i>Bea goes on contorno</i>	DUB: dov'è la foto...dov'è la foto SU: lì di fronte a te DUB: ma non c'è la foto eh? SU: sì io la vedo DUB: +l'adesso* adesso c'è la foto ITA: +l'io no, non vedo* DUB: adesso c'è la foto SU: è arrivata ora per te?è +la linea*di Dun Laoghaire che non funziona ((laughing)) ITA: +l'no* DUB: ((laughter)) BEA: ((laughter))
57.31	SU: CAPRESE	SU: ok è un antipasto la caprese.bravo.
57.50	<i>Ita walks on contorno and Bea on antipasto</i>	SU: numero sei.funghi all'aglio...
57.52	HEL: sì	...
58.08	SU: FUNGHI ALL'AGLIO	SU: avete deciso?Ita non puoi decidere venti cose ((laughing)) decidine una
58.15	<i>It goes on contorno, the others don't move.</i>	ITA: ((laughter))
58.32	<i>Bea goes on antipasto and Dub on primo</i>	SU: allora i funghi all'aglio, come si chiamano in inglese? ITA: +l'cosa*? DUB: +l'(XXX)* BEA: +l'ehm stuffed mushrooms? SU: garlic mu+l'shrooms* DUB: +l'garlic* mushroom? SU: non esistono in Italia.non dovevate andare in nessuna di queste. DUB: ((laughter))
58.38	<i>Ita walks on primo</i>	

59.10 59.13 59.28 59.32	SU: BURSCHETTA <i>Bea and Dub go on antipasti</i> <i>Ita walks on antipasti</i>	SU: se li sono inventati gli americani! SU: numero sette.brusche+1tta*! ITA: +1chi hai* vinto? SU: nessuno avete +1(XXX)* DUB: +1non esiste!* SU: bruschetta. ITA: ahh! SU: meno tre, meno due, meno uno.bravi!bea e Dub hanno vinto.è un antipasto.molto bene. ITA: ma anch'io sto qua ((laughing)) DUB: ((laughter)) SU: sì scusa, sì Bea, Bea.te Ita sei andata troppo +1tardi* ITA: +1no Ita!* SU: ci hai pensato troppo ((smile)) devi essere veloce BEA: ((laughing)) non Bea ((laughter)) SU: numero +1otto*pensate cosa si mangia, quando si ma- quando si usa questo a pranzo.latte ITA: ((whispering)) +1sti cazzi*... DUB: per il caffè...fine pasto ((whispering)) SU: ((smiling))ok, ok, ok, io pensavo che non si usa, ma in effetti si può mettere nel caffè a fine pasto.bravi ((laughter)) DUB: ((laughter)) SU: numero nove.gelato!...bravissimi...eh.state diventando sempre più bravi. SU: numero dieci.tagliatelle col ragu'... ITA: ((sighing)) ah il mio preferito SU: eh, lo so. BEA: ah! no no no no no! SU: Ita e Dub hanno vinto.primo. SU: ((laughing)) SU: numero undici.in onore di Gea.bistecca! ITA: cosa? SU: bistecca. DUB: è una carne, no?+1primo* ITA: +1sì* SU: è una carne quindi secondo caro Dub! ((laughter)) SU: numero +1dodici* +1la fiorentina*per la +2precisione* ((laughter)) SU: +2eh, la bistecca alla fiorentina* SU: numero dodici.peperonata! DUB: cos'è la peperonata? SU: eh.aspetta che si rezzi la foto così la puoi vedere.aspetto.quando mi dite che vedete la foto vi conto. DUB: adesso vedo. SU: ok BEA: ((to herself) no, no
59.58	SU: LATTE	
1.00.01	<i>The students are all on fine pasto</i>	
1.00.28 1.00.34 1.00.46	SU: GELATO <i>The students walk on fine pasto</i> SU: TAGLIATELLE COL RAGU'	
1.00.54	<i>The students move on primo, but Bea is on antipasto</i>	
1.01.03	ANN: Ci abbiamo una fame	
1.01.11	SU: BISTECCA	
1.01.20	<i>Bea is on secondo, Dub is on primo, Ita is waiting.</i>	
1.01.24	<i>Ita moves on to secondo</i>	
1.01.41 1.01.48	SU: PEPERONATA <i>The students are waiting for the picture to rez</i>	
1.01.59	<i>Bea is on primo. Ita and Dub are still waiting.</i>	

1.02.04	<i>Ita goes on antipasto, Bea leaves primo, Dub is waiting</i>	DUB: è una zuppa SU: no.
1.02.09	<i>Bea walks on contorno, Dub goes to primo</i>	DUB: no è una zuppa SU: ((laughing)) (XXX) DUB: primo ITA: ((laughter)) SU: contorno.brava Bea.è come una ver- si usa come contorno.ecco.e si mangia con il secondo... SU: numero tredici.patatine fritte!
1.02.26	SU: PATATINE FRITTE	DUB: è un contorno.
1.02.31	<i>Dub walks to contorno.</i>	SU: oh!((laughing)) dillo +1a tutti* così vincono anche loro!
1.02.38	<i>Bea walks on contorno. Ita stays where she is.</i>	BEA: +1sì* SU: bravi.è un contorno.molto bene.Ita ha deciso che.non risponde.
1.02.50	SU: SALUMI	DUB: ((laughter)) SU: numero quattordici.salumi! DUB: salumi? SU: salumi.
1.03.02	<i>Dub and Bea walk on to antipasto. Ita walks on primo</i>	DUB: ((thinking aloud)) antipasto SU: bravi! DUB: Ita? SU: Ita è andata al primo.è un antipasto.hanno ragione loro.eh.ne facciamo ancora un pochino poi dopo finiamo.numero quindici.prosciutto e melone!
1.03.22	SU: PROSCIUTTO E MELONE	ITA: ((sighs)) DUB: ((thinking aloud) prosciutto e melone?antipasto anche sì.
1.03.32	<i>Dub and Bea walk on antipasto. Ita walks on secondo</i>	SU: ((smiling)) ti sentiamo.è un antipasto.bravi Bea e Dub. ITA: ((to herself)) antipasto.what SU: numero +1sedici* ITA: ((thinking aloud)) +1cos'è antipasto.cos'è antipasto* SU: sì Ita.si mangia come antipasto.numero se+1
1.03.44	ITA: come antipasto??	ITA: +1cosa significa antipasto SU: è quello che si mangia prima del primo ITA: ah.ok.
1.03.50	SU: PESCE SPADA	SU: numero sedici.pesce spada.è un pesce.con una spada ((smiling)) DUB: secondo SU: sì...bravi.
1.04.09	<i>Ita stays on secondo and the others move on it</i>	SU: numero diciassette.cappuccino. SU: ((smiling)) lo sape+1vo* BEA: oh.no..no.ah!
1.04.16	SU: CAPPUCCINO	SU: brava Bea.e brava Ita.non si mangia il cappuccino a pranzo!non si beve il cappuccin +1a* BEA: +1sì* ((laughs))
1.04.19	<i>All students go to fine pasto. Then Bea moves out. She has difficulties getting far from fine pasto. Ita moves out too.</i>	SU: bravi!grazie. DUB: perché no? SU: sono molto felice.gra+zie* BEA: +1perché*per colazione
1.04.27		
1.04.41	<i>Dub moves out of fine pasto</i>	

1.05.06	ANN: Dub è perplesso	<p>SU: brava DUB: perché? BEA: è cola-è una è una cosa per colazione sta alla mattina DUB: uhm SU: grazie +1Bea* DUB: +1allora cosa bevi* BEA: In Irlanda è per tutti ma...penso in Italia è è per colazione ((smiles)) DUB: ((smiles)) e allora cosa bevi? SU: acqua. DUB: acqua? SU: vi+1no* ITA: +1vino!* GEA: +1vino* SU: vino SU: e caffè BEA: sì GEA: alla fine SU: caro Dub DUB: ma cappuccino no è caffè? SU: no è cappuccino BEA: sì ma caffè con latte e...è specializzata ITA: Dub lo sai.perché tu lavori in un bar ((laughing)) BEA: ((laughter))ah sì? DUB: sì.ma è un caffè SU: caro Dub.faremo una lunga discussione sul cappuccino DUB: ((laughter)) BEA: ((laughter)) DUB: oh gli italiani! ((laughter)) SU: diciotto.coniglio alla cacciatore!</p>
1.05.53		
1.06.01	SU: CONIGLIO ALLA CACCIATORA	ITA: ugh.che schifo!
1.06.10	<i>All students move on secondo</i>	SU: coniglio alla cacciatore ITA: blea ((shuddering)) BEA: +1((laughter))* SU: +1un secondo.bravi*bravi BEA: anche me
1.06.16	HEL: Ahaahahahaha	SU: e poi.amaro!numero diciannove...amaro.
1.06.22	SU: AMARO	DUB: cos'è amaro SU: è lo-aspetta ora lo vedi.
1.06.34	HEL: proprio non vi piace il coniglio ...	SU: lo vedi Dub?...bravi.si beve alla fine
1.06.35	<i>Bea and Ita walk on dopo pasto.</i>	del pasto.molto bene, perfe-è un digestivo
1.06.39	<i>Dub walks on dopo pasto</i>	Dub. DUB: ok SU: chi è che ha deciso antipasto?Bea.no.state in un posto e state fermi lì ((laughing)).venti!insalata mista DUB: antipasto ((thinking aloud)) SU: grazie Ita.è un contorno! BEA: ah.va bene SU: eh.lo sapete. BEA: in Irlanda è un antipasto ((smiling)) SU: va bene.non parliamo.non commento.
1.07.02	SU: INSALATA MISTA	
1.07.07	<i>Dub and Bea have moved to antipasto and Ita is on contorno</i>	

1.07.31	SU: LIMONCELLO	SU: limoncello. ITA: ah! DUB: limoncello è fine pasto BEA: è una dolce sì?...no? SU: no BEA: no no no sì alcolici? SU: e brava.brava. è fine pasto.molto bene SU: e l'ultimo poi finiamo qua.pane all'aglio
1.07.45 1.07.48	<i>The students are all moving to fine pasto</i>	DUB: antipasto.ma può essere anche un contorno no? SU: ma può essere che non esiste in Italia? ((smiling))che se lo sono inventato gli americani anche questo? DUB: ah ((laughter))
1.08.00 1.08.11	SU: PANE ALL'AGLIO <i>All students but Ita are on antipasto</i>	ITA: quindi sono stata qua GEA: stavo per chiedere cos'è SU: infatti.sentite Gea ripeti cosa +Idicevi* GEA: +Istavo per* chiedere che cosa è il pane all'aglio SU: in tutti i ristoranti italiani qua ti danno garlic bread e pensano che sia una cosa italiana DUB: ((laughter)) SU: è molto buono ma quando (XXX) cos'è? ((laughter)) GEA: forse.noi si fa la fett'unta ma con l'olio SU: comunque ragazzi siete stati bravi bravi comunque.vi do un regalino ciascuno.aspettate.eccolo....
1.08.20	ANN: Però è buono!	SU: per esempio anche questi, anche i funghi all'aglio li vendono nei ristoranti italiani (XXX) BEA: sì.e.il nome antipasto? SU: cosa? GEA: pane all'aglio? BEA: eh no.non lo so SU: non esiste Bea, non non c'è in Italia BEA: perché SU: ((laughter)) perché ITA: perché non c'è ((laughter)) SU: italiani perché non c'è?non, vi do vi do un bicchiere di vino.ecco qua.o un bloody mary DUB: merlot?mmm.
1.08.54	ANN: Bravissimi! <i>Su gives objects to the students as prize</i>	SU: e anche un'altra cosa che non abbiamo fatto era il il come si chiama macaroni cheese che non esiste. BEA: no è americano. SU: è americano quello.molto chiaramente americano. BEA: sì è strano e e quando una persona comprare e è non insieme in un ehm come si dice o non lo so ehm...tapa o ... non lo so
1.09.40 1.09.58		

Appendix B – Transcripts

1.10.29	<p><i>Ita is wearing objects that Su gave her by mistake. She has a question mark on her head.</i></p> <p><i>Su is sending IMs to Annette re the screen.</i></p>	<p>SU: non ho capito.che volevi dire scusa? BEA: tutti ingrediente è insieme in una scatola è non SU: ah preparato prima, pre-preparato via BEA: sì SU: sì BEA: sì SU: poi si mescola tutto e si mette BEA: è non fresco SU: infatti...eh Bea è vero che hai vinto tre gare di cucina? BEA: sì SU: ah che brava BEA: eh...sì ho vinto la il no il terzo premio e ehm sì competizione Tesco Young Chef (XXX) SU: brava! sì.è molto difficile ((laughing)) ma è una buona esperienza e...ho vinto il terza premio in Uncle Ben Young Chef Year e due prima che SU: allora senti Bea, quando finiamo questo corso tu cucini per noi.invitiamo anche +1tutti* gli italiani ITA: +1sì* BEA: sì SU: venite a casa mia, tu cucini BEA: sì e ((laughter)) GEA: bene SU: ma scherzi? GEA: io voglio il pane all'aglio eh? DUB: ma non, ma non su +1Second Life* SU: +1((laughter))* BEA: ((laughing)) sì GEA: ((laughter)) SU: ah sì scusa, a casa mia in real life DUB: ah va bene BEA: sì GEA: a Dublino tutti.dai! SU: c'è un diretto da Firenze Gea.cioè +1scusa*da Pisa GEA: +1sì*? da Peretola?Bene! SU: No.da Peretola no.c'è da Pisa.fai fai Helenita GEA: da Pisa.va beh.è uguale. SU: Dax verrà da Milano visto che lui è di lì ((laughter)) GEA: lui da Milano, hai voglia ((laughter)) BEA: sì GEA: e toccherà +1andare* a Milano ((laughter)) BEA: +1faccio*..sì..faccio la pasta perché Susanna mi ha detto che le non piace la pasta in Irlanda perché è non va bene ma secondo me quando eh ho fatto è molto buona ((laughter))</p>
1.11.11	<p>ITA: (IM) cos'è questo che porta adesso?? Tu mi lo ha dato. SU: (IM to ITA) oddio non lo so. SU: (IM to ITA) pensavo di averti dato da bere</p>	
1.11.59	ANN: Vengo!	
1.12.15	SU: RL	
1.12.19	HEL: Scusate sono al telefono	
1.12.29	ITA: (IM) adesso sì mi hai dato una birra ma prima mi hai dato questo anche un 'DOLL'	
1.12.41	<p>ITA: (IM) anche un ragno SU: (IM to ITA) ho sbagliato ... scusa SU: (IM to ITA) ma usali</p>	

1.13.16	<p>SU: (IM to ITA) il ragno fa i rutti</p> <p>ITA: (IM) fa i rutti??</p> <p>SU: (IM to ITA) burp</p> <p>SU: (IM to ITA) non ricordo</p>	<p>GEA: ((laughter))</p> <p>SU: no io son sicura</p> <p>ANN: ci crediamo ci crediamo</p> <p>GEA: brava</p> <p>DUB: io vorrei controllare ((laughing))</p> <p>BEA: sì la pasta quando è alla casa è buona ma in ristoranti in Ita-in Irlanda è molto molto eh come si dice non fresco non è ..</p> <p>GEA: scotta?</p> <p>BEA: non sapore</p> <p>SU: ah.non sa di niente</p> <p>GEA: ah</p> <p>BEA: sì giusto</p> <p>GEA: la la +1qualità*</p> <p>BEA: +1non giusto*</p>
1.13.36	<p><i>Ita is wearing the spider. Dub moved closer to Su.</i></p>	<p>DAX: apriamo un ristorante in Irlanda</p> <p>SU: eh sì.ce ne sono diversi a Dublino di italiani però non sono molto buoni.</p>
1.13.45		<p>ITA: ((farts))</p>
1.13.46		<p>BEA: sì il ristorante italiano è è..</p>
1.14.09 1.14.10	<p>ANN: Che schifo!</p>	<p>ITA: ((farts various times))</p> <p>SU: Ita basta.</p> <p>ITA: cosa</p> <p>BEA: ((laughter))</p> <p>DUB: ((laughter))</p> <p>SU: togliti il ragno</p> <p>DUB: ((laughter))</p> <p>ITA: ((farts)) ((laughter))</p> <p>BEA: eh li resto- i ristoranti italiano in Irlanda è male qualita.</p> <p>SU: (XXX)</p> <p>BEA: è non è non vero per la eh il cibo di Italia</p>
1.14.20	<p>SU: di cattiva qualità</p>	<p>SU: però ci +1sono alcuni*ristoranti buoni per esempio quello a Bray, Campo de' Fiori è molto buono</p>
1.14.37	<p>ANN: e i prezzi?</p>	<p>GEA: +1non fanno*</p> <p>BEA: sì? a Bray?</p> <p>SU: sì (XXX) ci vado sabato pros-no sabato fra due settimane.a Bray.Campo de' Fiori.quello è buono.</p>
1.14.50	<p>SU: Campo de' Fiori</p>	<p>BEA: ho visitato un un ristorante italiano eh vicino eh Blanchardstown è MOLTO</p>
1.14.56	<p>SU: CARI</p>	<p>molto molto male non bene.non è una buona esperienza</p> <p>ITA: Susanna.sei mai andata al ristorante si chiama Ciao bella Roma?</p> <p>SU: sì.e la pizza è buona</p> <p>ITA: ti piace?</p> <p>SU: sì</p> <p>ITA: sì la pizza sì</p> <p>SU: mi piace molto la pizza è una delle pizze forse migliori su Dublino città</p> <p>ITA: sì.mi piace molto</p> <p>SU: conosci Caffè di Napoli?</p> <p>BEA: sì ho visto Caffè di Napoli..sì sì</p> <p>ITA: ah</p>

1.17.27	<p>SU: +1la pizza lì* è buona BEA: +1ma è non* vicino all'università.è difficile per andare SU: no +1(XXX)* ITA: +1Dub andiamo* lunedì? DUB: a Caffè di Napoli? sì.io e te? SU: ho ho ho ((smiling)) DUB: ok SU: ho ho ho ITA: ((laughter)) BEA: ((laughter)) GEA: è una proposta ((LAUGHING)) DUB: sì ((smiling)) SU: (XXX) lasciamoli soli questi ragazzi GEA: sì davvero qui c'è sta nascendo+1qualcosa* SU: +1(XXX)* ITA: ((laughter)) DAX: vabbè la torta nuziale la portiamo dall'Italia SU: bravo.ok ragazzi GEA: scusate io approfitto per salutarvi SU: anche io grazie a tutti grazie di tutto GEA: io volevo dire bravi ai ragazzi perché sono stati stanno crescendo davvero.bravi. DUB: grazie Gea. BEA: grazie Gea.ciao ITA: grazie ciao. GEA: ciao alla prossima.ciao a tutti.ciao SU: oggi non andiamo a casa mia.devo ripulire qui.prendere delle cose.quindi se volete possiamo finire direttamente qua.va bene? BEA: sì sì va bene SU: ciao allora BEA: ciao a tutti DUB: ciao ITA: grazie ANN: ragazzi vi saluto.state migliorando tantissimo. SU: ciao.</p>
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Session Six: Feste in Italia

Introduction

Time	Scene description. Local chat and IM	Voice chat
00.00	<i>Su, ITA, MIA, BEA and DUB are at Su's house. They check voice and rezing. A few months have gone after they started the course. Recordings don't always start directly from the very first minute.</i>	
00.02	SU: mi sentivi meglio Dub?	

00.10 00.18	ITA: haha	SU: Dub?...mi senti meglio?...ora non se- non vedo nemmeno quello che scrive.. SU: ora siamo tutti silenziosissimi.dunque.faccio di nuovo prova.Ita tu mi senti giusto...perfetto. SU: Bea mi senti giusto? BEA: sì.è va bene SU: perfetto.Mia.tu? MIA: sì.va bene. SU: perfetto.anche voi vi sento molto bene.Dub?...((laughter))è sordo.non sente più...
00.36	ITA: sìiii	
01.03 01.12 01.28	ITA: ci sei Dub? DUB: non sento benne SU: prova a parlare Dub	SU: non capisco.ci sei? SU: non sento bene....
01.48	SU: ho capito Solo con me?	DUB: non so perché.perché io posso capire però c'è quello ccchhhhhsscchhh così..è troppo alto DUB: sì.solo con te
01.52	SU: ok allora non importa perché io parlerò poco ok?	
02.13	SU: però ora devo parlare un pochino <i>Su uses a laughing gesture</i> SU: posso?	DUB: ok ((chuckles)) DUB: ok ((chuckles)) SU: ok allora.parlo un pochino ((almost whispering)) e dico che magari.. pro- chie-chiudete tutti i microfoni forse Dub ha meno problemi.poi mi dite, mi scrivete se avete capito tutto.ora parto e poi vi mando un teleport.andiamo a Imparafacile e oggi, come sapete, parleremo di feste, quindi le nostre amiche italiane ci diranno un po' cosa fanno loro durante alcune feste e voi mi raccomando se non capite.se c'è qualcosa che non capite.chiedete.se ci sono problemi fermatele.e chiederanno anche a voi cosa fate cosa avete fatto durante alcune feste.forse vi chiederanno di parlare di San Patrizio, oppure Dub tu puoi parlare del carnevale in Brasile eccetera.ok? BEA: sì SU: benissimo.allora vado e poi vi..vi mando un teleport.ok?a fra poco.
02.57	<i>LORA is sending an IM regarding the organisation of the session.</i>	
03.26	DUB: ok	
03.38 04.02 04.38 04.39	<i>Su is teleporting to Imparafacile Island. Arrival in Imparafacile Island. Finding the correct spot and teleporting the students and the Italians.</i>	LORA: eccomi.mi sposto.aspetta. SU: ciao.un attimo che finisco di chiamare LORA: ciao a tutti.

<p>07.19 07.22</p>	<p>SU: cliccate CTRL ALT e R <i>ITA is walking around.</i></p>	<p>SU: di teleportare.ciao ciao.ecco.vediamo chi è arrivato. BEA: ciao ciao. SU: ciao ciao. LORA: tutti raffreddati eh? ((laughing)) ITA: +1((laughter))* SU: +1ho scusate*io continuavo a dire ciao ma avevo il microfono acceso LORA: è giusto ((laughing))credo di aver visto uno dei tuoi studenti volare qui intorno.si chiama Tip? SU: no. LORA: o sbaglio.+1non è un tuo studente*? SU: +1no.il problema è che qui c'è un po' di gente che non dovrebbe esserci in questi giorni. LORA: ah. SU: allora qui abbiamo due stu-delle studentesse e me ne mancano due.li ho persi per strada.un attimo eh? LORA: una sta rezzando.dub, dab, dub come si pronuncia sta rezzando adesso. SU: ah ok.allo+1ra* LORA: +1dille* dille che deve fare Contro Alt R per potersi condensare. SU: Ita ci pensi tu?e...mi manca Mia... BEA: ah.Mia è rezzando. SU: anche lei?ok. DUB: ma Susanna ora ti sento bene.benissimo. SU: o meno male!però io non ti vedo.dove sei. HEL: buona sera!dov'è GEA: ciao Hele! HEL: ciao io +1non vedo ancora* SU: +1ciao bimbe*eh è un po' lento HEL: ecco sì sì ecco ecco ora vedo SU: +1Dub*Dub +2dove sei*? HEL: +1Ita.vedo* Ita.vedo Gea BEA: +2ciao* SU: Mia ci senti?..+1Mia*?... HEL: +1ecco Su* MIA: sì. SU: devi fare control olt erre....anche tu Dub... SU: bimbi questi non si rezzano eh?...Dub mi senti bene? DUB: sì SU: allora.tu ti vedi? DUB: sì SU: ecco.noi non ti vediamo ((laughing)) come mai lui si vede e noi non lo vediamo? DUB: cosa devo fare? SU: prova a fare +1control alt, ok, insieme e* poi clicca erre.</p>
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Appendix B – Transcripts

<p>08.08 08.12</p>	<p>ITA: cambia i vestiti ITA: funziona per me</p>	<p>DUB: +1ho fatto.ho fatto* SU: hai provato DUB: yeah SU: e allora c'è un'altra cosa, ragazze che possiamo fare?aiutatemi. HEL: io non lo so SU: neanche io DUB: ((to himself)) control LORA: se non si vedono non</p>
<p>08.39</p>	<p>SU: appearance</p>	<p>SU: ah!prova a fare, Ita sei un genio.è vero!ehm Dub e Mia.cliccate su di voi e fate appearance.come si scrive appearance? LORA: appearance SU: appe arance grazie ((laughing)) LORA: appe e arance ((laughing)) SU: l'hai fatto Dub? DUB: no... SU: lo sai fare? LORA: forse devono slogare e rilogare probabilmente. SU: che strano.questa cosa non è mai successa prima. LORA: no ultimamente a me succede con fenix e fra poco succederà sempre più spesso perché+1la Linden ci sta portando a usare tutti, tutti il +2uiver*, il uiver3 SU: +1sì*?...+2e allora è la volta*sì e io è la volta buona che non posso più venire su second life perché il computer non me lo regge LORA: il uiver 3? SU: sì LORA: eh sì è molto +1molto impegnativo* SU: +1allora Dub* DUB: sì SU: prova a staccare.chiudi tutto e ritorna.ok? DUB: ok. SU: ci vediamo. SU: Mia?...Mia? MIA: sì? SU: allora siccome tu ti vedi? MIA: sì SU: eh invece noi non ti vediamo.allora prova ad uscire.stacca.esci da second life e rientra.ok?</p>
<p>09.51</p>	<p><i>Dub logs off.</i></p>	<p>MIA: sì</p>
<p>10.10</p>	<p><i>Irina is offline.</i></p>	<p>SU: va bene ci vediamo fra pochissimo.eccola.intanto.beh intanto.Ita e Bea vi presento.beh.Gea e Helenita le conoscete già no? GEA: sì ci conosciamo ciao +1ciao Ita, Bea*ciao ITA: +1ciao* BEA: +1ciao*</p>

<p>11.08 11.09</p>	<p>ITA: haha SU: perfetto Dub ti vediamo! DUB: yay SU: Benissimo Mia, ti vediamo</p>	<p>SU: invece Lora non la conoscete..vuoi presentarti Lora?... HEL: non si sente nulla... GEA: non ha sentito?forse LORA: oh scusa.non avevo cliccato sul ((laughter)) sul pulsante GEA: ah ecco ((laughter)) LORA: allora.io sono Lora, sono italiana, ma vivo nella parte più meridionale d'Italia, in Sicilia.vivo a Palermo, sono insegnante e insegno matematica e scienze alle scuole secondarie di primo grado, ai ragazzi che hanno undici-da undici a tredici anni.e amo molto la natura e il turismo in natura..basta così? SU: sì LORA: oppure devo dire altro SU: no va beni+Issimo* LORA: +Ie voi, dove vivete.e soprattutto eh eh qual è il vostro corso.cosa studiate...((laughing)) non hanno capito la domanda?((laughter)) SU: se non se non chiedi uno per uno no. LORA: mi sembravano,allora Ita ITA: sì (XXX) Dublino e studio italiano qui LORA: sì.economia e commercio perché si chia-da noi si chiama così LORA: e ti piace?è una uno studio che ti piace? ITA: mi piace l'italiano ma il business no.</p>
<p>12.33</p>	<p><i>Su uses the laugh gesture</i></p>	<p>LORA: ((smiling)) non ti interessa è difficile studiare business se non ti piace.molto difficile.è una materia complessa ITA: ((laughter)) LORA: e tu Bea? BEA: eh sono studentessa di italiano e economia anche ma mi piace tutto le commercio e anche l'italiano ehm sono di Cavan ma abito a Dublino al momento perché studio a Dublino all'università ehm sì.è tutto ((smiling))</p>
<p>13.08</p>	<p>SU: (IM to MIA) tutto bene Mia? MIA: (IM) sì ☺</p>	<p>LORA: è un po' difficile parlare ((chuckles)) conversare in italiano.è una lingua difficile per voi? BEA: eh sì.sì per me ma ma mi piace LORA: bene.((smiling))e tu Mia?da dove vieni studi pure tu economia eh business ed economia? MIA: sì business internazionale e lingua italiana, sono moldo-moldava, abito a Dublino +e studio con Bea* LORA: +Ie sei venuta dalla Moldavia*ah perfetto.grazie.e quanti anni avete tutte e tre. MIA: venti</p>

14.58	ITA: Dub, vedo solo le gambe ☺	<p>LORA: venti.eh noi siamo un po' più grandi ((laughter))</p> <p>ITA: io dicio-ho diciotto anni</p> <p>BEA: e ho diciannove anni</p> <p>LORA: e Dub?Dab Dab.vuoi dirci qualcosa di te?...non ha capito che mi rivolgevo a lui</p> <p>SU: no.forse non ci ha senti-ci senti Dub?...Dub?</p> <p>DUB: mi senti adesso</p> <p>SU: benissimo sì</p> <p>DUB: ((smiling)) ok.mi chiamo Dub sono brasiliano e anche io abito a Dublino e faccio lo stesso corso che Ita, primo anno di io ho venti-ventisette anni</p> <p>SU: è il nonno del gruppo</p> <p>LORA: ((laughter)) allora è è una città internazionale Dublino.ospita molta gentedi molti paesi</p> <p>DUB: +1troppo internazionale sì*</p> <p>BEA: +1que-questo corso*</p> <p>LORA: ah.questo corso è proprio internazionale.</p> <p>BEA: sì perché è molti lingue non solo italiano, è possibile fare un'altra lingua lingua con commercio per esempio inglese o cinese o ...</p> <p>DUB: sì ma c'è ma c'è troppi stranieri a Dublino</p> <p>BEA: eh sì +1molticulturale*</p> <p>LORA: +1forse Dub è brasiliano* gli viene un po' più facile parlare in italiano</p> <p>DUB: yeah, pronunciare per me è un po' difficile.a me non mi piace come io pronuncio, pronuncioIo, pronuncio?</p> <p>LORA: pronuncio.sì</p> <p>DUB: eh pronuncio</p> <p>LORA: eh va bene +1si impara*</p> <p>DUB: +1 però per scrivere, per leggere penso che che è meglio</p> <p>LORA: ebbè è una lingua simile alla tua</p> <p>SU: eh è più facile.direi di sì.eh perché Dub hai detto che Dublino è una città TROPPO internazionale?... </p> <p>DUB: io?</p> <p>SU: eh.hai detto troppo</p> <p>DUB: sì ma perché c'è tanti stranieri</p> <p>SU: ma è negativo?</p> <p>DUB: non è negativo no.</p> <p>SU: ah ma troppo è negativo</p> <p>DUB: mol+1ti*</p> <p>BEA: +1molti*molti</p> <p>DUB: molti stranieri</p> <p>SU: eh volevi dire molto allora penso</p> <p>DUB: moltO o molti</p> <p>SU: molto molto</p> <p>DUB: quello che voleva dire</p> <p>SU: bravo ((laughter))ok sentite allora</p>
15.48	<i>Ita starts walking around the group</i>	
16.21	Ita: hahah	

16.38		diciamo che è l'ora forse di cominciare anche perché so che Helenita deve andare fra un po'
16.47		

Taks One: The Easter language task

Time	Scene description. Local chat and IM	Voice chat
16.47		SU: quindi cominciamo con la prossima festa.ragazzi qual è la prossima festa?in Irlanda e in Italia?è passato eh è passato Natale Capodanno la prossima cosa sarà. DUB: la pa+lsqua* ITA: +1 la Pasqua*
17.20	<i>Ita starts walking straight away. The camera is on Su, who is walking for a few seconds. Bea, Ita and Dub are walking around, so are the Italians. Mia doesn't move. Su starts walking towards the right spot. The students, except for Mia, are still walking around. Ita flies, which is the easiest way to see things and places.</i>	SU: ecco.quindi provate a vedere se trovate l'angolo della Pasqua.vedete che ci sono dei cartelloni in giro?guardate se trovate dov'è la parte della Pasqua e andiamo tutti lì... dovete cercare, camminare un po' eh.
18.03	<i>Ita is flying towards the right place.</i>	SU: acqua, acqua, acqua! HEL: ((laughter)) SU: acqua, acqua, acqua!brava Ita che vola...fochino fochino
18.17		ITA: cosa significa acqua, acqua, acqua
18.24		SU: significa che siete lontani.acqua lontano fuoco vicino.fuochino Ita fuochino..acqua...
18.36	<i>Bea and Dub are still in an area quite far from the right place. Walking is too slow and they don't run. Mia has not moved.</i>	
18.45	SU: (IM to MIA) vieni con noi Mia	SU: fuochino fuochino
18.49	<i>Dub and Bea are getting closer to Su, who is not in the right spot, yet.</i>	ITA: chi
18.55	<i>Gea is in the right place, Helenita is on her way and Su starts running towards it</i>	SU: io ((laughter)) HEL: ((laughter)) DUB: ((laughter)) ITA: ((laughter)) SU: no ci siamo.brava Ita.ci siamo.eccoci qua.
19.21	<i>Ita is flying to the spot. Bea is following Su and Ita.</i>	SU: allora.Ita c'è ecco che arriva..arrivano tutti.eccoci qui. GEA: eccola.ho visto l'ova io ((laughter)) HEL: ((laughter)) SU: ((laughter)) e la schiacciata.l'hai vista la schiacciata di Pasqua?..in omaggio alla Toscana. HEL: +1ci siamo tutti*?
19.40	<i>Everyone is on the spot except for Dub and Mia who are walking towards it.</i>	SU: +1ci siamo tutti*?vediamo.sì sì.Dub e Mia.siamo qui!eccoli.allora cosa vedete ne-Dub?((laughter))Dub?
19.59	<i>Dub enters a see-through building and gets lost</i>	ITA: ((laughter))

	<i>in it.</i>	SU: è entrato ((laughter)) HEL: ((laughter)) DUB: è che mio computer è troppo lento ((laughter)) SU: ah.ho capito ho capito non ti preoccupare SU: ((laughter)) devi uscire da quella ((laughing)) casa.gra-perfetto SU: allora.cosa vedetein questi cartelloni ragazzi? ITA: le uove SU: le uo? ITA: le uova SU: le uova perfetto.e anche +1delle torte di Pasqua*. DUB: +1cioccolata* SU: Helenita ci vuoi dire qualcosa su perché ti preferi-ti piace la Pasqua? HEL: allora.io ho scelto la Pasqua come festa di cui parlare di cui dire qualcosa perché vivo da da molti anni in una regione dell'Italia che si trova a sud, la Puglia, e in particolare proprio la punta estrema della Puglia, quella più a sud, quindi il Salento, e dove ci sono delle tradizioni legate alla alla Pasqua e in particolare alla settimana che precede la Pasqua, quindi quella che va sotto il nome di settimana santa e che è ricca di riti particolari, riti della comunità eh cattolica chiaramente ehm ITA: scusa cosa significa riti? HEL: eh i riti sono tutte le manifestazioni tutte gli come dire sì dico bene le manifestazioni legate alla celebrazione in questo caso di una festa ITA: oh HEL: un rito è una celebrazione eh.. che si ripetono, queste celebrazioni si ripetono uguali ogni anno nello stesso periodo quindi nella settimana santa ci sono dei giorni in cui si fanno alcune cose e sono tutte cose legate alla appunto alla celebrazione della della passione di Cristo.eh io volevo chiedere ah sì cosa è lo devo dire io o loro lo sanno cosa è la Settimana Santa SU: no volevo sapere se lo sapevano.lo sapete ragazzi cos'è la settimana santa? ITA: no BEA: no HEL: allora nella religione cattolica la settimana santa è la settimana che precede il giorno di Pasqua cioè il giorno della della resurrezione di Gesù Cristo e ed è la settimana in cui si celebrano tutti i momenti più dolorosi eh che che Gesù Cristo ha dovuto attraversare prima di
20.12 20.20 20.22	ITA: hahahahahahaaahaha	
20.40 20.42		
21.05	SU: PUGLIA SALENTO	
21.18 21.26	SU: SETTIMANA SANTA SU: RITI	
21.34 21.35	SU: RITI CATTOLICI	
21.48	SU: RITUALITA'	
21.50 21.52	SU: CELEBRAZIONI SU: RIPETUTE	
21.59	SU: COME LA MESSA	
22.14	SU: SETTIMANA SANTA SU: COS'E'?	
22.45	ANN: (IM) tippi?	
23.08	SU: LA SETTIMANA PRIMA DI PASQUA	

Appendix B – Transcripts

23.11	ITA: ciao annette	arrivare al giorno della resurrezione +1questo è secondo*
23.25	SU: ciao Annette	DUB: +1è questo che* non si mangia la la non si mangia +1la carne*
23.30	ANN: Ciao a tutti! Ciao Ita	HEL: +1la carne* esattamente difatti ci sono alcune diciamo prescrizioni alcuni obblighi diciamo così legati alla eh alla celebrazione di questa di questa settimana e tra questi c'è anche l'asti- la cosiddetta il digiuno e l'astinenza cioè ci si astiene si evita di mangiare la carne e quindi si mangia prevalentemente di magro il cosiddetto sì digiuno.in particolare il digiuno caratterizza il venerdì santo che corrisponde al giorno in cui eh Gesù è morto.quindi in quel giorno non si mangia la carne e ci sono ovviamente in Italia a seconda delle regioni delle zone ci sono anche dei cibi particolari che si consumano in queste in questi giorni della settimana santa quindi non è solamente la settimana santa il giorno di pasqua, ma subito dopo pasqua c'è il lunedì dell'Angelo che si chiama insomma in modo più popolare si chiama Pasquetta ed è una giornata eh caratterizzata cioè in cui le persone siccome incomincia ad essere primavera qualche volta a seconda di quando la Pasqua cade può essere già primavera oppure già voglio dire primavera inoltrata oppure può essere anche ancora non essere arrivata dipende da quando cade no?e..però insomma normalmente è il periodo un po' del risveglio anche della natura quindi il giorno di Pasquetta in Italia si usa andare a fare un picnic.andare a fare una scampagnata e mangiare all'aperto in compagnia..e voi prima magari di parlare proprio di qualche caratteristica
23.44	SU: digiuno	particolare della zona in cui vivo dei riti
23.48	SU: ASTINENZA	insomma che si usano dove vivo io voi
23.50	GEA: Annette ciao ☺)	conoscete qualche modo particolare per- cosa fate voi a Pasqua?Ita ad esempio, tu che cosa fai a pasqua?
24.00	SU: VENERDI' SANTO	ITA: +1(XXX)*
24.15	ANN: Ciao Gea!	HEL: +1no no no*no a scusa ti volevo rispondere.mi chiedi se durante la settimana santa si deve andare alla messa ogni giorno.no.non si deve andare alla messa ogni giorno.c'è nella settimana santa ci sono alcune celebrazioni che quelli che osservano diciamo eh... lo- vanno a messa in giorni particolari che poi ti dò.poi magari faccio domande a tutti anche a Ita
24.35	SU: LUNEDI' DELL'ANGELO	SU: scusa.scusate.scusate un secondo
23.40	SU: PASQUETTA	
25.11	SU: FARE UN PICNIC	
25.14	SU: UNA SCAMPAGNATA	
25.32	ITA: durante la settimana santa, si deve andare alla messa ogni giorno??	
26.06		
26.08		

26.39	SU: VENERDI' SANTO	HEL: sì SU: ma Ita, ma, questa domanda.ma perché in Irlanda si va a messa ogni giorno durante la settimana santa?non lo so. BEA: no ITA: anch'io non lo so ((laughter)) SU: ah BEA: no.no ehm..per venerdì ehm e ehm non sì sì ehm venerdì e e sabato no non sabato.domenica di Pasqua HEL: la domenica di Pasqua.ok BEA: sì.due volte HEL: solo+1il giovedì* SU: +1come in* Italia allora. HEL: e il giovedì non andate?perché il giovedì ad esempio in Italia si celebra l'ultima cena e quindi c'è un rito particolare che si fa durante la messa che è l'ultima cena che è la lavanda dei piedi.quindi si ricostruisce quello che Gesù ha fatto durante l'ultima cena cioè ha lavato i piedi a tutti i discepoli, quindi sull'altare eh si mettono dodici persone che vengono scelte insom-con criteri che possono essere i più vari e il celebrante si insomma ricordando il gesto che ha fatto gesù prima dell'ultima cena lava i piedi a tutti i commensali, a tutte le persone che sono lì riunite che devono eh praticamente interpretano le parti dei dodici apostoli.e poi c'è la messa con la, ed è il giovedì santo è una messa generalmente molto partecipata dai credenti, dai partecipanti.io volevo chiedere anche agli altri.Mia tu fai qualcosa di particolare, ci sono usanze particolari nel tuo paese per la Pasqua? Mia: no... HEL: non non festeggiate in modo particolare la Pasqua? Mia: no è come Italia. HEL: no.NON come l'Italia.perché in Italia avremo avremmo abbiamo le nostre usanze.nel tuo paese ci sono usanze particolari legate alla Pasqua? MIA: ehm.no ehm ovi colore.basta HEL: non non aver paura eh ((laughter))vediamo di capire che cosa ci vuoi dire SU: cioè.dici le uova colorate? HEL: ci sono le uova ah sì sì MIA: sì HEL: anche in Italia abbiamo le uova.e ma come riti religiosi non c'è niente di particolare che si faccia nel tuo Paese?... HEL: no.forse non MIA: è una celebrazione a chiesa.
26.50		
27.13	SU: la lavanda dei piedi	
27.19	SU: LAVANDA DEI PIEDI	
27.29	SU: IL SACERDOTE LAVA I PIEDI AI FEDELI	
28.20	SU: (IM to HEL) sempre a monosillabi lei	
28.51	ANN: Uova colorate. Bellissime	

Appendix B – Transcripts

29.31	SU: benedette	<p>HEL: sì?</p> <p>SU: ma le uova, Mia, le portate in chiesa?</p> <p>MIA: sì sì</p> <p>SU: quindi vengono BENEDETTE in chiesa?...</p> <p>MIA: sì</p> <p>LORA: per esempio in Germania so che fanno le cacce al tesoro cioè nascondono le uova colorate nel giardino e i bambini devono cercarle</p> <p>SU: in Irlanda no?penso di.sì o no?</p> <p>ITA: sì +1in Irlanda sì*</p> <p>BEA: +1no*</p> <p>MIA: poi andiamo a chiesa per uovi colori e per ... per acqua santa</p> <p>LORA: Mia è moldava quindi questa è la +1tradizione*</p> <p>SU: +1acqua* santa?</p> <p>MIA: sì</p> <p>HEL: eh si rinnova il fonte battesimale effettivamente a pasqua no?se non mi sbaglio +1si fa l'acqua* nuova sì sì a pasqua</p> <p>SU: +1è possibile sì*l'acqua santa nuova sì sì</p>
30.21	SU: ACQUA SANTA	<p>HEL: si deve fare la nuova acqua santa che deve che deve servire per l'anno</p> <p>SU: ma allora ha ragione Mia, è simile all'Italia perché anche noi portiamo le uova a benedire.+1almeno* da +2dalle parti*</p> <p>HEL: +1sì*</p>
30.31	ITA: uova colarate = le uova di cioccolato????	MIA: +2è simile* in Italia
30.39	SU: NO ITA	HEL: sì sì ecco.però infatti ci sono le uova eh si portano si consumano sia le uova di cioccolato ma anche le uova, le uova sode, no?si fanno le uova sode e molto spesso +1si* colorano e i bambini eh i bambini le io ricordo quando ero bambina andavo a scuola che tra i .. i lavoretti che si facevano a scuola per poi portarli a casa c'erano anche questo uova colorate che potevano essere uova che si rassodavano, sode e poi si coloravano con i pennelli oppure si svuotavano, quindi erano vuote e.. si si beveva l'interno, si faceva un buchino, si beveva l'interno e il guscio vuoto, intero, veniva dipinto tutto, disegnato, colorato.era, era divertente.poi si mettevano +2le uova colorate nei cestini*
30.44	SU: UOVA NORMALI ANN: No. Uova vere colorate	MIA: +1sì sì*
30.46	SU: SODE SU: COLORATE	SU: +2Dub tu che facevi*che si fa in Brasile, uguale?
31.09	DUB: sode?? SU: bollite SU: dure	DUB: non lo so.perché io io sono
31.13	ITA: sode?	
31.14	DUB: ok	
31.21	SU: sìiii anche ioooo	
31.31	ANN: Sì, anch'io	
31.45	SU: BATTEZZATO	

31.51	SU: NON PRATICANTE	battezzato e dopo anche fatto la comunione ma dopo non sono mai andato a chiesa e e mia madre è un po' religiosa e..lei va.penso che lei fine oggi anda a chiesa per per domenica di pasqua.però..è è non c'è non c'è una celebrazione grande..c'è una torta che è famosa dove io abito la città che io abito che è una torta con pesce e gambeta, come si dice sea food?
31.57	SU: VA	HEL: gamberetti?cioè salata non è dolce DUB: sì ma tutte quello tutt-frutti di mare!sì.è una torta con quello perché non si può mangiare la carne HEL: ah.quindi è una torta salata.una torta+1salata* DUB: sì.giovedì giovedì san.to? HEL: forse venerdì è più facile venerdì +1santo forse* DUB: +1sì.venerdì eh eh facciano quella torta con i frutti di mare e quello e anche la uova di cioccolato SU: che buona la torta salata però eh? HEL: eh.per esempio una torta salata famosa in Italia è la torta pasqualina che è fatta con della pasta sfoglia ripiena di eh ricotta e spinaci e poi con le uova sode dentro ed è una ed è una torta che è abbastanza diffusa però l'origine proprio l'origine di questa pietanza di questa torta salata è la Liguria.la torta pasqualina è tipica ((laughter)) della Liguria.è +1vero*!Su, parliamo di mangiare tanto DUB: +1ma* DUB: ma è una tradizione è in in Italia o solo in Puglia Puglia HEL: no no è abbastanza diffusa è una pietanza ligure, della Liguria.di Genova e dintorni che però poi si è diffusa in tutta italia anche in Toscana ma la facciamo anche in Puglia, quindi ci sono delle ricette in Italia che nascono come ricette regionali ma poi eh non l'hai ma mangiata Su?ma guarda!fra l'altro è anche molto facile da fare.quindi non è così complicata.certo un momento è molto facile da fare diciamo nelle sue semplificazioni.la ricetta originale non è semplicissima perché richiede una serie di strati di pasta e.. SU: ((laughter)) no.hai ragione Ita.una to-ma si chiamano torte anche quelle salate sai quelle che qui sono i pie in italiano si chiama torta ITA: ahh! SU: mm.torta salata però +1naturalmente* DUB: +1anche* anche in portoghese
32.22	SU: FRUTTI DI MARE?	
32.33	SU: ☺	
32.37	SU: TORTA SALATA	
32.41	SU: GIOVEDI SANTO	
32.45	SU: VENERDI SANTO	
33.09	SU: TORTA PASQUALINA	
33.26	SU: e parliamo di mangiare tanto per cambiare	
33.32	<i>Su uses a laugh gesture</i>	
33.41	ITA: ☺	
33.42	SU: ligure	
33.47	ANN: in Toscana c'è	
34.00	SU: sì	
34.03	SU: non l'ho mai mangiata ☹	
34.13	<i>SU uses the embarrassment gesture</i>	
34.24	ITA: una torta senza dolce??secondo me non è una torta!!!	
34.38	ANN: torta è neutro in italiano	

Appendix B – Transcripts

		<p>SU: perché voi copiate sempre noi DUB: ((laughter)) SU: ((laughter))scusa.quante volte lo dico.ok penso che DUB: copiamo.copiamo i portoghesi no?((laughter)) SU: ((laughter)) forse sì.ok scusami tantissimo Helenita ti taglio ti taglio la presentazione ma altrimenti non facciamo in tempo+lfacciamo* eh facciamo una corsa verso il carnevale che, vedo che Annette è venuta mascherata.bellissima. HEL: +lnon ce la+certo.non ce la facciamo. ANN: sì.sono attrezzata.anche perché non fa freddo.qui si muore. HEL: scusatemi vi devo veramente mi dispiace stasera non posso fermarmi per fermarmi con voi fino alla fine della della lezione quindi ci vediamo una prossima volta allora.va bene?un saluto a tutti e ciao.ciao Mia, ciao Dub, ciao Bea, ciao Ita, ciao Annette ciao a tutti ((laughter)) .ciao ANN: ciao!grazie ciao. BEA: ciao Helenita DUB: ciao! ITA: ciao grazie DUB: ciao! SU: grazie ciao grazie a te carissima</p>
35.28	SU: grazie mille Hele	
35.37	<p>SU: alla prossima <i>SU uses the ma ciau gesture</i></p>	
35.39	GEA: ciao Hele a presto ☺)	
35.46		
35.50		

Task Two: The Carnival language task

Time	Scene description. Local chat and IM	Voice chat
35.51		SU: ok.a corsa verso il il carnevale.il carnevale è vicino.lo avete visto dov'è?ecco seguiamo Annette.
36.00	<i>Everyone walks towards the area with signs, pictures and objects about carnival. Dub has problems moving.</i>	
36.03		<p>DUB: oh here we go BEA: ((laughter)) SU: ((laughing)) il povero.ti tippiamo Dub. DUB: sì BEA: ((laughter))</p>
36.29	<i>Everyone is in the Carnival area but for Dub who is stuck behind one of the posters.</i>	<p>SU: a no.sei arrivato presto questa volta...allora ragazzi eh queste due scatole sono sorprese di carnevale se potete potete se cliccate prendete dei regali..Dub ci sei? DUB: sì.sono qui però non riesco a SU: ecco ti vedo dietro al cartellone DUB: sì ((laughter)) SU: ((laughter)) ANN: c'è un po' di rallentamento stasera.</p>

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37.04 37.17	<i>SU tps Dub</i> <i>Ita is wearing some of the surprises contained in the carnival boxes. The other students are not.</i>	SU: sì sì.no poi lui ha un po' di problemi questa sera con il...con il computer...eccolo!prego Annette. DUB: grazie
37.22		ANN: allora.innanzitutto qualcuno sa qualcosa del carnevale?immagino Dub sia un esperto come sono un'esperta io.
37.41	<i>Ita is still taking presents from the carnival boxes.</i>	DUB: sì((laughing)) Susanna eh parlava su carnevale due settimane fa penso e io non sapeva de tutta la istoria.ho imparato con lei ((laughter))
37.42	<i>Su uses a laughing gesture</i>	SU: Dub però voi avete un carnevale famosissimo! ANN: eh appunto DUB: no sì però quella istoria che la carne che penso che era tu che parlava di questo con noi SU: penso di sì.+1può darsi* ANN: +1sì.è legato* alla pasqua comunque DUB: yeah quello quello non lo sapevo ANN: sì +1infatti* DUB: +1la istoria* del carnevale ANN: sì sì diceva che è legato alla pasqua sono praticamente sette settimane prima, comincia il carnevale sette settimane, la domenica la septuagesima come diciamo in italiano prima di pasqua e è una storia lunghissima addirittura le prime le prime celebrazioni eh sono state addirittura ai tempi romani e forse quelli degli degli etruschi.quindi la storia è è.. ANN: sento tantissimi rumori non so perché.anche voi?+1oh*chi +2era*? DUB: +1no* LORA: +2dobbiamo spegnere* tutti quanti il voice (XXX) ANN: o ecco.perché io.ecco adesso sì.prima non riuscivo nemmeno a sentirmi. ANN: ok dicevo eh ci sono tantissimi tipi diversi di celebrazioni.voi ne conoscete qualcuno?Mia ad esempio...Mia conosci qualche forma.di.celebrazione del carnevale?...Mia? Su: no Mia non ti sentiamo.avevi spento il microfono forse?... ANN: ok Ita ad esempio?in Irlanda c'è qualche modo in cui si festeggia il carnevale?in Italia ce n'è tantissimi. ITA: non sono il carnevale in Irlanda. ANN: non c'è carnevale in Irlanda.ok.allora in Italia dicevo ci sono tantissime feste il periodo comincia sette settimane prima di Pasqua e finisce
38.09	ITA: sì ☺	
38.31	SU: (IM to ANN) fa' parlare Mia e Bea se puoi ☺	
38.51		
38.57		
39.02	SU: no	
39.03	ITA: no	
	SU: il mio è spento	
39.08		
39.31	MIA : mi senti?	
40.05	MIA: mi puoi sentire ora?	
40.11	SU: no, Mia. Scrivi	

40.35	SU:	martedì grasso		ovviamente con il mercoledì santo,
40.41	SU:	MERCOLEDI DELLE CENERI		martedì santo mardi gras famoso martedì
40.41	ITA	pancake tuesday???		gras in tutto il mondo in italiano è
40.42	MIA	non c'è carnevale nel mio paese ☺		martedì grasso e poi invece c'è il
40.50	SU:	NO????? ☹		mercoledì delle ceneri.ci sono tre tipi
				fondamentali di carnevale, ci sono le
				celebrazioni storiche,
				ah non c'è carnevale nel tuo paese.ho
				capito.va bene, magari ci sono delle
				celebrazioni storiche simili.perché in
				realtà nel nostro carnevale ci sono
40.58	MIA	un festival di vino		celebrazioni di vario tipo.dicevo ah uno è
41.03	SU:	SI' ITA		sono le celebrazioni storiche.per esempio
41.07	SU:	FESTIVAL DEL VINO	BELLO	conoscete Venezia, il carnevale di
41.12	MIA	settimana ubriaco ☺		Venezia?qui ci sono moltissime foto del
				carnevale di Venezia.
41.15				BEA: sì il carnevale di Venezia è più
				famoso
				ANN: esatto è una ricostruzione storica
				del '700 in pratica poi era sperita ed è
				ritornata in voga rispetto l'han rifatta mi
				pare dopo la seconda guerra mondiale
				negli anni '50 '60 quindi ci sono queste
				bellissime maschere che sfilano per tutta
				Venezia ed è soprattutto mi pare è
				cominciato domenica scorsa il carnevale
				di Venezia e finirà con il martedì grasso
				SU: Annette, scusa se ti interrompo,
				parlando appunto del carnevale di
				Venezia vedete le foto che ci sono qui del
				Carnevale ragazzi?tutte queste foto sono
				maschere fatte veramente fatte a mano da
				Kajal e Daxim...ve li ricordate?
				BEA: sì sì mi piace il masche
				SU: eh le hanno fatte +1loro*
				BEA: +1ho molte* maschere
				SU: maschERE
42.24	ITA	in RL?		BEA: maschere.ho molte maschere
42.26	SU:	MASCHERE		SU: in real life sì Ita le hanno fatte loro
				queste sono foto delle loro maschere.
42.37	ITA	Woah		ANN: partecipano tutti gli anni al
				carnevale allora
				SU: sì preparano le maschere e
				partecipano al carnevale e infatti il
				prossimo anno io prenderò le maschere
				da loro.sono bellissime eh
				ANN: veramente.veramente molto
				belle.le avevo viste oggi quando ero
				venuta e mi sono sembrate
43.02	SU:	SPETTACOLARI		straordinarie.quindi questa è una
				ricostruzione storica, l'altra è quella di
43.16	SU:	COSA FANNO A IVREA?		Ivrea poi facciamo una bella battaglia con
				le arance eh?dopo (XXX)abbiamo, allora
				a Ivrea fanno una famosa battaglia in
43.22		<i>Su activates a screen with pictures of the carnival</i>		pratica ci dovrebbe essere un pannello se
				non mi sbaglio, vediamo un po' se lo
				trovo
				SU: eh.aspetta perché

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43.34		ANN: eh. SU: in teoria lo dovrebbero sapere eh ragazzi vi ricordate cosa fanno al carnevale di Ivrea? ITA: chi è l'Ivrea? SU: Ivrea è una città e c'è un carnevale particolare con della frutta ITA: +1ah sì*tirano le arance? BEA: +1uh sì*
43.49		SU: ((laughter)) proprio così.sì
43.50		ANN: esatto esatto ora ve le tiro anche io eh un momento se aspettate un momento
44.02	<i>Bea and Ita follow Annette to the orange thrower</i>	se riesco.vedete questo allora guardate seguitemi bene questa è uno dei avevo ricostruito l'anno scorso per eh una mostra sul carnevale.questa cosa qui se
44.18	<i>Ita is the only one who is able to do it. Using objects was done in the preparation to SL but some students have problems with their line, computer etc. and possibly the language.</i>	cliccate qui potete prendere una un'arancia.se la indossate poi la potete tirare.vediamo un po' se ci riesco.se mi ricordo come si fa.non mi ricordo come si fa...Su come si fa? SU: allora.dovete cliccare sul l'aranciometro poi andare view mouselook e poi tirare le arance a chi volete ANN: come si fa a +1tirarle*? BEA: +1dove*? SU: mouselook ITA: dov'è mouselook SU: view.mouselook..vedi in alto view?poi mouselook brava e poi punti e tiri le arance a qualcuno.eh che bella battaglia! BEA: oh! SU: ((laughter))il povero.il povero Dub si sta beccando un sacco di aranciate..Mia io le tiro a te!...avete capito come funziona? Bea hai capito? ANN: qualcuno ce l'ha SU: io...devi eh Ita hai fatto mouselook? ANN: Ita sta tirando SU: eh.poi dopo devi.vedi c'è un un piccolo quadratino al centro, devi mirare su una persona e tirare l'arancia.Bea vedi che ti tiro le arance? BEA: ((smile)) ANN: Ita ha fatto SU: hai pro-Ita prova a tirarmene una a me ANN: Ita vuoi spiegare tu agli altri come come fare? ITA: mi senti? ANN: sì perfettamente ITA: come si esce di mouselook? ANN: esc ITA: ah ANN: i es ci ITA: ho capito
45.20	<i>While some people are throwing oranges, Dub goes to the carnival posters, probably to read them.</i>	
45.44	ITA: come si tira?	
45.50	ITA: io no	
47.23	SU: ESC	
47.24	SU: E POI DETACH	

47.42	<i>Su uses the laughter gesture</i>	ANN: ok. allora in pratica in si picchiano con le arance.tutti gli anni ci sono un sacco di feriti.vanno all'ospedale.(XXX) molto medievale diciamo così. SU: sì ANN: detach oppure da dove hai indossato, lo togli.come l'hai indossato?ok poi +1quest* ITA: +1dov'è* detach SU: sull'ar+1ancia Ita* ANN: +1se vai su inventory c'è ordina snowball thrower sono una delle cose delle recenti e quindi fai eh detach SU: fatto ANN: ci sei? SU: sì sì sì ITA: sì
48.13		ANN: allora.questo è il primo gruppo di
48.14		carnevali quindi le ricostruzioni storiche.sia Venezia che Ivrea sono ricostruzioni storiche.poi altre cose interessanti sono invece i riti cosiddetti
48.40	<i>Everyone moves to the posters with the Sardinian carnivals, with Annette. All but Bea, Dub and Mia.</i>	riti apotropaici.i riti apotropaici ad esempio quelli dei mamuthones, i (XXX)
48.46	SU: RITI APOTROPAICI	i mamuthones in Sardegna qui sono dei riti che servono per far arrivare la primavera.e ci sono in vari luoghi d'Italia sono (XXX) delle maschere e dove in pratica si cerca di mandar via il cattivo tempo e si cerca di far tornare la primavera.sono collegati con i riti della primavera.ehh esatto sia in Sardegna invece c'è l'altro (XXX) e sono quelli dei del..eh...il diavolo.quindi il diavolo a Tufara nel (XXX) e li cacciano una persona eh per che sembra il diavolo e poi la sera del martedì grasso bruciano il la figura del diavolo (XXX).e quindi è di nuovo sono questi riti per far venire la primavera.sono riti antichissimi.di origine prima che medievale proprio sono sono eh riti riti...primitivi si vede benissimo dalle immagini sono maschere...
48.50	SU: IN SARDEGNA	
48.51	<i>Bea moves towards the group</i>	
48.53	SU: E ALTRI POSTI	
48.59	SU: PER FAR VENIRE IL BEL TEMPO	
49.08	SU: MAMUTONES	
49.18	SU: DIAVOLO	
49.20	ITA mamutones?	
49.26	SU: VEDI LA FOTO ITA	
49.36	<i>Su moves towards the poster</i>	
49.39	SU: QUI DAVANTI A ME	
49.43	SU: MAMUTHONES	
49.49	<i>Ita moves to the poster</i>	
	SU: SONO MASCHERE	
	SU: UN PO' SPAVENTOSE	
50.11	<i>Mia moves towards the posters.</i>	ANN: se andate alla Sardi in Sardegna qui su Second Life potete prendervi una maschera di dei mamuthones SU: infatti.sì SU: e poi quando andrete in Sardegna, Mia e..Bea andranno in Sardegna il prossimo anno, vedranno i mamuthones dal vero. ANN: dice sia affascinante io non l'ho mai visto.+1(XXX)* SU: +1mah.io li ho* visti in video e fanno cioè sono un po' particolari eh.

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50.36	SU: SCACCIARE L'INVERNO	ANN: sì è tutto un movimento particolare nelle vie della piazza ma lo scopo è sempre quello è quello di eh scacciare l'inverno i i momenti cupi e far tornare la primavera.+lpenso però*che cose del genere le abbiate anche voi nei vostri paesi, Bea? SU: +lcapito Bea?*
51.05	SU: GUARDA LA FOTO BEA	BEA: scusi? SU: hai capito che in Sardegna ci sono i Mamuthones? BEA: no..cosa significa mamuthones. ANN: sono è il nome di alcune di personaggi son dei personaggi con delle maschere che spaventano eh BEA: oh
51.33	<i>Mia moves closer to the poster</i>	ANN: guarda la foto qui.io credo che se cliccate sui pannelli se ancora funziona potete prendere dei notecards sia in italiano che in inglese.cliccate su tutti i pannelli.ci sono le notecards SU: l'hai vista vedi Mia e Bea voi che andate in sardegna se vedete nella foto vedete le fotografie di queste maschere un po'... spaventose.
51.42	SU: SPAVENTOSE	MIA: sì SU: eh.quando sarete a Sassari a a carnevale spero che ci sia una sfilata dei mamuthones.
51.55	SU: SFILATA	DUB: dove dov'è Tufara? ANN: Tufara è in Molise, nel centro Italia sai dov'è il molise?sotto l'umbria.è una piccola regione
52.03	SU: MOLISE	e perchè quan-quan-non ho capito l'istoria del carnevale del perché c'è
52.08	SU: SOTTO L'UMBRIA	ANN: se clicchi comunque sulla sul carnevale di Tufara trovi la notecard.allora praticamente tutto il paese caccia un diavolo un personaggio che è vestito da diavolo e praticamente tutti lo cacciano e poi lo prendono e dicono di buttarlo giù c'è una rupe una specie di di montagna lo buttano giù da lì ovviamente non il personaggio vestito da diavolo ma un pupazzo e poi un altro gruppo lo prende e l'ultimo giorno di carnevale lo bruciano.il diavolo è un po' il simbolo dell'inverno.+lsono riti per la+primavera
52.22	SU: VAI ALLA FOTO	DUB: ah.ok.+l e che*ma c'è anche c'è anche la morte come personaggio
52.46	SU: CACCIANO IL DIAVOLO	ANN: sì c'è anche la morte come personaggio è uno dei dei è ovvio tutto è per cacciare il brutto l'inverno la morte e far tornare la primavera.son tutti mascherati..
52.50	SU: E LO BUTTANO DALLA MONTAGNA	SU: e poi si mangiano questi dolci che vedete qui per terra.
53.03	SU: SIMBOLO DELL'INVERNO	ANN: questo si mangiano in Toscana, si
53.28	<i>There's a large picture of the carnival</i>	

		<i>biscuits on the ground</i>	<p>mangiano le chiacchiere sono o o cenci SU: le frappe a roma sono tutte si mangiano anche in Sicilia Lora? ANN: sì LORA: sì, +1 si chiamano le zeppole* da noi SU: +1 come si chiamano?* come? LORA: zeppole. SU: le zeppole ANN: ((laughter)) LORA: ma sono fatte con lo stesso procedimento. SU: sì DUB: zeppole LORA: a roma credo che le chiamano e frappe SU: le fra e frappe sì LORA: le chiacchiere sì sì esatto DUB: no ho +1 cosa significa cenci* BEA: +1 trovo la storia molto interessante* SU: sono questi Dub +1 questi* ANN: +1 sono tutti* nomi degli stessi degli stessi dolci SU: guarda la foto dove sono io DUB: (XXX) LORA: Dub sono i nomi locali nelle varie regioni +1 degli stessi biscotti* DUB: +1 ah ok* SU: dello stesso tipo di dolce DUB: ((laughter)) SU: perché come sai l'italia ha nomi diversi per una cosa venti nomi diversi venti regioni diverse e co- come si pronuncia lo primo? cenci? SU: cenci DUB: cenci SU: i scenci ANN: i scenci giusto ((laughter)) in toscana ITA: ((laughter)) DUB: ((laughter)) ANN: ok. l'ultimo tipo di carnevale è il mio favorito perché la manifestazione più famosa è quella della mia città e sono i carnevali cosiddetti di cartapesta ovvero sono degli enormi carri allegorici che attraversano le vie della città e sono soprattutto dei carri, cioè delle costruzioni di tipo politico o per ridere sulla politica sulla sul di nuovo sul brutto dei tempi normalmente LORA: satirici. satirici ANN: satirici. esatto appunto satirici. il più famoso in italia è a viareggio che è anche il più antico di questo genere del 1873 ma ce ne sono tantissimi. in sicilia è molto bello c'è quello di acireale credo</p>
53.54	SU: ZEPPOLE SU: CENCI SU: FRAPPE SU: CHIACCHIERE		
55.16	SU: (IM to BEA) come va Bea? Capisci?		
55.20	SU: (IM to BEA) domanda se non capisci		
55.30	SU: satirici		
55.33	<i>Ita is not there any longer</i>		
55.35	SU: SATIRICI		
55.40	SU: VIAREGGIO SU: 1873		

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55.45	SU: SICILIA AD ACIREALE	LORA: sì sì il carnevale di acireale e quello di termini mi pare se non ricordo ma di termini (XXX)
55.49	SU: TERMINI	ANN: eh ma ce ne sono tantissimi da noi sono enormi i carri forse la differenza è quella arrivano fino a 30 metri quest'anno
56.05	SU: 30 M DI CARRO	LORA: i nostri sono pure molto grandi ma il carnevale di viareggio è in-insuperabile per la grandiosità.e per bellezza
56.15	SU: DURA 5 SETTIMANE ☺))	ANN: e poi dura tantissimo perchè comi-dura praticamente cinque settimane LORA: mamma mia! ANN: sì finiamo il 3 di marzo quest'anno quindi LORA: ad acireale +1ad acireale*i carri di +2cartapesta con i fiori* DUB: +1cinque settimane!)* SU: +2sì caro Dub.andiamo tutti al carnevale.partiamo la prossima settimana ANN: a viareggio è iniziato con i carri con i fiori e c'è ancora un rione che lo fa.i primi erano carrozze che sfilavano con i fiori ma ora sono diventati talmente grandi e tutto in movimento che sono con la-forse avete visto il video ragazzi? SU: hanno visto qualcosa del-no tutto il video no ANN: ah SU: hanno visto qualcosa del carnevale però sì..una solo video brevi ANN: avete qualcosa di simile nelle nei vostri paesi...Dub su per forza tu +1a rio!andiamo!*((smiling))
56.49	BEA: (IM) va bene, no lo so se è maleducato a parlare quando gli altri persone sono parlare. è va bene a detto le cose penso? sì o no? non lo so	DUB: +1sì sì*((laughter)) in brasile pensavo che che era più grande del mondo ma adesso non lo so ANN: beh è diverso il frambodromo da noi è su su due viali paralleli sono forse come dimensioni è lo stesso sai DUB: sì ma io non son mai andato a a rio de janeiro e penso che là è è troppo bello c'è un vestimento e e..mettere troppo soldi per per per fare carnevale là. SU: ah ANN: +1beh ma hanno anche tantissimi turisti* DUB: +1io penso penso così*sì ma penso che oggi ah il carnavales è è legato con con con ah...le è ah non lo so come dire ANN: è una cosa economica?+1soldi*? DUB: +1sì,no è anche e anche*la figura femminile no è no è +1vista* SU: +1ah* DUB: no lo so come dire esplo-esplora esplorano? SU: no.exploited.sfruttano?
57.12	SU: (IM to BEA) no no non è mai maleducato parlare quando gli altri parlano ☺))) <i>Mia is coming closer to the group</i>	
57.17	SU: (IM to BEA) non in italia parla parla:DD	
57.33	BEA: (IM) ok, mi dispiace	
57.40	SU: (IM to BEA) non ti preoccupare	

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58.34	SU: sfruttano	ANN: sfruttata.
58.37	SU: sfruttare	DUB: sì
58.44	SU: il corpo femminile	SU: il corpo femminile? DUB: sì io penso che è un po' esagerato SU: mm DUB: ma quando è là c'è tutta una istoria tutto il [inglese]costume?sono là per un c'è una ragione perché contano la istoria SU: ah ho capito.tutti i costumi? DUB: sì forse sul brasile, su religione su italia su emigrazione su sempre su un topico importante BEA: annette ehm ho una domanda per te eh ho sento che il carnevale è molto violento o un po' pericoloso è vero o falso ANN: a viareggio?no.((laughing)) assolutamente no.ci sono i bambini dappertutto.no quello che stupisce di solito gli stranieri è che non ci sono transenne.cioè i carri sfilano in questi due grandissimi viali e non ci sono ehm barriere tra il pubblico e i carri ma non è pericoloso perché vanno pianissimo e quindi..poi è pomeriggio,c omincia alle 3 finisce alle 5, ci son tutti i bambini no.a viareggio no assolutamente no. BEA: è non violento ANN: no no no è contro la violenza ci sono sfilate a piedi anche da noi ci sono persone mascherate di solito legate al tema del carro BEA: ah ok ANN: sì no no no.ci sono ma è una festa per i bambini
59.25	SU: argomento	BEA: la mia cosa preferita del carnevale è è le maschere e ho molti maschere eh a casa è perché eh...un paio di anni fa è ritorna eh a una vacanza in italia e lei mi ha dato una maschera che non lo so eh lei aveva comprato per me in venezia e è stata bella e e.. l'anno scorso quando sono andata a roma ho speso troppo soldi su una maschera anche ma è secondo me è molto bello e.. non ho ((laughing)) non ho i soldi per la ma ..è è bella
59.55	SU: TRANSENNE	ANN: sì sono bellissime, quelle di venezia sono molto molto belle.tutto il carnevale di venezia è ricchissimo anche i costumi.invece il nostro è molto popolare quindi c'è una differenza enorme come costumi.i nostri sono fatti con raso pannolenci con il peluche perché fa caldo ((laughing)) ma è un è un carnevale popolare fondamentalmente invece
1.00.10	SU: (IM to LORA) siamo in ritardo ☺ come al solito	
1.00.20	LORA (IM) non ti preoccupare è normale	
1.00.32	SU: (IM to GEA) gea, mi sa che dopo facciamo ognissanti, forse il tuo salta☺	
1.00.32	<i>Ita is back online</i>	
1.00.34	LORA: (IM) per ogni tema da sviluppare ci vuole tempo	
1.00.39	SU: (IM to GEA) non è un problema?	
1.00.56	LORA: (IM) anzi mi sembra che stiano interagendo	
1.00.56	GEA: (IM)assolutamente no ☺)	
1.01.06	SU: (IM to LORA) infatti quello è l'importante	
1.01.24	GEA: (IM)anche perché devo andare tra pochissimo però mi è piaciuto tanto	
1.01.28	SU: (IM to GEA) va quando devi ☺	
1.01.38	ITA: (IM) mi spiace, sono caduta .. ke cazzo!!	
1.01.40	GEA: (IM) certo ☺	

1.02.03	SU: (IM to ITA) basta che tu non ti sia fatta male	venezia è ricchissimo. BEA: sì ma è non possibile eh a usare il mio maschere in irlanda ((laughter)) ANN: no?in irlanda no?+1non ci sono feste*feste nelle case o nei negli alberghi?da noi ci sono i cosiddetti veglioni negli alberghi ad esempio SU: ah+1per halloween* BEA: sì.ehm..per eh il mio eh festa per eh 21 eh quando ho ventuno anni vorrei una festa di con maschere eh... perché...sarò ehm ventuno quando in italia l'anno prossimo
1.02.30 1.02.32	ITA: (IM) what? SU: VEGLIONE	
1.02.47	SU: (IM to ITA) non ti vediamo Ita	
1.02.57 1.03.02 1.03.06	ANN: festa mascherata SU: AH SI' QUANDO? ITA: (IM) cosa vuol dire, basta che tu non ti sia fatta male	ANN: benissimo!organizzati , fai tutti gli inviti feste mascherate a tema BEA: sì a sardegna ANN: benissimo.sì. BEA: e...vorrei eh miei amici ehm in Irlanda e a vadano in italia per la festa SU: quando è il tuo compleanno bea BEA: aprile SU: che bello!organizziamo un viaggio a sassari BEA: sì e va bene perché eh un'altra ragazza eh si chiama daria eh lei è è non lo so cinque giorni ehm vicino il mio compleanno +1e così*lei ha.sì.è possibile abbiamo una grande festa per lei e per me ehm perché normale per tutt ehm per noi perché ehm sono ehm non se l'anno scorso ehm.. abbiamo una festa non lo so toge-insieme un festa per due non lo so in inglese è joint party SU: +1ah davvero?*
1.03.17	SU: (IM to ITA) as long as you didn't hurt yourself non ti vediamo fa' appearance	SU: sì una festa insieme, una festa doppia BEA: sì e vorrei ma SU: ma daria ha la stessa età tua?avete+1gli stessi*anni? BEA: +1sì* SU: ah.ok BEA: sì SU: bello allora BEA: sì penso che una buona idea ehm sì SU: allora il prossimo anno prendiamo le maschere di kaja e di daxim poi veniamo tutti a sassari al caldo ad aprile +1poi veniamo* alla festa tua del ventunesimo BEA: +1((laughter)) ANN: +1eh sì*io ho una bellissima maschera tipo charleston un costume da charleston ma è troppo freddo da indossare qui ((laughter)) SU: eh febbraio è freddo ancora eh...Ita ci senti adesso?scusa eh annette perché ita ha+1dei problemi*mm mm ANN: +1sì ho visto che ha problemi*
1.03.40 1.03.47 1.03.50	ITA: (IM) sto provando nn sent niente ITA: (IM) *sento SU: (IM to ITA) esci e rientra riprova	
1.04.58	<i>Ita is back online</i>	
1.05.23 1.05.07	SU: ventunesimo	

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1.06.11	ITA: ciao	SU: ci senti Ita? ITA: sì.sì vi sento. SU: ti vedi?ti vedi? ANN: io non la vedo è tutta una nebbia. SU: +1noi ti sentiamo molto bene* ITA: +1 mi senti *e mi vedi SU: prova control alt erre o appaerance appearance GEA: io vi rubo solo un attimo pr salutarvi perché devo andare e SU: grazie mille Gea di essere venuta qui con noi GEA: vi saluto tutti alla prossima volta.ciao.ciao ciao ANN: ciao Gea DUB: ciao SU: ciao gea BEA: ciao grazie! GEA: ciao ANN: Mia e tu c'è niente di simile nel tuo paese? SU: ma hai visto Mia ha detto che fanno la festa che bevono una settimana.la festa del vino. MIA: sì è un festival di vino. LORA: un po' come l'oktober fest MIA: sì +sì*((laughter))anche è bellissimo LORA: +1festa della birra* SU: quando è Mia. MIA: con vino SU: in che mese.Mia MIA: ottobre SU: eh allora è tipo oktober fest sì.
1.06.23		
1.06.26		
1.07.06		

Task Three: All Souls' Day language task and Wind-Down part

Time	Scene description. Local chat and IM	Voice chat
1.07.07		SU: ok visto che abbiamo poco tempo ancora andiamo al ognissanti eh lasciamo perdere il natale e il capodanno tanto li conoscete e Lora ci parlerà della festa di non ognissanti ma la festa dei morti.vi ricordate ragazzi quand'è il giorno di ognissanti?
01.07.37	SU: ognissanti	ITA: il primo novembre LORA: brava. SU: brava sì.il primo novembre LORA: faremo la festa dei morti dopo ognissanti e quale festa avete voi il due novembre?... DUB: in brasile non c'è niente LORA: eh ma in irlandà sì ((laughter)) SU: non il due LORA: in irlandà SU: è il 31 ottobre

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01.08.25	<i>Everyone is moving to the spot for all dead.</i>	<p>LORA: ah io +1credevo* +1non c'è* sì ha ha a LORA: h nel passaggio del 31 ottobre e l'uno novembre, giusto? SU: mm +1c'è una festa* LORA: +1da noi invece* e poi è posticipata di una giornata.qual è questa festa? ITA: halloween DUB: halloween LORA: eh.esatto.halloween.allora se ci spostiamo possiamo fare meglio il discorso.che dici Su. ANN: ti seguiamo LORA: ok SU: sì sì veniamo dietro a te vai LORA: ok se lo trovo ((laughter)) (XXX) SU: se lo ritrovi.se no lo tro- ((laughter))Dub ti tippo ti tippo DUB: grazie ((laughing)) LORA: ho perso dov'è SU: oddio non mi ricordo più.aspetta eh. BEA: ah!sugar! SU: ((laughter)) un momento che arriva.dov'è dov'è dov'è..un attimo che vi.lo cerco ((laughing))</p>
1.08.45	<i>Ita and Mia are running, Lora is flying,</i>	
1.09.04	<i>Su is flying, Ita is flying. Su flies to the place.</i>	
1.09.29	<i>Su lands in the spot. Lora is there already. The area has been set up like a cemetery and has posters with different photographs. Su teleports the others.</i>	
01.10.47	ANN: Cimitero <i>Ita gets closer</i>	<p>ANN: ci eravamo perse ((smile)) SU: sì anche io ((laughter)) nonostante li abbia messi io i posti.spostatevi che state cadendo uno sull'altro ((laughter)) ci siamo tutti?si.mi pare di sì.eccola. LORA: eccoci. ITA: non vedo niente. SU: veramente?hai problemi con la linea oggi Ita eh? ITA: dove sei? SU: sono..di fronte a te. ANN: girati.girati BEA: ((laughter))+1mi sento che*sono in un ehm vampire diaries ((laughter))su second life ANN: +1così.ok* SU: ((laughter)) esatto e anche +1io BEA: +1son Bea un vampiri Barbie vampiri ((laughter)) SU: ((laughter)) Bea io ho anche i denti da vampiro eh nell'inventario ((laughter)) BEA: ((laughter)) SU: come va Ita vedi un pochino adesso? ITA: un pochino sì SU: sì ITA: ma poco +1(XXX)</p>
01.11.02	<i>Mia comes closer</i>	

1.11.43		SU: +lok* è un po' lento sì ANN: io ora ti vedo bene Ita eh ITA: sì *lannette ti vedo* SU: sì +l anche io la vedo* molto bene ITA: io non mi vedo ma annette ti vedo.e anche lora.ma ANN: per me compari perfettamente cappello e maschera incluse ((smile)) SU: anche per me l'importante è che tu veda le foto eh ita ITA: sì sì vedo le foto SU: perfetto LORA: fra poco fra poco rezzerei tutto SU: ok lora grazie allora poi se vuoi puoi cominciare
1.11.46		LORA: ok.allora quando su mi ha proposto di fare questa serata io ho pensato che noi avevamo una cosa in comune che è questa festa dedicata ai morti.voi avete halloween e noi abbiamo questa dei morti.la festa dei morti è una festa, non è una festa nazionale, cioè nel calendario.più che altro è la festa di ognissanti che viene festeggiata questo è il momento in cui vengono commemorati i defunti.ma la festa de di ognissanti è il momento in cui vengono celebrati insomma tutti i santi che non sono in calendario.in realtà la festa più importante a livello popolare è la festa dei sa dei sa dei morti che si celebra il due novembre.per noi praticamene è una festa strana perché è una festa che è un mix tra la la una le feste antiche pagane e la festa cristiana che poi le ha sostituite perché non è uguale sul tutto il territorio nazionale.ogni regione la vive a modo suo anche perché noi in italia siamo ci siamo unificati centose
01.12.19	SU: DEFUNTI <i>Ita runs around the place to look at the pictures</i>	centocinquant'anni fa ma venivamo, tutte le regioni venivano da situazioni storiche e culturali completamente diverse.io sono siciliana e la sicilia faceva parte del regno delle due sicilie che era un regno borbonico e che era un regno spagnolo e gli spagnoli da noi sono stati molto importanti perché ci hanno lasciato molte tradizioni.soprattutto nel festeggiare le feste popolari sia per i santi patroni sia per per le celebrazioni appunto del natale della pasqua oppure appunto per la commemorazione dei morti.e da noi viene vissuta come un momento molto bello di festa in cui i bambini diventano protagonisti perché secondo la tradizione nella notte del due novembre si aprono
01.12.37	SU: 2 NOVEMBRE FESTA DEI MORTI	ITA: scusa lora cosa significa protagonisti?
01.13.01	SU: UNIFICATI 150 ANNI FA	
01.13.17	SU: REGNO DELLE DUE SICILIE	
01.13.27	SU: DOMINAZIONE SPAGNOLA IN SICILIA	
1.13.50		

01.13.57	SU: PROTAGONISTA	LORA: protagonisti vuol dire che stanno al centro della attenzione sono i più eh i personaggi primari
01.14.08	SU: AL CENTRO	ITA: ho capito
01.14.09	DELL'ATTENZIONE	LORA: chiaro?
01.14.10	SU: I Più IMPORTANTI	ITA: sì
	ANN: personaggi principali	LORA: importanti sì sono le persone più importanti a cui la festa è destinata.eh.posso eh su glielo posso dire in inglese?
		SU: certo che no
		LORA: no((laughter))
01.14.38	ANN: lol	SU: no.proibito.((laughing)) l'inglese è proibito.no non ci sonoproblemi spieghiamo con parole più semplici in italiano.ragazzi se avete qual-se non capite qualcosa fate come Ita chiedete.interrompete.+1 va benissimo*
01.14.49	ITA: ☺	LORA: +1sì è stata brava Ita*è stata brava Ita a interrompermi.e allora.perché sono protagonisti i bambini?perché la festa dei morti eh tramanda una tradizione, la tradizione che nella notte del due novembre si aprono le porte dell'aldilà e i morti entrano in contatto con i vivi.allora eh i genitori spiegano ai bambini che durante la notte verranno i morti di famiglia, i nonni, i parenti a portare dolci e regali per i bimbi per i bambini e però raccomandano loro di non aprire gli occhi durante la notte, di non svegliarsi perché se i bambini sono svegli i morti gratteranno loro i piedi.grattare i piedi è una cosa terribile e i bambini hanno paura e allora molti in molte case nascondono la grattugia per il formaggio per evitare che ((laughter)) che i morti la usino per grattare i piedi ai bambini.al mattino i bambini si svegliano, cercano i giocattoli fanno una caccia al tesoro in casa e trovano i giocattoli e trovano anche i dolci.la tradizione dice anche che bisogna regalare le scarpe nuove ai bambini e dentro le scarpe fare trovare i dolci.i dolci che voi vedete sono quelli che che sono esposti qui in questi cartelloni.ora vi dico i loro nomi.questo primo cartellone rappresenta un dolce di mandorle che si chiama torrone, un dolce molto duro,croccante mandorle e zucchero.le parti verdi sono pistacchi.questo invece è un biscotto molto buono molto speziato che si chiama rama di napoli.e la rama di napoli è stata fatta inventata in onore di una moneta che usava nel regno delle due sicilie.era una moneta in rame e appunto per celebrare il fatto che c'era questa
01.15.14	SU: SI APRONO LE PORTE DEL MONDO DEI MORTI	
01.15.20	SU: VENGO I MORTI DI FAMIGLIA	
01.15.38	SU: GRATTARE I PIEDI	
01.15.41	ITA: hahaa haha	
01.15.46	SU: ☺)	
01.15.54	SU: LA GRATTUGIA	
01.16.02	ANN: questa non la sapevo	
01.16.07	DUB: grattugia?	
01.16.09	SU: BELLISSIMA STORIA	
01.16.18	SU: è PER GRATTUGIARE IL FORMAGGIO DUB	
01.16.25	SU: (ES: PER IL PARMIGIANO)	
01.16.26		
01.16.32	ITA: che bello ☺)	
01.16.42	SU: MANDORLE	
01.16.46	ANN: torrone	
01.16.51	SU: PISTACCHI	
	SU: BISCOTTI	
	<i>Ita and Bea are getting closer to the photos</i>	

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01.16.55	SU: SPEZIATO	moneta nuova crearono questo biscotto che è un biscotto molto profumato d'arancia, cannella vaniglia, ricorda molto (XXX) ha un cuore di cioccolata morbido e una glassa di cioccolata sopra. questi invece sono chiamati pupaccelli omini di zucchero e sono praticamente dei puppet dei oh scusate ((laughter)) dei dei piccoli delle piccole statue di zucchero che sono fatte solo con acqua zucchero e aromi naturali e ricordano una tradizione, una leggenda dove si dice che un signore arabo che ormai era diventato povero aveva invitato a cena delle persone ma aveva il problema..
01.17.14	SU: insomma mangiamo anche per i morti <i>A lightbulb comes to our class. s/he starts bumping into people but doesn't say anything.</i>	
01.17.40	ITA: ho mangiato mandorle ☺ mi è piaciuta molto ☺	
01.17.43	SU: PUPAZZI DI ZUCCHERO	
01.17.43	ANN: non avevo capito fossero biscotti	
01.18.01	<i>The lightbulb bumps into Lora while she is talking. Su ims him/her "We are having a class"</i>	
18.18.08	ITA: haa hahahah	questo ha qualche problema non sa dove andare. ((laughter)) si vede che non ci sta vedendo. allora la leggenda dice che questo signore arabo non aveva i soldi per offrire un pranzo degno allora aveva (XXX) e offrì ai suoi invitati questi dolci a forma di pupazzi. questi sono anche dei biscotti. non ricordo il nome. sono molto buoni. e questo qua questo che vi voglio mostrare qui è un dolce partico particolare sempre della sicilia
01.18.49	<i>Lora is walking along the posters and gets close to each poster that she is explaining. Ita follows her.</i>	SU: sì. guardate questa frutta ragazzi. la vedete la foto della frutta qui di fronte a a lora?
01.19.05	<i>The students move closer to the picture.</i>	LORA: pasta reale o frutta martorana eh martorana perché c'è il convento della martorana un convento di monache che produceva dolci e produceva
01.19.11	ANN: frutta martorana	ITA: è frutta o è dolce? LORA: allora sono dolci che hanno la forma di frutta ITA: ok LORA: loro praticamente impastavano mandorle e zucchero e praticamente eh modellavano la frutta davano la forma di frutta e poi li coloravano con dei coloranti vegetali. con l'essenza di rose, pistacchio, polvere di pistacchio eh zenzero, zafferano zafferano non zenzero, zafferano. e lo facevano così bene che sembravano veri. sono dolci molto zuccherati e quindi se ne deve mangiare pochissimo e sono tipici di qui, della sicilia. e quest è e eh durante il periodo di di dei morti si usa è tradizione regalare un cestino un cesto pieno di frutta martorana e biscotti di quelli che abbiamo visto qui in questa in questa cosa, in questa rassegna. qui invece vediamo due momenti di una piccola fiera. in tutta la
01.19.30	SU: DOLCI CON FORMA DI FRUTTA	
01.19.34	SU: PASTA DI MANDORLE	
01.19.37	SU: FATTA COME FRUTTA	
01.19.40	SU: SEMBRA VERA	
01.19.45	ITA: ahhh, ho capito ☺)	
01.19.49	SU: PISTACCHIO	
01.19.54	SU: ZAFFERANO	
01.20.27	SU: UN CESTO PIENO DI FRUTTA	

01.20.35	MARTORANA E BISCOTTI SU: BANCARELLE	sicilia ci sono mostre e bancarelle, fiere, dove vengono venduti giocattoli, zuccheri filati e mele candite e dolci per i bambini. è una festa per i bambini la festa dei morti. perché l'obiettivo è quello di insegnare ai bambini a rispettare la memoria dei parenti morti di famiglia e a fare a prendere amicizia con loro, cioè si raccontano ai bambini gli aneddoti, i racconti le storie del nonno della nonna che non c'è più e gli si insegna a volergli bene e gli si insegna che è importante mantenere con loro un legame d'amore e mantenere con loro questo affetto attraverso la cura delle loro tombe e la visita ai parenti morti per cui i morti portano questi giocattoli ma in realtà sono i genitori che portano i giocattoli solo che i bambini non lo sanno quindi vivono quest'atmosfera magica e in quei giorni si va al cimitero per ringraziare i nonni morti o gli zii che hanno portato questi giocattoli, si va insieme si puliscono le tombe si cambiano i fiori, si parla con i morti, si vedono le fotografie e si raccontano le storie di famiglia e i bambini capiscono che la loro famiglia è più grande di quella che loro conoscono perché contiene anche le persone che ormai non ci sono più. è una forma educativa di far di far vivere in modo vicino in modo molto bello molto ma non pauroso non vissuto con la paura. vissuto in nome dell'amore e della dolcezza. SU: e lora senti anche voi beh che tipo di fiori portate poi al cimitero. anche voi crisantemi? LORA: sì. molto i crisantemi i garofani* SU: +1 garofani* garofani. sì. anche noi eh LORA: questi sono i fiori principali perché i garofani sono molto resistenti. anche anche i crisantemi però devo dire che da qualche anno sono comparsi anche altri tipi di fiori +1 come le gerbere* SU: +1 sì. gigli* eh le gerbere sì LORA: ma più sì le gerbere soprattutto i fiori a forma di margherita che sono colorati che sono molto resistenti. le rose ho visto che sono pure molto diffuse. SU: no. è veramente una tradizione bellissima perché io non, tu la conoscevi annette? LORA: +1 no. credo che* sia tipico del meridione d'italia ANN: +1 no. eh* non così. da noi si va al cimitero ma non è così
01.20.47	SU: (BANCHI A UN MERCATO/FIERA)	
01.21.15	SU: I BAMBINI DIVENTANO AMICI DEI PARENTI MORTI	
01.21.37	SU: CIMITERO	
01.22.00	ANN: Bello! ITA: Mi piace questa festa ☺)	
01.22.06	SU: Sì è MOLTO BELLA	
01.22.11	SU: DA NOI NON C'è	
01.22.25	SU: CRISANTEMI	
01.22.30	SU: GAROFANI	

01.23.24	ITA: non c'è questa festa in tutta l'italia??	SU: eh beh. anche da noi ma non ma non ci sono questi regali per i bambini, dolci particolari, no. ANN: no no no. noi abbiamo un po' adottato halloween ma questa è più bella perché è più (XXX) SU: Dub ce l'avete halloween a a ah no scusa Ita no non c'è in tutta l'italia. c'è in sicilia. LORA: no. in altre parti d'italia però hanno delle altre tradizioni che io ho trovato per esempio nelle regioni del nord come la lombardia il trentino alto adige il friuli il piemonte e la val d'aosta hanno l'abitudine di lasciare sul tavolo la notte dell'uno nove-dell'uno e due novembre lasciare la brocca di acqua e il pane per dare ristoro ai morti che vengono a visitare i parenti. e perché l'idea è quella che le porte del dell dell'aldilà si aprono e vanno a trovare i loro parenti. allora i popoli in tutti i popoli c'è questa tradizione di lasciare cibo o acqua sul tavolo. per esempio in trentino la tavola resta apparecchiata per tutta la notte e il camino acceso. addirittura in trentino fanno anche suonare la campana per molte ore perché si pensa che i defunti spiino in casa dalle finestre SU: bellissimo LORA: poi un'altra cosa particolare purtroppo su non ha potuto fare la fotografia c'è un tipo di biscotto che si chiama ossa di morto SU: eh non è venuta LORA: è un biscotto duro molto particolare perché è un biscotto impastato di farina, zucchero, molto zucchero e acqua +1 praticamente lo zucchero* SU: +1 lora. lora scusa* parli troppo veloce LORA: sì sì sì SU: hai visto cosa ha scritto Ita. vai più lentamente. LORA: sì. eh. sono dei biscotti molto duri. durissimi. bianchi di sopra e gialli di sotto. fatti con lo zucchero. sono impastati con acqua zucchero e farina. e vengono prima essiccati al sole e poi praticamente infornati. e praticamente lo zucchero scivola tutto verso il basso e lascia una parte sopra bianca quando tu add-addenti il biscotto, quindi mordi il biscotto, il biscotto si frantuma come cristallo nella parte bianca e praticamente invece è durissimo nella parte zuccherata, con lo zucchero. e questo è un modo divertente. esatto. ((laughing)) come un osso ((laughing)) però è un modo
01.23.33 0123.41	ANN: No. Non così ITA: vado in sicilia ☺)	
01.23.51 01.23.54 01.23.57	SU: LOMBARDIA TRENTINO FRIULI VAL D'AOSTA ANN: @Ita lol SU: BROCCA DI ACQUA E PANE PER I MORTI	
01.24.17 01.24.19	SU: la Sicilia è bellissima Ita SU: devi andare	
01.24.27	ANN: e poi ci fa caldo	
01.24.38 01.24.41	ITA: lora parla troppo veloce SU: OSSA DI MORTI	
01.24.42	ANN: quelle si trovano anche qui	
01.24.55	ITA: scusa ☹	
01.24.56	SU: BISCOTTI	
01.25.07 01.25.08	BEA: grazie Ita ☺ SU: (IM to ITA) non ti scusare mai. Hai ragione.	
01.25.32 01.25.42 01.25.44	SU: oddioooo come un osso ☹((DUB: frantume?? ITA (IM) haha ☺)	

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01.25.47	SU: frantumarsi (va in pezzi)	divertente di è un po' come come come eh..rendere meno meno pauroso meno spaventoso il la paura della morte.no?si.va in pezzi.si.fantuma si rompe.
01.25.52	SU: si rompe	SU: Dub.sen-ma voi ce l'avete halloween in in brasile?
01.25.52	ANN: frantuma si rompe	no.io penso.ce l'ha c'ha feste tutte però' SU: uhm.è tipo la festa americana.eh? si.ma no è grande. SU: ho capito.si...chi vuole dire.poi dobbiamo finire perché è finito il tempo.ma chi vuole raccontare a Lora cosa si fa per halloween in Irlanda.perché è una festa irlandese halloween no? LORA: si.+1si*infatti la vostra +2festa e la nostra*e la vostra hanno origini comune e più antiche.hanno un'origine comune e più antiche. +1si* SU: +2la vuoi raccontare tu*? SU: Bea la vuoi racc+1ontare tu*? BEA: +1normalmente in italia è per ehm i bambini e anche in irlandia è una festa per bambini e per ehm non realtà un un'opportunità per ehm uhm non lo so come si dice to dress up? SU: mascherarsi BEA: mascherarsi?è un'opportunità per per le persone maschera-eh LORA: di mette-di indossare un costume? BEA: si.si. LORA: si.si. SU: +1è un mini car*nevale BEA: +1ma in italia* è ehm..si ma in irlandia è eh ci sono nessuno ehm ehm brru ((laughter)) ehm non ci sono altre opportunità di ci maschere ehm normalmente halloween è l'ultimo ehm LORA: possibilità BEA: possibilità.si per un giorno per anno SU: per fare festa, eh? BEA: si. SU: si si ma è molto carina che passano i bambini LORA: se non erro però per halloween i costumi hanno tutti il tema delle streghe dei fantasmi dei morti BEA: si LORA: e per carnevale mentre per carnevale le maschere possono essere di tutti i tipi possibili non per forza legate al mondo delle dei morti..e +1però*in italia stiamo incominciando a festeggiare sempre più spesso halloween mentre stiamo dimenticando le nostre tradizioni
01.27.21	ITA: indossare in costume??	
01.27.34	SU: mascherarsi	
01.28.19	SU: UNA SCUSA	
01.28.20	SU: PER MASCHERARSI	
01.28.38	SU: STREGHE	
01.28.42	SU: FANTASMI	
01.28.44	SU: VAMPIRI	
01.28.50	SU: ☺	

		<p>locali SU: +linfatti* SU: è vero LORA: e i ragazzi vanno a ballare per halloween vestiti così così come voi.è una festa che si sta internazionalizzando SU: la globalizzazione LORA: la globalizzazione sia dal punto di vista delle comunicazioni sia dal punto di vista commerciale perché ci sono grosse spinte commerciali per questa perché si festeggia halloween qui da noi.per cui qui siamo colonia americana ((laughter)) +l abituati*un po' a farci invadere da queste da queste abitudini straniere e daltronde la cultura che passa per i giovani oggi in italia è una cultura internazionale musicale di cinema quindi diventa assurdo mettere i confini.però non bisognerebbe dimenticare un po' anche le proprio tradizioni.certe volte è bello imparare quelle degli altri ma è bello anche trasmettere le nostre agli altri, farle conoscere. SU: +lesatto* SU: ok.mi sa che abbiamo sfornato un po' grazie mille lora di queste di questa di averci fatto conoscere questa festa perché appunto io non ne sapevo niente veramente bella e interessante, son bellissimi i dolci anche ((smile)) ANN: sì.veramente molto interessante.grazie SU: no.ma infatti anche ora Ita ha deciso che viene in sicilia. LORA: ((laughter)) ITA: ((laughter)) SU: ma infatti dovresti andare guarda perché veramente vale la pena LORA: veramente io credo che, scusate, non per qualcosa, penso che la mia regione è la più pazzesca di tutta l'Italia.perché noi siamo al centro del Mediterraneo, noi siamo al centro del Mediteraneo, siamo l'ombelico del Mediterraneo.eh perché siamo stati dominati da molti popoli.da noi sono passati i normanni,sono passati gli arabi, sono passati gli spagnoli.eh abbiamo avuto tedeschi abbiamo avuto molti molte popolazioni, greci.e quindi la nostra cultura, se il nostro sangue fosse vino noi saremmo un cocktail SU: ((laughter))ah bellissimo! LORA: perché perché e quindi anche nelle facce si vede questo ci sono uomini alti biondi con gli occhi azzurri, quelli piccoli scuri coi capelli e gli occhi</p>
01.29.27	SU: (IM to ANN) hai registrato?	
01.29.46	ANN: (IM) Sì, da quando sono arrivata	
01.30.40	SU: pazzesca ☺)	
01.30.49	SU: ombelico del Mediterraneo	
01.31.13	ANN: Sì, la Sicilia è ricchissima di cultura SU: se il sangue fosse vino	
01.31.18	SU: saremmo un cocktail ☺)	

01.31.23	SU: (in Sicilia)	nerissimi eh siamo quindi e anche la nostra lingua è un mix di tante lingue, ci sono parole francesi parole spagnole eh parole lombarde eh beh ehm dell'alta, anche qualche parola tedesca.sì sì arabe, molte arabe.per cui è un po' particolare, e poi c'è anche una cosa particolare.la regione è una regione anche molto diversa dal punto di vista geologico.perché è formata è un puzzle di terre diverse.+1((XXX)* SU: +1 e ora.*sì va sul difficile e io ti fermo ((laughter))scusa.no *è per* LORA: +1no.era*per.è per dire semplicemente che, essendo tanti tipi di terre diverse ci sono tanti paesaggi diversi SU: sì certo LORA: e quindi colori, i monumenti che cre-che sono stati costruiti con la pietra del posto sono diversi da provincia in provincia SU: ma Ita, tu sei an-hai anche visto un famosissimo scrittore siciliano no.ti ricordi?quando hanno dato la laurea honoris causa a ITA: sì ma non non mi ricordo il nome SU: eh oddio mio!ho un vuoto di memoria, di Camilleri, Camilleri ITA: ah sì! SU: Camilleri ha avuto una laurea honoris causa a UCD.sì. LORA: fantastico Camilleri SU: quindi Lora è venuta +1a vederlo* LORA: +1non scrive in italiano* Camilleri non scrive in italiano.Camilleri scrive in una lingua che è un siciliano misto a un italiano SU: uh.c'è anche un film ragazzi, al Film Festival che è tratto è stato fatto, basato su un libro di Camilleri.eh infatti non è facile. SU: beh ragazzi.grazie mille per questa sera.spero che che vi sia stato utile, vi siate divertiti, noi ci vediamo ehm ci vediamo lunedì.e poi qui il prossimo giovedì.ok? DUB: grazie mille.ciao Bea: ok.Gra-grazie Lora! Mia: grazie Lora: grazie a voi.siete bravissime! Bea: ((smiling)) è molto interessante SU: ciao ciao ragazze! LORA: sì siete voi che siete brave.siete state attente molto +1brave*e molto bravo +2anche Dub* BEA: +1ciao* ITA: +2ciao a tutti* LORA: ciao ciao ((smiling))
01.32.07	ANN: Vai Ita. Vai!!	
1.32.31	ANN: Camilleri?	
01.33.02	ANN: Una mia amica russa ha provato a leggerlo. È impazzita!	
01.33.10	ITA: perchemi dici vai Ita? Annette	
01.33.29	ANN: è un modo di dire! Vai e divertiti!	

01.33.41		Bea: ciao a tutti! SU: ciao ciao! BEA: ciao Su! SU: ciao bimbe! LORA: ciao!
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Session Eight: Mamma mia, che dolore!

Introduction

Time	Scene description. Local chat and IM	Voice chat
00.00	<i>After talking to her students at her house, Su tps to Imparafacile Island.</i>	
	<i>She tps Helenita and walks to the hospital building.</i>	
00.28	<i>Helenita arrives</i>	SU: ((laughter))eccola,ciao! ((smiling))..ciao HEL: ciao, ciao +1ciao* SU: +1allora* HEL: lo sai che io SU: dimmi dimmi vieni HEL: giravo e non riuscivo a capire dove dove dove fosse il set. SU: ((laughter)) è qui guarda. HEL: sono stata giù nella nella nella welcome area (XXX) ecco qui l'ospedale, vedi. SU: dunque..aspetto che vedo che c'è anche Gea.perché siamo un pochi+1no* HEL:+1sì* sì Gea l'ho vista entrare.l'ho vista entrare quindi arriverà.la tippo SU: sì.ho fatto io guarda HEL: ah hai fatto te.ok.va bene SU: sì sì sì..quindi senti allora ehm.tutto a posto no?è tutto chiaro insomma tanto HEL: sì sì io praticamente vi vedrò arrivare, vedrò i ragazzi arriva+1re*e chiederò buonasera chi siete posso fare qualcosa per voi cer+2cate qualcuno*ecco. SU: +1sì*...+2perfetto.sì sì sì*ci blocchi direttamente quando perché dunque HEL: all'ingresso SU: ciao Gea.praticamente +1se vedete*qui HEL: +1ciao Gea* GEA: ciao SU: l'entrata è qui vedete che c'è c'è il teleport proprio qui.vicino alla farmacia HEL: allora aspetta SU: e Gea tu sarai all'ultimo +1piano* HEL: +1ah sì sì sì*..e io dove devo dove do-dove devo dove devo po+1rta SU+1e tu blocca*ci.tu fai una cosa, eh
	<i>Helenita and Su walk towards the hospital</i>	
01.04	<i>Su tps Gea</i>	
01.21	<i>Gea arrives</i>	
01.36	<i>Su walks to the teleport next to the hospital entrance</i>	
01.48	<i>Su, Helenita and Gea are standing before the hospital entrance</i>	

Appendix B – Transcripts

		<p>forse è meglio se tu ti metti qui all'entrata, noi entriamo la cerchiamo, ci blocchi qui e poi dopo ci dici che è su al terzo piano e vieni su con noi.oppure magari ci di-ci fai un po' eh ci ci blocchi un attimo all'inizio, insomma.e Gea tu sei su al terzo piano e sei.se non sb-oddio!stai proprio male eh? ((laughter))</p> <p>HEL: ((laughter))</p> <p>GEA: ((laughing)) io son spaventoso o no?perché ((laughter)) mi son messa d'impegno io eh</p> <p>SU: ((laughter))</p> <p>HEL: mamma mia!!</p> <p>SU: ((laughing)) ciao kaja!senti Gea, +1sei*magari guarda ti fai, ti fai vedere da Kaja ehm qual è il tuo letto.ok?</p> <p>GEA:+1dimmi*</p> <p>KAJ: buonasera a tutte</p> <p>SU: ciao, buona+1sera*</p> <p>HEL: +1ciao.buon*asera</p> <p>SU: allora io torno, torno un attimo dai ragazzi perché ho dimenticato prima di portarli qui ho dimenticato di dargli una cosa.quindi torno da loro poi ritorno qua e cominciamo direttamente</p> <p>HEL: va bene,+1va bene ok*</p> <p>SU:+1ok a fra poco*</p>
02.18	<i>Gea is made up black and blue and looks sick</i>	
	<i>Kaja is walking to the spot</i>	
03.17		<p>SU: ciao.</p> <p>SU: sì scusate ((laughter)) scusate ho dimenticato una cosa scusate non vi ho chiamato subito perché ho dimenticato una cosa.sentite eh volete portare qualcosa di regalo a Gea che è all'ospedale?... </p>
02.51		
03.00	<i>Su teleports back to her place where the students are waiting</i>	
03.16	DUB: allora??	
03.17	<i>Bea, Mia and Dub are there. Ita is not supposed to be in the session as she is sick.</i>	
03.34	DUB: sì	<p>SU: non parli?</p> <p>DUB: sì, dimmi</p> <p>BEA: oh oh oh loud oh loud!</p> <p>SU: di solito cosa portate di cosa si porta di regalo a qualcuno in ospedale..cosa preferite portarle</p> <p>BEA: frutta?</p> <p>DUB: fiori</p> <p>SU: frutta, fiori allora frutta aspetta guardo se ho, fiori quindi aspetta, ehm</p> <p>Mia tu che vorresti portare, facciamo una cosa diversa ciascuno</p> <p>MIA: ehm fiori frutti ((smile))</p> <p>SU: allora vediamo fiori guarda facciamo così eh a te dò questo.ti è arrivato Dub?... </p> <p>DUB: sì</p> <p>SU: ok.allora questo qui lo puoi lo se clicchi destro su questo e fai wear vedrai che puoi, lo tieni in mano, ti rimane in mano e poi puoi passarlo direttamente a</p>
04.43	HEL: (IM) entrate all'interno?	
04.57	HEL: (IM) vi aspetto al banco accettazione?	

06.52		Gea quando arrivi.poi eh altri fiori, Mia ti posso dare questa.e anche questa è .. ti è arrivato Mia?guarda che bello!vi faccio una fotografia eh.posso farvi una foto?
06.59	<i>Su teleports back to Imparafacile Island and tps the students.</i>	BEA: sì DUB: anche io voglio (XXX) SU: cosa? DUB: la fiori gialli SU: ah vuoi il fiore giallo?ok ti dò anche il fiore giallo.va bene.tò.senti Bea non ho frutta.ho dei cioccolatini, ti vanno bene? BEA: sì va bene +1sì sì* SU: +1ok allora* ti dò una scatola di truffles oh..sì ecco qua.tieni...ho anche un irish coffee ((laughter)) si porta l'irish coffee all'ospedale? BEA: eh no ((laughter)) SU: direi probabilmente non è una buona idea +1aspetta guardo se* ho della frutta BEA: +1((laughter))* SU: ah forse sì ho della frutta...ho anche della frutta.ecco qua.se poi se poi vuoi dargliela come regalo quando arriviamo.quella non la indossare perché se no è un problema.ok perfetto allora siete prontissimi.quindi vado e vi mando un teleport.fra un secondo.
07.29		SU: eccoci! HEL: sono arrivati SU: quasi arrivati.un attimo che li chiamo
07.56	<i>We are in front of the hospital. The Italians inside are chatting. Mia teleported and is not moving from her spot so that Bea can't land.</i>	
07.57		SU: Mia spostati per favore che Bea non può scendere...Mia spostati...Mia?...Mia?spostati.cambia posizione che c'hai Bea sulla testa.((laughter)) oh.benissimo ((smile))
08.21	<i>Mia moves.</i>	

Task One: Visiting a friend at the hospital

Time	Scene description. Local chat and IM	Voice chat
08.24		SU: bene.allora questa è l'entrata dell'ospedale, quindi andiamo pure dentro..tutto bene Dub?...
08.46	<i>Dub had walked off and comes back.</i>	
08.52		SU: prego entrate pure nell'ospedale ragazzi.
08.57	<i>Bea walks in first, then Su, Mia and Dub</i>	
09.02		HEL: buonasera. BEA: buonasera.

09.07	<i>Bea gets closer to Su and Mia goes to the couch and then to the counter</i>	HEL: buonasera.posso fare qualcosa per voi?
09.30	<i>Mia walks around the room, Dub is standing facing Hel and Bea moved closer to Hel</i>	MIA: buonasera. HEL: +1buonasera* eh..scusate cercate qualcuno in particolare? DUB: +1buonasera* DUB: stiamo chi per vedere Gea HEL: ah siete venuti a trovare la paziente Gea uhm però io vi devo informare che non è l'ora delle visite questa.siete un po' fuori orario. MIA: ohh HEL: voi siete dei parenti? BEA: amici DUB: +1amici* MIA: +1amici* BEA: amici sì HEL: siete degli amici ma a quest'ora non si può, non si potrebbe fare visita a Gea.perché è tardi.vorrà dire che farò un'eccezione perché in realtà Gea può vedere poche persone, solo i familiari. DUB: ma cosa è successo con lei HEL: ha avuto un incidente.non vi potrei dare quest'informazione.sarebbe meglio se ve le desse direttamente lei.eh io vi posso solamente dire che ha avuto un piccolo incidente ed è ha avuto adesso ha dei lividi delle contusioni e deve stare a riposo. BEA: quando è possibile a visitare Gea? HEL: allora.come dicevo prima questo non è l'orario per le visite però facciamo un'eccezione DUB: grazie mille HEL: voi da dove venite?..+1Mia lei da* dove viene? DUB: +1dublino* MIA: +1di dublino* HEL: eh.siete venuti abbastanza da lontano.e allora credo che possiamo chiudere un occhio e e.. e accompagnarvi di sopra a salutare Gea. DUB: grazie mille BEA: +1ok grazie* MIA: +1(XXX)* HEL: prego seguitemi...
10.33	SU: lividi	
10.35	SU: CONTUSIONI	
11.14	<i>Hel, Su, Dax leave the hospital the students leave the hospital and go outside in order to get the teleport</i>	
11.18		HEL: allora per salire, perché Gea si trova al piano superiore... potete uscire per favore?...ecco Mia, eh fra i due cartelli area videosorvegliata e farmacia c'è un uhm un ascensore diciamo così ((laughter)) un teleport che vi porterà su...cliccate su questo triangolo e vi troverete su.vado avanti.vi precedo.ah lo
11.40	SU: ASCENSORE	

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11.51	<i>Mia goes up, Dub gets closer to the wall. Helenita goes up. Dub and Bea are still waiting</i>	sta usando..
12.00		SU: avete capito come si fa? DUB: sì.cliccate
12.10	<i>Helenita is giving Mia information upstairs. Dub goes up.</i>	SU: ecco.clicca di destro +1e poi clicca teleport* HEL: per il piano superiore, destro +1siedi qui (XXX) e poi clicca sopra* SU: perfetto.Bea BEA: dov'è teleport? SU: è vedi la farmacia e area videosorvegliata?+1c'è*un triangolo.vedi un piccolo triangolo nero? BEA: +1sì*.oh sì.
12.15		SU: sì.clicca sul triangolo de-benissimo! BEA: grazie. SU: prego HEL: dovete salire ancora sopra eh SU: anche questo.ce ne è un secondo qui.il triangolo che va su...qui ragazze.dove sono io...qui.
12.30	<i>Bea and Su go up.</i>	BEA: ah! SU: vedete c'è un triangolo anche qui? BEA: +1scusi?*
12.39	<i>We are all on the first floor. Bea and Mia walk towards Dub, who is on the other side and far from the teleport.</i>	SU: +1dobbiamo anda* HEL: +1al piano superiore* SU: il triangolo verso l'alto.perfetto.brava.
12.48	<i>Dub, Mia and Bea walk back. Bea walks backwards.</i>	DUB: sì sì sì sì HEL: eh.Mia è arrivata...spostatevi così arrivano anche gli altri.adesso questa vi precedo.questa è la porta della stanza dove si trova, bisogna cliccarla e si apre e possiamo entrare. HEL: buonasera Gea. GEA: buonasera HEL: sono venuti degli amici +1a trovarti* MIA: +1ciao Gea* GEA: o ragazzi!gra+1zie*! BEA: +1buonasera*
12.54	<i>Mia goes up.</i>	GEA: come siete gentili!sto messa un po' male come vedete...vi ringrazio d'essere venuti DUB: oh.ciao Gea come stai. GEA: insomma.non troppo bene.è capitato un guaio.lo vedi quanti lividi che ho addosso? DUB: oh ((smile))cosa è cosa è successo. GEA: oh.aspetta eh.ecco.se volete vi racconto.come è andata..mi hanno mi hanno..scippato.sapete cosa vuol dire? DUB: scippato.no GEA: scipp+1are* BEA: +1no*
13.05	<i>Su, Dub and Bea teleport up.</i>	
13.16		
13.18		
13.41	<i>Mia and Dub get closer to Gea's bed</i>	
13.51	SU: INSOMMA...	
13.55	SU: UN GUAIO	
13.58	SU: LIVIDI	
14.22	SU: SCIPPARE	

Appendix B – Transcripts

14.26	SU: SCIPPO	GEA: no.eh.beh è un modo per dire che mi hanno strappato la borsa.sono passati dei, dei ragazzi in motorino e e e hanno acchiappato la mia borsa, mi sono passati vicino e hanno tirato per per per prendermi la borsa.questo si chiama uno scippo.si chiama
14.32	SU: L'HANNO SCIPPATA	DUB: è non +1rubare*?
14.38	SU: LE HANNO STRAPPATO LA BORSA	BEA: +1oh, mi dispiace*!
15.03	SU: SCIPPO	GEA: oh grazie!eppure era era era una bella giornata perché ero andata a fare una passeggiata in centro BEA: sì GEA: sai cosa vuol dire in centro, sì DUB: sì GEA: nel nel centro della città.sai che io io sto a firenze e allora BEA: sì.hai avuto paura? GEA: tantissimo.+1perché*io non mi ero accorta che questi stavano arrivando ero ero naturalmente avevo portato con me rocco.vi ricordate di rocco?+2il bassotto*? BEA: +1sì* DUB: +2no*no non lo so chi è rocco GEA: lui era con me e ho sentito, io veramente stavo passeggiando in una strada piena di negozi di negozi ehm è una strada famosa a firenze che si chiama via de' tornabuoni ((smile)) HEL: eh stavo dicendo anch'io via de'tornabuoni +1ci scommetto* ((laughter)) GEA: +1naturalmente ero* andata lì ((laughter)) HEL: ovvio ((laughter)) GEA: è do dove ci sono tutti lo lo capite se dico stilisti? DUB: sì GEA: ehm per esempio conoscete gucci, lo conosci? DUB: sì, +1versace* GEA: +1sì?lo conosci gucci*?o o anche armani, +1poi c'è il negozio di uno stilista di firenze che si chiama cavalli eh +2fe*ndi BEA: +1oh!* HEL: +2fendi* GEA: e..((laughter)) no cavalli è un +1signore* ((laughing))che ha messo il negozio dove vende i suoi abiti in quello che era un antico caffè di firenze che si chiama Giacosa.lui lui ha lasciato il caffè eh però ci vende gli abiti HEL: +1((laughter))* GEA: e vabbè io stavo passeggiando ero e guardavo questi negozi, ero presa da ((laughter)) li guardavo solo eh perché
15.42	SU: ROCCO	
15.44	SU: IL BASSOTTO	
15.59	SU: (IM to DUB) dalle i fiori ☺ prima di partire	
16.01	DUB: sì	
16.12	SU: IL CANE BASSOTTO	
16.22	DUB: ok	
16.24	SU: stilisti	
16.38	SU: GUCCI	
16.40	SU: ARMANI	
16.48	SU: CAVALLI	
16.51	SU: (NON GLI ANIMALI)	
16.52	SU: FENDI	
17.03	SU: IL NOME DELLO STILISTA è CAVALLI	
17.14	SU: ANTICO CAFFÈ	

17.45	SU: ABBAIARE	+Ihanno* dei prezzi tremendi
17.49	SU: BAU BAU	DUB: +I no hai soldi*
17.53	SU: MOTORINO	GEA: e poi ho sentito rocco che abbiava e io gli ho detto zitto che fai sempre confusione, invece lui aveva visto questi due in motorino che poi erano in due su un motorino e non si può
18.08	SU: CICLOMOTORE	DUB: era +I veloce*? GEA: +I è così* anche da voi? GEA: eh un ciclo-era un ciclomotore..cioè quei motorini piccoli, non era una moto grande..e non avevano neanche il casco, erano proprio fuori..fuori legge.e uhm si sono avvicinati e e quello dietro, quello che non che non guidava il motorino ha acchiappato il laccio della mia borsa e ha tirato.io non gliela volevo lasciare la borsa...perché dentro la borsa ci sono tante cose importanti.voi, Bea tu cosa tieni in borsa?
18.21	SU: NON AVEVANO IL CASCO	BEA: ehm
18.25	SU: FUORILEGGE	GEA: nella tua borsetta cosa ci tieni
18.38	SU: ACCHIAPPARE	BEA: ((laughter)) una regola per te, cioccolate GEA: ((laughter)) ho capito.((laughing)) le cioccolate?
19.02	SU: BORSETTA	BEA: sì
19.10	SU: UN REGALO PER TE GEA	GEA: ma io c'avevo i docume- i i documenti.. GEA: ah +I ho* capito BEA: ah! GEA: oh grazie!+I mi ci*vuole!per tirarmi un po' su sì ((laughter))la cioccolata BEA: +I prego* HEL: io però vorrei ricordare a gea e lo dico anche a Bea che quando si sta in ospedale bisogna seguire un'alimentazione controllata, e quindi direi che la +I cioccolata* che ha portato Bea la deve portare a casa, la mangerai quando starai bene e tornerai a casa GEA: +I no eh*? BEA: ok GEA: bea me la dovevi ((laughing)) passare di nascosto ((laughter)) DUB: per questo che io ho portato i fiori HEL: ah ecco GEA: o che caro.grazie che cavaliere che sei!((laughter)) DUB: prego. GEA: belli quelli lì.li tengo lì con me mi fanno un po' d'allegria in questo momento, grazie Dub HEL: Gea stamattina ti hanno misurato la pressione?
19.40	SU: ☹ NIENTE CIOCCOLATA???	GEA: eh sì.sono passati, mi hanno medicato le ferite e mi hanno misurato la
19.47	SU: LA MANGIA BEA ☺)	
20.07	SU: CHE CAVALIERE	
20.26	<i>Dub sits on Gea's bed</i>	

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20.28	SU: MISURARE LA PRESSIONE	pressione che è un po' bassa perché ho +lavuto* HEL: +1allora* bisogna fare +2(XXX)* GEA: +2uno choc*
20.44	SU: (IM to HEL) NON CI SI PUÒ SEDERE SUL LETTO DEI PAZIENTI!!!	HEL: bisognerà dare qualcosa per tirare un po' su eh questa questa pressione sì.e le analisi del sangue? GEA: scusa.quelle andavano bene HEL: ma eh scusate scusa eh Dub eh non non non ci si può sedere sul sul letto dei pazienti DUB: o scusa HEL: ti devo chiedere di alzarli per favore DUB: ok
20.56	SU: ANALISI DEL SANGUE	HEL: tra l'altro ehm la nostra paziente ha ha avuto delle ferite e quindi eh anche delle costole incrinare +1quindi*i movimenti del letto dove lei si è seduto potrebbero dare fastidio GEA: +1sì* DUB: mi dispiace GEA: forse nell'analisi del sangue un po' un po' il ferro un po'come si chiama HEL: va bene.la sideremia è un po' bassa GEA: eh sì perché ho perso un po' HEL: cercheremo +1di* di integrare GEA: +1ho un po' sanguinato* HEL: cercheremo di integrare.va bene DUB: ma ho, io ho una domanda GEA: dimmi DUB: non lo so esattamente cosa vuoi dire con scippare è è lo stesso che rubare GEA: sì ma rubare eh a una persona portando via qualcosa che una persona ha indosso cioè a +1a*assalire una persona che cammina DUB: +1ah*sì sì sì sì GEA: per la strada e di solito la borsa.sì.perché per prendere quello che c'è nella borsa insomma i soldi soprattutto.e poi il problema è che nella borsa uno tiene i documenti o anche la carta di credito.e quindi se te la portano via poi devi pensare a tutti questi a tutte queste cose, a bloccare a denunciare che hanno portato via queste cose qua.nella borsa DUB: quindi ha+1nno portato*portato BEA: +1e Gea* GEA: sì io c'avevo la patente, per guidare, la carta d'identità, Mia sai cos'è la carta d'identità? MIA: sì GEA: voi per per farvi riconoscere cosa cosa avete per per far vedere che siete voi, oppure ...la carta di credito anche DUB: hai chiamato la banca
21.09	SU: (IM to HEL) ☺ DAGLI DEL LEI ☺)	
21.15	<i>Su uses a laugh gesture</i>	
21.26	SU: FERITE	
21.28	SU: COSTOLE INCRINATE	
21.45	SU: IL FERRO è BASSO NELLE ANALISI	
21.53	SU: DEL SANGUE	
22.10	SU: SCIPPARE	
22.24	SU: LA BORSA DI SOLITO	
22.34	SU: STRAPPARE DI MANO	
23.14	SU: (IM to GEA) FA' DOMANDE A MIA SE PUOI ☺	
23.31	SU: PATENTE DI GUIDA	
23.37	SU: CARTA D'IDENTITÀ	

		<p>GEA: quella della +1banca*quella +2della banca*sì BEA: +1sì* MIA: +2(XXX)* BEA: è è importante contattare la banca per chiudere i carta di credito, carta di credito GEA: perché possono usarla BEA: eh +1sì* GEA: +1quindi* eh ho +2anche* BEA: +2è* possibile a chiudere così le carte non funziona GEA: sì.bisogna telefonare e bloccare sì +1dice* c'è un numero di telefono per bloccare BEA: +1sì sì* GEA:e anche la carta d'identità voi Mia hai capito cos'è la carta d'identità?tu sai cosa MIA: sì in inglese si dice ID. GEA:identity card ah..anche voi avete quello sì.tu ce l'hai sì MIA: sì GEA: perché anche quella è pericoloso perché possono utilizzarla DUB: ma in Irlanda non esiste sì non esiste GEA: no? BEA: la carta d'identità è differente di differente del passaporto sì? DUB: +1sì* MIA: +1(XXX)* age card or ID BEA: ah.in irlanda age card MIA: sì BEA: oh ok.carta ok carta identità.ok GEA: e quindi l'avete.allora c'è anche in Irlanda eh ah age card ok la carta d'identità MIA: sì GEA: può servire per non serve per andare all'estero o almeno nei paesi dell'unione europea sì ma è diverso dal +1passaporto* MIA: +1no.è per l'irlanda* BEA: sì, ma è DUB: forse possono viaggiare con la patente BEA: sì o per entrare un bar eccetera eccetera è solo per MIA: discoteca, uscire GEA: +1la la* BEA: +1non è* per viaggiare no altri (XXX) GEA: ho capito, per +1ho capito* BEA: +1e la tua* carta d'identità è è più importante più forte GEA: forse.serve per per far capire che sono io.cioè per perché io non dica un</p>
24.43	SU: E LA CARTA D'IDENTITÀ	
24.45	SU: BLOCCARE LA CARTA	
24.47		
24.48		
25.07	SU: sì	
25.15	SU: NO	
25.20	SU: NON ESISTE IN IRLANDA	
25.40	SU: COSA È AGE CARD???	
26.42	SU: ALL'ESTERO NO?	

27.21	SU: RICONOSCERE	nome falso, o serve per per farmi riconoscere per far sapere chi sono e che non in in certi momenti insomma, dipende
27.32	SU: SI PUÒ VIAGGIARE NELL'UE	BEA: mmm
27.38	SU: MAROCCO	GEA: e serve anche per viaggiare nei paesi dell'unione europea per esempio
27.40	SU: TURCHIA	per andare, non lo so per esempio in francia in gran bretagna se io faccio vedere quella posso entrare in questi paesi.+1e anche in turchia*
27.45	SU: NORVEGIA	BEA: +1è possibile*è possibile ehm a comprare o trovare una carta nuovo, sì?
27.47	SU: ISLANDA	GEA: eh, la bisogna andare bisogna denunciare che è stata smarrita, persa o rubata in questo caso, al comune alla no bisogna denunciare alla ai carabinieri alla polizia che è stata rubata e poi andare in comune dove ne fanno una nuova e bloccano quella rubata.
28.19	SU: DENUNCIARE LO SMARRIMENTO IL FURTO	BEA: sì
28.26	SU: AL COMUNE	GEA: ti fanno un duplicato...costa, non lo so quanto costa...poco...sì sarà uhm noi li chiamiamo mettono su una marca da bollo...piccola tassa.
28.29	SU: E AI CARABINIERI	HEL: no.costa molto meno
28.44	SU: FARE UN DUPLICATO	GEA: meno forse
28.47	SU: QUANTO COSTA?	HEL: sì sì eh..mettono una marca da bollo
29.00	HEL: poco	GEA: sì è come un francobollo ((laughter))
29.07	SU: 25-30 EURO?	HEL: 25 euro?il duplicato costa 25 euro?
29.08	HEL: una piccola tassa	GEA: ah sì?a beh ora è tutto più caro
29.10	HEL: nooooo	HEL: bisogna stare attenti a non perderla ecco per+1ché quando*è è meglio portare le borse a tracolla invece che appoggiate solamente alla spalla
29.24	SU: NO NO FATTO L'ESTATE SCORSA	GEA: +1sì*
29.27	SU: 25 EURO	HEL: bisogna portarle di traverso eh in modo +1tale*che che nessuno le possa afferrare passando col motorino.
29.36	SU: A MARINA DI PISA	GEA: +1sì ma*.e no ma io l'avevo a tracolla, per questo mi hanno trascinato.sono caduta e mi hanno trascinato per un po'.tutti questi lividi è per quello.+1e ho avuto tanta paura*
29.50	<i>Ita logs in anyway, despite saying she wouldn't make it. Su tps her.</i>	HEL: +1ah è arrivata una* nuova una nuova eh una nuova visita
29.59	<i>Ita tps in the room.</i>	GEA: Ita.
30.09	DUB: Ita è online	HEL: Ita è arrivata a tro+1vare Gea*
30.13	SU: (IM to ITA) ITA STIAMO CHIEDENDO A GEA COSA È SUCCESSO	GEA: +1ciao!*...benvenuta grazie di essere venuta.
30.15		MIA: ciao Ita
30.42	SU: E ROCCO?	BEA: buonasera
30.59	SU: GUINZAGLIO	GEA: insomma ecco ho raccontato una bella giornata che è finita male.
31.04	SU: INSEGUIRE IL MOTORINO	GEA: rocco.e rocco per ho dovuto mentre cadevo l'ho dovuto trattenere con il

31.10	ITA: sì	tirando il guinzaglio perché lui voleva inseguire il motorino..era arrabbiatissimo rocco..guinzaglio lo sapete cos'è?il laccio che la corda eh che ..per trattenerlo e pensare che ero uscita per andare a comprargli un osso.da da da da mordere ((laughter))m'era venuto in mente un negozietto che stava vicino all'università quando ((laughing)) andavo all'università e volevo andare lì però eh non ci sono mai arrivata perché e lui voleva inseguire il motorino per fortuna sono riuscita a trattenerlo se no chissà che che succedeva.
31.23	SU: OSSO ☺	HEL: forse Gea eh gli amici che sono venuti a trovarti vorranno sapere eh come come sei arrivata in ospedale eh..Bea, lei eh glielo vuole chiedere lei a Gea?come è arrivata in ospedale?dopo l'incidente?
31.56	SU: (IM to ITA) SE VUOI CHIEDI A GEA COSA LE È SUCCESSO	ITA: Gea cosa è successo?
31.59	ITA: (IM to SU) is it too late join in?	
32.02	SU: (IM to ITA) VISTO CHE SEI ARRIVATA UN PO' TARDI	
32.06	SU: (IM to ITA) NO NO NON È TARDI	
32.21	SU: (IM to ITA) NON HO UNA NOTECARD PER TE PERÒ PER PRENDERE UN APPUNTAMENTO	
32.30	SU: SCIPPATA	GEA: eh ho raccontato.è successo che mi hanno strappato la borsa, due due ragazzi in motorino mi hanno strappato la borsa e prima si diceva che si dice mi hanno scippata, mi hanno fatto uno scippo.e e io sono caduta perché ho cerca perché avevo la borsa a tracolla e perché cercavo di non... sì Ita scippo si dice.perché cercavo di non di non lasciare la borsa e allora, tracolla.tracolla vuol dire uhm hai presente avete presente le borse con il laccio lungo?e l'avevo passata da una spalla all'altra.quindi.attraverso eh ...le spalle insomma...e e mi hanno trascinato per un po' anche per terra.perché io trattenevo la borsa e loro tiravano..e poi gliel'ho lasciata però eh, perché ((laughing)) non ce la facevo più.+1e così sono rimasta per*terra
32.43	SU: SCIPPO	DUB: +1allora (XXX)*
32.45	ITA: (IM) ok ☺	GEA: e allora passava di lì un un signore che che mi ha aiutato però ha che era meglio chiamare l'ambulanza.cioè per per farmi accompagnare
32.57	ITA: scippo??	HEL: lo sapete che quando c'è un incidente del genere è bene che +1(XXX)*il personale specializzato muova il ferito perché può essere imprudente
33.01	SU: STRAPPARE LA BORSA	DUB: +1non muovere*
33.03	DUB: borsa tracola??	
33.07	SU: TRACOLLA	
33.10	SU: A SPALLA	
33.12	DUB: lo so	
33.42	SU: (IM to HEL) sai che hanno fatto TUTTI esercizi su SCIPPO due settimane fa?????	
33.50	SU: (IM to HEL) frustrante da morire!!!!	
33.59	HEL: (IM) e non se lo ricordano!	
34.12	HEL: (IM) uguale agli italiani...	
34.17	HEL: (IM) non ripassano la lezione!	
34.20	SU: (IM to GEA) due settimane fa prima della lezione hanno fatto tutti esercizi con scippare e scippo	
34.27	SU: (IM to GEA) è terribilmente frustrante	
34.45	SU: (IM to HEL) non studiano proprio	
34.47	DAX: MI DICA POSSO ESSERLE UTILE?	
34.59	Ann logs in	GEA: eh +1perché* HEL: +1(XXX)prova a tirare su una persona eh allora può fare delle manovre eh che possono peggiorare la situazione quindi bisogna che ci sia un medico o o un infermiere specializzato che sappia

		fare i movimenti giusti per non eh peggiorare appunto lo stato del del paziente. DUB: e co-e come si chiama di nuovo?am ambulanza HEL: ambulanza. GEA: ambulanza. HEL: l'ambulanza è quel mezzo che viene che serve per trasportare eh i feriti e e quando si tratta di un incidente particolarmente grave, allora per cui bisogna che si arrivi nel più breve tempo possibile in nell'ospedale più vicino allora l'ambul.36anza accende la sirena.che serve per annunciare (XXX) in modo tale che gli altri automobilisti facciano strada. DUB: e la polizia?ha chiamato la polizia HEL: eh gea GEA: eh sì poi c'è bisogno anche di denunciare il furto, certo.io però non ero in condizioni di fare questo cioè no non non potevo denunciare allora questo signore è stato molto gentile e ha chiamato lui la polizia.ha chiamato l'ambulanza e ha chiamato anche la polizia.e e insomma mi ha dato una mano.e poi DUB: allora GEA: sì che era un bel signore.infatti poi è venuto anche a trovarmi e il giorno dopo.in ospedale.era gentilissimo e poi ...a a me mi piaceva insomma ecco ((laughing)) e poi mi ha detto anche che magari quando quando sto bene quando esco dall'ospedale che si dice quando MI DIMETTONO dall'ospedale, magari andiamo dimettere sì che vuol dire mandare a casa se uno è guarito lo mandano lo lo mandano a casa, sano lo lasciano andare.e +1 allora* DUB: +1rimani* qua in ospedale fine.. GEA: eh questo lo dovete chiedere alla dottoressa che..che sa più o meno la situazione HEL: allora ci vorrà ancora qualche giorno.perché se non se non siamo sicuri che i valori sono tornati a posto i valori del sangue sono tornati a posto e anche i dolori son passati e le ferite si sono un po' rimarginate dobbiamo continuare con le medicazioni e e poi vedremo un po'.dobbiamo tenerla ancora sotto osservazione ventiquattro ore.domani ripeteremo eh le analisi e se starà bene e tutti i valori saranno a posto potremo mandarla a casa. GEA: no la gamba proprio rotta non è.Ita
35.18	SU: ambulanza	
35.26	SU: AUTOAMBULANZA	
35.37	ANN: (IM) Ciao. Ce l'ho fatta. Mi tippi? Grazie	
35.49	<i>Su tps Ann</i>	
35.57	<i>Ann arrives</i>	
36.16	SU: DENUNCIARE IL FURTO	
36.38	SU: ERA UN BEL SIGNORE?	
36.47	SU: BENE ☺)	
37.14	<i>Su uses a laugh gesture</i>	
37.27	SU: DIMETTERE DALL'OSPEDALE	
37.37	SU: MANDARE A CASA	
37.40	SU: GUARITO SANO E SALVO ☺	
38.24	SU: I DOLORI DEVONO PASSARE	
38.30	SU: LE FERITE SI DEVONO RIMARGINARE	
38.34		
38.36	ITA: ti sei rotta la gamba Gea? SU: SOTTO OSSERVAZIONE PER 24 ORE	

38.52	SU: SE STA BENE PUÒ USCIRE CON IL SIGNORE BELLO	mi chiedeva se la +1 gamba è rotta*
39.03	SU: CONTUSA	HEL: +1 no. non è rotta* altrimenti non si potrebbe mandarla a casa già domani
39.05	ITA ☺	GEA: infatti non è rotta, è contusa
39.10	SU: CAVIGLIA GONFIA	HEL: è contusa, ha una brutta contusione e un gonfiore alla caviglia. ma passerà
39.17	SU: NON È ROTTA	GEA: perché se fosse se fosse rotta sarebbe stata fatta l'ingessatura. cioè
39.22	SU: NON È INGESSATA	HEL: non potrebbe camminare così presto
39.25	SU: SOPRA IL PIEDE	DUB: cosa co- caviglia gonf-gonfia
39.35	SU: DOVE SI METTONO I BRACCIALETTI	HEL: sì
39.41	SU: LA CAVIGLIA	DUB: cos'è cosa c'è
39.46	SU: sì	HEL: quando c'è una forte contusione o una storta può succedere che a livello della caviglia, sai qual è la caviglia? sopra il piede
39.47	ANN: magari le cavigliere ☺	DUB: ah sì sì
39.52	SU: SI GONGIA	HEL: eh. ecco esattamente
39.59	SU: CAVIGLIERE HANNO IL PROBLEMA CHE CAVIGLIA NON SI CAPISCE NO?	GEA: dove si mettono ((laughter)) i braccialetti
40.10	SU: ARROSSATA	HEL: +1 le fasc*
40.14	SU: CONTUSA	DUB: +1 e gonfia* è quando è quando diventa più grande gonfia eh
40.19	SU: CON UN EMATOMA	HEL: quando diventa più grande esattamente +1 si gonfia*
40.23	SU: LIVIDO	GEA: +1 sì sì* esatto
40.31	SU: LIVIDO=EMATOMA	HEL: a seguito di una contusione di una storta si può gonfiare allora è necessario intervenire
40.41	SU: RADIOGRAFIA	DUB: e come di dice quando quando è rosso no rosso eh quand'è
41.30	SU: (IM to ITA) MAGARI PRENDI PURE UN APPUNTAMENTO DOPO.	HEL: quando c'è un'inflammatione quando si ar si arrossa
41.33	SU: (IM to ITA) CON UNO SPECIALISTA	DUB: è gonfia e anche ross
		HEL: è arrossata. arrossata.
		GEA: è contu-una contusione anche un ematoma
		DUB: ematoma sì sì
		HEL: un ematoma o un livido è la stessa cosa
		GEA: sì. ematoma sì perché.. l'ematoma vuol dire che c'è del sangue è fermo lì che è uscito sono rotti
		DUB: e come si dice ra radiografia radiografia?
		HEL: la radiografia è quella che si fa per per accertarsi che non ci sia una frattura
		DUB: ah ok è lo stesso in +1 portoghese*
		HEL: +1 quindi noi ieri quando Gea è arrivata abbiamo fatto immediatamente una radiografia e ci siamo accertati che la gamba non è rotta e la caviglia è solo contusa
		GEA: però vedi che non la posso stendere non la posso piegare la de la devo tenere te-stesa perché mi fa male.. mi fa molto male. comunque io aspetto questi giorni

Appendix B – Transcripts

41.40 41.45	SU: (IM to ITA) CHE TI AIUTI PER PROBLEMI CON GLI OCCHI SU: (IM to ITA) INVENTALO TU	che poi dopo devo uscire con quel signore lì che m'ha detto che andiamo a fare a fare festa ((smile)) quando son guarita ((laughter)).almeno mi consolo un po'.+1pazienza* DUB: +1sì.festa((smile))* HEL: Mia lei si è mai fatta male a una caviglia?sa che cosa che co'è una contusione, la sensazione che si ha quando una caviglia è gonfia? MIA: no HEL: non è mai capitato.eh.meno male.meglio così HEL: fortunati certamente. MIA: +1eh sì.sì* HEL: +1se non vi* è mai capitato siete fortunati SU: va bene povera +1gea* GEA: +1Mia ma da* voi succede che facciano gli scippi? SU: eh.è vero.ci sono scippi in irlanda? BEA: ((laughter)) MIA: +1scippi*? DUB: +1non.non ho capito*scippi (to himself)...
41.56	SU: FORTUNATI	HEL: quello di +1prima* GEA: +1di prima* DUB: ah sì sì sì sì GEA: questi che rubano per la strada ((laughter))le persone che passano che +1strappano le borse* DUB: +1in Irla*in Irlanda no però in brasile GEA: in brasile sì DUB: tantissimi ((laughter)) GEA: ((laughter))...ho capito SU: direi che dobbiamo far riposare la povera gea.che poverina +1ha parlato*tanto.gentilissima HEL: +1sì sì*(XXX)un'eccezione SU: lasciatele i fiori. GEA: sì la dottoressa + 1è stata molto gentile ma ora* SU: +1è vero.è stata gentile*ringraziate la dottoressa che è stata molto carina GEA: sì, m'ha fatto piacere vedervi HEL: eh non avremmo potuto perché è molto tardi.non è l'orario adatto per fare visita alle persone in ospedale però visto che venivano molto da lontano ho pensato che insomma si potesse anche fare un'eccezione.però adesso dovete andare.salutate Gea.magari la andrete a trovare a casa GEA: ciao. SU: sì.quando+1non disturbiamo* GEA: +1è appena*appena mi mandano.+2ciao bea!*
42.21	SU: SCIPPO SU: SCIPPO SU: SCIPPO SU: SCIPPARE	
42.30	ITA (IM) va be.non mi dai la notecard?	
43.16 43.21	SU: (IM to ITA) non ce l'ho per te. Hai problemi agli occhi SU: (IM to ITA) ti serve un appuntamento. Per domani se possibile. Basta così?	
43.37 43.20	ITA: (IM) sì ho capito ☺ ANN: Ciao Gea. Guarisci presto!	

44.22		<p>SU: +2lasciatele i fiori*...ok allora GEA: grazie Annette ((laughter)) SU: Bea lascia la cioccolata a gea e non la portare via con te che so che vuoi mangiarla tu HEL: no no la può mangiare ma domani quando torna a casa la potrà mangiare.gea la cioccolata.bea gliela può lasciare. GEA: ho promesso la metto da una parte ((laughter)) SU: ciao gea grazie noi andiamo GEA: ciao SU: al piano sotto..e poi dobbiamo andare a prendere degli appuntamenti GEA: mi trasformo e poi vengo</p>
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Task Two: Making an appointment with a consultant

Time	Scene description. Local chat and IM	Voice chat
44.27		HEL: allora.teleport giù
45.05	<i>Only Bea is on the correct floor. Ita arrives, teleported.</i>	SU: allora scendiamo al piano sotto quindi ragazzi è la freccia che vedete qui che va in basso...
45.08	<i>Dub crashes</i>	<p>SU: Mia e Ita?..ecco Ita.ci manca Mia...allora Ita, mi mi senti bene? ITA: sì. SU: allora senti.ti dò la notecard di Dub.perché Dub non so dove sia.credo che sia caduto.ecco qua.quindi.quello è il tuo.ah è tornato. ITA: sì ((laughter)) SU: è tornato.va bene quindi comunque sai, no?quella o quella che ti ho dato, eccetera....aspetta che chiamo.chiamo Dub se lo trovo..ecco qua.allora avete delle, dov'è Mia? HEL: è giù è giù con me SU: ah.ma deve venir su.un attimo. HEL: Mia devi di nuovo devi di nuovo prendere il teleport per salire al piano superiore.</p>
45.37	<i>Dub appears.</i>	
45.46	<i>Dub arrives.</i>	
46.27		<p>MIA: ha una problema con coordinazione SU: ha ho capito non ti preoccupare allora.non c'è problema guarda non importa.tanto veniamo fra pochino giù.dunque questi ragazzi sono gli i vari ambulatori e studi dei medici.e sono i medici poi da per cui dovete prendere gli specialisti per cui dovete prendere l'appuntamento, ok?quindi vedete, potete visitare i vari ambulatori a seconda del problema che avete e il tuo problema Ita, non c'è.((laughing)) perché non comunque per te lo specialista è in un</p>

47.46	<i>Su goes to the ground floor and Mia is there already.</i>	altro, in un altro ospedale... quando avete deciso quale specialista vi vi interessa scendiamo giù all'entrata dell'ospedale e prendete gli appuntamenti uno per volta.ok?quindi vi aspetto, vi aspetto giù al al all'accettazione. DUB: ma non lo so come si chiama in italiano SU: ma sai che cosa devi fare, vero? DUB: sì SU: allora se non lo sai puoi chiedere aiuto alla segretaria all'accettazione. DUB: ok
47.58		SU: ciao Mia.siamo qui HEL: qui potete prendere gli appuntamenti con gli specialisti
48.18	ANN: Fantastica accettazione!	SU: prego Mia vai, comincia pure, grazie dottoressa, comincia pure tu, prendi l'appuntamento per il tuo specialista. KAJ: buonasera Mia. MIA: sera KAJ: so che hai bisogno di un appuntamento con uno specialista.di che cosa si tratta?così individuiamo quello che è lo specialista di riferimento e vediamo quando ti possiamo dare un appuntamento
48.36	SU: come sempre Annette!! Bellissima	MIA: ehm il mal di denti KAJ: hai mal di denti per cui abbiamo bisogno di un dentista MIA: sì prendere un appuntamento con il dentista
48.44	SU: (IM to KAJ) LEI	KAJ: hai già fatto una radiografia della dentatura o dobbiamo fare anche quella? MIA: no no, dobbiamo fare KAJ: mm dobbiamo fare anche la radiografia? MIA: sì KAJ: è solo un dente oppure hai un problema più esteso.nel senso che magari +1c'è (XX)* MIA: +1un dente* KAJ: un dente solo, e che +1cos'hai?*
49.01	SU: (IM to KAJ) non la aiutare troppo... KAJ: (IM) ok SU: (IM to KAJ) è pigra ☺	MIA: +1sì KAJ: così scriviamo tutto nella cartella.questo per aiutare il medico e anche per te. MIA: ok KAJ: è un dente cariato per cui ti fa male oppure sta eh uscendo il dente del giudizio per cui ha bisogno di spazio di che cosa si tratta.è da curare soltanto? MIA: eh fa male e e non lo so che è la problema ma eh fa male KAJ: fa male.allora io ti prenoterei per un lunedì mattina per le dieci perché vedo
49.47	SU: (IM to KAJ) se puoi dai del LEI agli altri ☺	
50.03	<i>Ita is in the reception, Dub is still outside of the door, Bea is nowhere to be seen. Su opens</i>	

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50.22	<i>the door for him. Dub walks in. Su has to tp Bea, who doesn't come down.</i>	qua sul computer che il dentista è molto molto preso per cui ha come unico buco ehm posto libero il lunedì mattina alle dieci eh per fare inizialmente la radiografia, la panoramica e poi ti fisserà l'appuntamento per il lunedì successivo.ti va bene?
50.31	KAJ: (IM) ok	MIA: sì grazie mille
50.32	SU: RADIOGRAFIA	KAJ: come orario può andare?o o ha degli impegni?...
50.36	SU: LUNEDì ALLE 10	
50.44	SU: HA IMPEGNI?	MIA: significa ha +1impegni*
		KAJ: +1Mia* cioè l'appuntamento che ti che ti le verrà dato è per lunedì alle 10 del mattino eh +1ha degli* impegni oppure posso fissarlo
51.07	SU: FISSARE UN APPUNTAMENTO	MIA: +1sì ok*eh posso fissarlo
		KAJ: va bene.allora ti lascerò poi una note in cui ci sarà scritto l'orario e cosa dovrai fare con che cosa ti dovrai presentare.molto importante è che al luogo della radiografia lei si presenti con la tessera sanitaria perché senza quella non è possibile fare nessuna visita nessun nessun intervento nessun prelievo, nessuna radiografia.lei è in possesso della tessera sanitaria?
51.29	SU: TESSERA SANITARIA	MIA: eh sì sì
51.47	SU: MI RACCOMANDO	KAJ: per cui mi raccomando lunedì mattina alle dieci per la radiografia si presenti con la tessera sanitaria.allora io adesso glielo scrivo in una nota.ecco qua.appuntamento per la signorina Mia, presso lo studio dentistico di questo presidio ospedaliero lunedì ore dieci con tessera sanitaria.va bene?
51.47	<i>Ita sits on the wheelchair then walks around the room</i>	MIA: sì va bene.grazie mille
52.01	SU: SI PRESENTI CON LA TESSERA SANITARIA	KAJ: ok.allora adesso un attimo solo che la stampo e gliela passo...ecco a lei
52.12		Mia.le è arrivato?+1(XXX)*
52.19	SU: APPUNTAMENTO PRESSO LO STUDIO DENTISTICO	MIA: +1sì grazie mille grazie*
52.41	SU: DI QUESTO PRESIDIO OSPEDALIERO	KAJ: ecco quello è l'appuntamento per lunedì le raccomando ancora una volta, ricordarsi la tessera sanitaria...altrimenti le toccherà pagare completamente la radiografia.
52.45	HEL: (IM) io ho finito? HEL: (IM) o c'è ancora bisogno di me?	MIA: ok.sì...
52.58	SU: (IM to HEL) Sì GRAZIE MILLE!!!BRAVISSIMA ☺)	
53.01		
53.07	HEL: (IM) di nulla!	
53.09	SU: (IM to GEA) SEI STATA PERFETTA ☺	
53.10	HEL: (IM) saluto e vado	
53.14		SU: chi è il prossimo che +1deve prendere un* appuntamento? KAJ: +1c'è qualcun altro*? HEL: eh scusate io intanto saluto perché il mio turno è finito e quindi eh tanto vi lascio in ottime mani, la nostra segretaria prende gli +1appuntamenti alle persone*

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53.39	GEA: (IM) grazie☺) fatto il possibile	e e ci vediamo spero presto SU: +1grazie dottoressa, grazie mille* HEL: +2buona sera e buon lavoro* SU: +2arrivederci* e buona giornata +3della donna dottoressa*! KAJ: +2buonasera*
53.42	ITA: CIAOOOOO	DUB: +2grazie* +3grazie mille*buonasera HEL: grazie anche a voi!
53.45		KAJ: eh dottoressa Helenita cliccando sulla mimosa può prendere la spilla per la giornata della donna, eh su +1questo vaso* HEL: +1grazie mille!*
53.56	ANN: buonasera dottoressa. Grazie mille di tutto	KAJ: prego HEL: +2grazie!(XXX)* KAJ: +2mi sono dimenticata*per tutte HEL: io devo capire come funziona, +1questo qui*?questo vaso che è +2qui sopra*?
54.10	<i>Ita is walking around the reception</i>	KAJ: +1basta che clicca sopra*sì +2il vaso*sì esatto HEL: col destro?no KAJ: no con con il sinistro è sufficiente..sì apre il coso e fai copia nell'inventario. HEL: ah.ci provo eh.((laughing)) perché KAJ: col tasto sinistro HEL: eh.col tasto sinistro..normale.ma questo qui?+1non funziona* KAJ: +1questo che è qua* dietro al computer.vedi il vaso +2davanti (XXX)* HEL: +2ma non sta* sì sì lo vedo ma non sta succedendo niente KAJ: stranissimo..sul fiore HEL: voi riuscite? SU: no.neanche io riesco KAJ: neanche voi? HEL: +1eh* KAJ: +1vera*mente.ve la passo io HEL: allora ce la devi passare +2tu sì* SU: +2va bene* KAJ: sì sì ve la passo così.stranissimo perché a me riesce però +1capita*magari SU: +1eh succede* KAJ: solo un +2attimino* che ve la passo HEL: +2grazie* SU: sì ((laughter)) i poveri pazienti che stanno soffrendo e noi ci passiamo le mimose ((laughter)) HEL: +1((laughter))* KAJ: +1((laughter)) ebbè è una giornata particolare per noi eh +1merita un attimino di eccola qua.eccola HEL: +1((laughter)) SU: ora entra la paziente e la mena HEL: grazie KAJ: prego
54.37	ANN : neppure a me	
55.08	SU: MIMOSA	
55.12	SU: OGGI è LA FESTA DELLA DONNA ANN: Auguri a tutte le signore!	
55.16	<i>Ita opens the gate to the back of the counter</i>	

		HEL: grazie mille la posso mettere indossare vero? KAJ: certo, si indossa. HEL: ecco.perfetto. +1grazie* GEA: +1io saluto la dottoressa* grazie!mi sento +2già meglio* HEL: +2buonasera.arriv+3ederci* SU: +3la vediamo* signora!già (XXX) HEL: (XXX) GEA: (XXX) SU: è +1un miracolooo* KAJ: +1c'è qualcun altro* che ((laughter))i +2miracoli* succedono SU: +2grazie* ((receiving mimosa)) KAJ: ehm.qualcuno ha necessità ancora di prendere qualche appuntamento? SU: eh sì DUB: sì anche io vorrei fare un appuntamento. KAJ: anche lei vorrebbe un appuntamento.per che cosa?qual è il lo specialista di suo interesse? DUB: sì ma io non sono italiano e non so come si chiama il dottore in italiano eh +1sono caduto* KAJ: +1(XXX)*sì? DUB: sì sono caduto dal motorino e ho una dolore al polso KAJ: ha un dolore al polso.allora per lei è necessario un ortopedico perché dovrà vedere se il suo polso ha subito eh qualche trauma se ha qualche lesione o semplicemente è stato il colpo che lei ha ricevuto nel cadere dal motorino, per cui è necessario prendere l'appuntamento con l'ortopedico, ma anche per lei sarà necessario prima della visita effettuare una radiografia perché l'ortopedico avrà così la visuale del suo polso e potrà emettere una diagnosi precisa.lei +1ha*lei delle.dica prego. DUB: +1sì*perché lavoro tutte mattina +sono libero* solo dopo dopo le due pomeriggio KAJ: +1tutte le mattine*ah.questo è un un bel guaio.un bel guaio.adesso vediamo cosa +2posso* DUB: +2cos'è* un bel guaio KAJ: è un problema ((laughter)) allora è un problema perché l'ortopedico generalmente come tutti i medici generalmente effettuano il loro turno e le visite nel durante la mattinata e non nel pomeriggio.quindi se è nel mattino io riesco a prenotarle in tempi brevi mentre se dev-dobbiamo guardare gli appuntamenti del del pomeriggio eh bisogna che che lo interpellii, cioè parlo
55.38	ITA: COSA SIGNIFICA LA FESTA DELLA DONNA?	
55.40	SU: MIRACOOOOLOOO	
55.46	ANN Grazie mille! Fantastica idea!	
55.50		
55.54		
56.10	SU: PRENDERE UN APPUNTAMENTO <i>Mia doesn't move from where she is, so Dub has to stand behind the mimosa vase</i>	
56.29	SU: DOLORE AL POLSO	
56.30	SU: ORTOPEDICO <i>Bea has no hair</i>	
57.06	<i>SU is trying to give Bea some hair</i>	
57.28	SU: GUAIO	
	SU: PROBLEMA	
57.33	SU: GUAIO=PROBLEMA	
57.59	SU: (IM to GEA) chiudi il mic che rimbomba ☺	

58.20	GEA (IM) fatto ☺ <i>Su is still looking for hair for Bea</i>	con l'ortopedico se è possibile che lui venga un pomeriggio.in quale giornata avrebbe meno problemi a presentarsi nel pomeriggio, qualunque? DUB: domani perché io ho molta dolore KAJ: ah.domani nel pomeriggio abbiamo dei problemi mi sa che fino alla settimana prossima non è possibile che lei abbia un appuntamento. DUB: e allora cosa devo fare KAJ: allora come indicazione, così per alleviare il dolore le direi inizialmente di mettere del ghiaccio sul polso.e poi vedo se riesco ad accelerare la procedura però sicuramente prima di lunedì pomeriggio non è possibile avere un appuntamento con l'ortopedico. DUB: sì ma è molto dolore KAJ: molto dolore eh capisco perché il colpo deve essere stato decisamente..è esatto.la signora ha suggerito un'ottima cosa.non può lei prendere un permesso dal lavoro?cioè non può chiedere al suo datore di lavoro se le concede qualche ora, magari recuperandole, o di ferie?o un permesso? DUB: provo a chia-a chiamarlo KAJ: bene
58.42	ANN: Non può chiedere un permesso al lavoro?	
58.50	SU: (IM to BEA) ti ho mandato dei capelli sei senza	
59.07	SU: PERMESSO	
59.09	ITA: LEI HA DETTO UN BEL GUAIO? MA SE E' UN PROBLEMA PERCHE E' BELLO??	
59.14	ANN: Per visita medica	
59.19	SU: BRAVA ITA	DUB: adesso non sono italiano e non ho una tessera sanitaria cosa +1devo fare*
59.26	SU: BEL SIGNIFICA ANCHE GRANDE	KAJ: +1non ha la* tessera sanitaria?ah è un grosso problema allora.è un grande problema lei dovrà recarsi presso un altro sportello di un altro ufficio per ottenere eh la tessera sanitaria perché senza quella non si può accedere a quelli che sono i servizi sanitari in italia
59.38	GEA: bella domanda Ita	DUB: ma si non è italiano?
59.39	BEA: (IM) lo so, è stato un incidente	KAJ: anche per i non italiani è necessario che abbiano una copertura assicurativa che viene data con il rilascio della tessera sanitaria in un altro ufficio però, non qui da me
59.42	SU: NIENTE TESSERA SANITARIA	DUB: oh
59.48	SU: GROSSO PROBLEMA UN BEL PROBLEMA	KAJ: questa è la il primo passo che lei deve fare è la prima cosa che lei deve fare è richiedere la tessera sanitaria è molto importante.perché oggi è solo una caduta e il polso che le fa male.ma domani potrebbe essere qualcosa di molto più grave e allora le toccherà poi pagare tutto a lei se non ha la tessera sanitaria.
59.54	SU: DEVE RECARSÌ A PRENDERLA	DUB: e da dove devo andare per fare la tessera
59.58	SU: IN UN UFFICIO	KAJ: io le darò l'indicazione per recarsi
1.00.05	BEA: (IM) ho clicato sul la cosa no corretto	
1.00.10	ITA: ahh ho capito ☺	
1.00.24	SU: GRAVE	
1.00.33	ANN: Se è urgente però potrebbe provare al	

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1.00.50 1.00.54	pronto soccorso ... Magari c'è da aspettare un po'... SU: CI VUOLE LA TESSERA SANITARIA SU: ANCHE AL PRONTO SOCCORSO	presso un ufficio..eh per avere la tessera sanitaria..eh.signorina lionard anche in pronto soccorso purtroppo è necessario avere la tessera sanitaria altrimenti il servizio deve essere pagato.è proprio necessaria anche per il pronto soccorso.
1.00.56	ANN: Grazie	DUB: ok KAJ: prego.per cui signor Dub deve proprio effettuare il primo passaggio con la richiesta di rilascio della tessera sanitaria.possiamo fare una cosa, io l'appuntamento glielo fisso comunque per lunedì facciamo pomeriggio così sappiamo che lei al mattino può andare a chiedere la tessera sanitaria per cui io glielo fisso per lunedì pomeriggio.lei però si presenti con la tessera sanitaria.altrimenti non potrà accedere ai servizi sanitari.d'accordo?
1.01.20	SU: FISSARE UN APPUNTAMENTO	DUB: d'accordo.adess-allora quando quando quanto devo pagare. KAJ: in questo momento non deve pagare niente.e non dovrà pagare niente se lunedì pomeriggio lei si presenta con la tessera sanitaria DUB: e senza la tessera sanitaria? KAJ: dovrà pagare completamente tutti i servizi che le verranno effettuati.per cui sia la radiografia che l'appuntamento con l'ortopedico e tutto quello che sarà necessario.eventualmente vari medicinali, fasciatura il gesso.dipenderà da quello che risulterà dalla radiografia.
1.01.47	SU: GRATIS	DUB: cosa è gesso? KAJ: allora, quando c'è una caduta per cui si può ipotizzare una frattura, l'arto, per cui il polso deve essere immobilizzato e si fa con una con del gesso DUB: +1ah* KAJ: +1e viene* messo attorno al polso per tenerlo fermo lo immobilizza lo si lo si fa diventare fermo dentro questo diciamo che diventa una cosa molto rigida per cui resta fermo dentro questo questo specie di guanto ecco. DUB: ho capito KAJ: uh? DUB: ho capito.e come si chiama quello tsk la medicina per per per no avere dolore di più KAJ: per non avere dolore?ci sono degli antidolorifici +1che lei* può in questo caso acquistare nella farmacia qui di fronte. DUB: +1anti* KAJ: si +2chiamano*antidolorifici DUB: +2ok*...va bene grazie mille KAJ: prego!
1.02.07 1.02.08	BEA (IM) ho trovato è ☺ lol SU: RADIOGRAFIA + VISITA + MEDICINE	
1.02.13 1.02.18 1.02.22	SU: GESSO SU: BIANCO SU: INTORNO AL POLSO	
1.02.26	ITA: io nn so cosa vuol dire POLSO?? mi speighi Su	
1.02.28 1.02.31 1.02.37	SU: IMMOBILIZZA IL POLSO SU: è DURO SU: E TUTTI CI SCRIVONO IL NOME SOPRA ☺	
1.02.47 1.02.47	SU: GESSO ANN: Polso: tra la mano e il braccio	
1.02.59 1.02.59 1.03.01	ANN: l'articolazione, Ita SU: ANALGESICO ITA: Grazie Ann!!!	
1.03.03	SU: ANTIDOLORIFICO	
1.03.18	SU: ANTI + DOLORE =	

1.03.25	ANTIDOLORIFICO	KAJ: qualcun altro?
1.03.29	<i>Bea moves to the counter, she ends up behind Mia and Dub. Dub moves out of the way. Bea moves somewhere else</i>	SU: c'è la signorina Bea che sta aspettando di fare la fila ma la signorina Mia non si sposta.
1.03.57	<i>Dax arrives. Mia doesn't move and Bea walks around.</i>	KAJ: grazie
1.03.59	DUB: lol	SU: Mia puoi lasciare il posto a Bea?...
1.04.03	<i>Mia sits on the couch next to the skeleton waiting for her turn</i>	SU: perfetto grazie!
1.04.44	SU: PRENDERE UN APPUNTAMENTO	KAJ: può venire anche qui signorina Bea eventualmente eh se se vuole..mi dica, aveva bisogno?
1.04.46	SU: FISSARE UN APPUNTAMENTO	BEA: ehm sì vorrei fare un appuntamento con la dottoressa per favore ehm un tosse molto forte ehm per due settimane e .. ehm e il giorno che il mio preferito è mercoledì per favore, perché ho lezione all'università durante gli altri giorni
		KAJ: sì allora per prima cosa, così vediamo subito se è il caso di prenotare un appuntamento o meno le chiederei se lei è già in possesso della tessera sanitaria.
		BEA: ehm un carta europea ma non italiano
1.05.19	SU: TESSERA EUROPEA	KAJ: la tessera sanitaria europea?
		BEA: sì
		KAJ: perfetto.va bene comunque quella le dà diritto ad accedere ai servizi anche nel nostro paese.allora da quello che mi dice lei ha la necessità di eh essere visitata da un medico generico, nel senso che non ha bisogno proprio di uno specialista all'interno del nostro ospedale eh ma un medico generico potrebbe comunque risolvere il suo problema e questo +1è *
		BEA: +1ehm pos*
		KAJ: dimmi.mi dica
		BEA: ehm niente ehm penso è una buona idea per me a visitare uno specialista ehm perché la tosse è è ricorrente
		KAJ: uh uh.sì +1all*
		BEA: +1e*
		KAJ: potre-lei anche per caso male alle orecchie?
		BEA: ehm sì sì
1.06.30	SU: OTORINOLARINGOIATRA	KAJ: allora potrei fissarle un appuntamento dall'otorino così la le fa uh
1.06.32	SU: OTORINO	le +1fa*
		BEA: +1cosa* significa otorino
1.06.50	SU: SPECIALISTA DI NASO, GOLA ORECCHIE	KAJ: un otorinolaringoiatra è uno specialista che come nella sua situazione potrà essere utile perché controlla sia le vie nasali, il naso, la gola le orecchie tutto
1.06.53	ANN: Naso, orecchie e gola	quello è adatto per soprattutto nei

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1.06.56	SU: OTORINOLARINGOIAGRA *TRA	momenti in cui si è particolarmente influenzati perché tutte le ghiandole vengono interessate per cui si infiammano e l'otorinolaringoiatra è lo specialista che potrebbe fare al suo caso BEA: ok KAJ: lei mi ha detto scusi che è libera il mercoledì pomeriggio? BEA: ehm mercoledì è il preferito KAJ: il mercoledì nella mattinata o nel pomeriggio BEA: ehm nel pomeriggio KAJ: nel pomeriggio.allora.controlliamo subito se c'è +1la possibi*eh? BEA: +1se è possibile* KAJ: allora, sì lei ha fortuna perché mi si è liberato un posto per una rinuncia da parte di un'altra paziente, per cui io adesso le passerò la note su cui ci sarà fissato un appuntamento dallo specialista..otorinolaringoiatra per la signorina Bea, mercoledì alle ore 15.mi raccomando sempre munita della tessera sanitaria europea in questo caso...ecco a lei signorina.le ho passato eh la nota con l'orario dell'appuntamento e lo specialista di cui lei ha la necessità, per cui mercoledì nel pomeriggio quando si presenterà di nuovo nei nostri nel nostro presidio ospedaliero, dovrà presentare il biglietto che le ho appena dato e la tessera sanitaria.le indicheranno quale sarà l'ambulatorio presso cui lei dovrà rivolgersi...sono stata chiara? BEA: sì tutto chiaro.grazie KAJ: bene.grazie a lei BEA: ci vediamo a mercoledì KAJ: ci vedremo mercoledì.arrivederci BEA: arrivederci
1.07.31	SU: MATTINATA O POMERIGGIO?	
1.09.26		
1.09.30	<i>Bea moves far from the counter</i>	
1.09.39	ITA: tocca a me? SU: Sì	
1.09.45		KAJ: bene.ancora qualcun altro che ha necessità?signorina Ita buona sera... ITA: ciao. KAJ: Buona+1sera* GEA: +1allora* mentre Ita ci pensa io vi io vi saluto.bacioni a tutti.alla prossima. SU: rimettiti KAJ: +2alla prossima* GEA: +2ciao ciao* SU: +2riposati* GEA: sì sì infatti vado per que+1lo* SU: +1prenditi* i regali che non ti hanno dato ((laughter)) GEA: ((laughter)) lo so che che ci hanno provato SU: ciao.ciao
1.09.57	ANN: Ciao Gea!	
1.10.11	DAX: ciao Gea	

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1.10.25		DUB: ciao Gea GEA: ciao ciao ciao KAJ: eccomi a lei signorina Ita ITA: mi serve un appuntamento con uno specialista per gli occhi.. KAJ: con un oculista per cui.lei è titolare di eh della tessera sanitaria?è già in possesso? ITA: ah sì ce l'ho già. KAJ: ce l'ha già.l'ha già avuta.perfetto eh potrei sapere qual è il problema?è solo una visita di controllo oppure lei porta degli occhiali e ha la necessità di vedere se questi vanno bene, oppure è una prima visita.
1.10.42 1.10.50	SU: OCULISTA SU: TESSERA SANITARIA	ITA: no i miei occhi sono male.ogni volta tutto diventa nero e ho sempre mal alla testa KAJ: ogni volta vuol dire quando lei legge piuttosto che guardar la televisione +l'oppure in qualun*que momento della giornata? ITA: +l'sì quando (XXX)*quando leggo, quando guardo il tv, quando navigando su internet KAJ: per cui possiamo dire che è un affaticamento dell'occhio quando questo viene sollecitato...
1.11.05 1.11.07	SU: VISITA DI CONTROLLO SU: OCCHIALI	ITA: ok KAJ: allora.lei ha dei problemi per le giornate eh per un eventuale appuntamento oppure possiamo andare tranquillamente a vedere quello che in computer risulta? ITA: eh per domani se possibile? KAJ: domani? ITA: sì KAJ: io domani ho delle serie difficoltà.provo a dare un'occhiata ma penso proprio che non possa essere possibile un appuntamento così a breve termine.comunque controlliamo subito...e no.avevo poprio ragione.purtroppo se ne parlerà per la settimana prossima per un appuntamento dall'oculista.è uno tra i più richiesti in questo periodo.purtroppo ci sono parecchie persone con gli stessi suoi problemi di conseguenza gli appuntamenti andranno molto in là nella settimana.
1.11.15	SU: PRIMA VISITA	ITA: ok.va bene.va bene.più presto quando vuoi KAJ: più che quando vuoi, quando voglio è quando avremo la disponibilità.allora.il primo giorno libero è venerdì prossimo alle ore sedici
1.11.44 1.11.46	SU: CIECA SU: INSOMMA	ITA: va bene KAJ: va bene?allora anche per lei le
1.11.57	SU: AFFATICAMENTO DELL'OCCHIO	
1.12.08	ANN: Dalla voce sembrerebbe che abbia pure un raffreddore ☺))))	
1.12.26	SU: (IM to ANN) INFATTI STA MALE POVERINA	
1.13.09	SU: QUANDO VUOLE	
1.13.15	ANN (IM) Scusa se sono arrivata in ritardo. Problemi a scuola. Comunque ho cominciato	

1.13.49 1.13.54	a registrare quando sono arrivata SU: (IM to ANN) NON DOVREBBE ESSER UN PROBLEMA TI FARÒ SAPERE ☺ SE VA BENE PUOI CANCELLARE SU: RAFFREDDATA SIGNORINA? ANN (IM) Benissimo	passerò la note con su scritto la giornata in cui lei dovrà presentarsi .allora.visita specialistica presso oculista per la signorina, è anche parecchio raffreddata signorina se non sbaglio.per venerdì ore sedici.lo rammento anche a lei, munita obbligatoriamente della tessera sanitaria...
1.13.54	DAX: sì mi sa che delle aspirine sarebbero utili	
1.14.13	ITA: cosa??	
1.14.27	DAX: delle pastiglie per il raffreddore	
1.14.30	SU: HA IL RAFFREDDORE SIGNORINA ITA?	KAJ: ecco.ci sono dei problemi Ita? ITA: (XXX)
1.14.33	ANN (IM) Comunque, Gea, Kaja e Helenita sono diventate bravissime	
1.14.47	SU: (IM to ANN) LE DONNE Sì	KAJ: allora io le ho passato la note con su scritto la giornata e lo specialista di cui lei necessita e le ho rammentato per iscritto che deve presentarsi con la tessera sanitaria..ma quello che le dicevo prima, che mi sembra anche particolarmente raffreddata
1.14.53	SU: (IM to ANN) ANCHE DAX	ITA: cosa significa raffreddata KAJ: che ha l'influenza ha il naso chiuso il naso che cola il raffreddore
1.14.59	SU: CON IL RAFFREDDORE	ITA: io sto male adesso
1.15.03	SU: EEETTCHHHIII	KAJ: lei sta male adesso.potrei consigliarle di recarsi presso la nostra farmacia per acquistare qualche farmaco che potrebbe darle un po' di sollievo?
1.15.08	SU: SI SENTE	ITA: sono già andata al dal dottore KAJ: ah è già andata dal dottore.ha già risolto il tutto.oggi la farmacia non lavora insomma.
1.15.39		ITA: va bene KAJ: bene

Task Three: At the Chemist's and Wind-Down part

Time	Scene description. Local chat and IM	Voice chat
1.15.42		SU: +1bene* KAJ: +1qualcuno*deve prendere altri appuntamenti o SU: ci sono altri appuntamenti?mi pare di..no KAJ: mi pare di no..nessuno +1ha bisogno*della farmacia
1.16.03	<i>Everyone walks to the chemist's, which is adjacent to the reception.</i>	SU: +1perfetto*..è direi che lasciamo qui, anche se la farmacia era veramente andiamo a vederla che è proprio carina.la parte dalla farmacia. KAJ: prego SU: eh.andiamo a vedere la farmacia che c'è l'aspirina per Ita. KAJ: eh.infatti io le ho consi-le consigliavo l'acquisto dell'aspirina..e

1.16.25	SU: COLLIRIO	magari di un collirio nel frattempo
1.16.29	ANN: Bellissima Kajal! <i>Mia is still sitting on the couch. Ita is still at the counter. All the others are in the chemist's.</i>	SU: eh sì
1.16.32		SU: Ita.se vieni qui puoi vede-puoi prendere l'aspirina per il raffreddore.è bellissima questa farmacia, veramente...
1.16.40	KAJ: grazie Annette ☺)	KAJ: è venuta carina eh? SU: molto..veramente.bella.complimenti! SU: vuoi prendere qualcosa per il raffreddore Ita? ITA: +1do* KAJ: +1signorina* SU: do! ((laughter)) KAJ: do? SU: do! ITA: do!((laughter)) KAJ: io il consiglio gliel'ho dato eh ((laughter)) ITA: ((laughter)) KAJ: giusto per alleviare un po' SU: certo certo KAJ: ma se lei ritiene che così va bene +1ci arrendiamo* ANN: +1(XXX)* ((laughter)) KAJ: ((laughter))
1.17.09	ANN: lol	SU: come diceva Mia oggi, se uno sta male con la febbre basta un tè con il miele. KAJ: verissimo anche questo è vero
1.17.22	<i>Mia and Bea never entered the chemist's.</i>	SU: no bellissimo.sì è vero complimenti a a a Kajal, è stato bellissimo il
1.17.33	DAX: ancora complimenti a Kaj per il lavoro	KAJ: grazie
1.17.34	ANN: aiuta	SU: l'ospedale è una meraviglia.verrebbe da venirci ((laughing)) fissi
1.17.42	ANN: davvero	KAJ: ((laughter))
1.17.49	ITA: sì, complimenti ☺)))	SU: no.veramente.è bello.bello davvero e...
1.18.01	ANN: Il tocco migliore ☺))	KAJ: vedete abbiamo anche gli scheletrini ((laughter)) non più negli armadi
1.18.03	SU: TANTI AUGURI	SU: sì infatti..e io vorrei quindi ringraziare tutti e fare tanti auguri...tanti tanti auguri alle ragazze...
1.18.13	DAX : auguri	KAJ: spero di avere dato a tutti il la mimosa +1(XXX)* SU: +1a me è arrivata* KAJ: è arrivata.annette sì la vedo, la vedo SU: eh Bea hai ricevuto la mimosa? KAJ: Bea ecco non so se bea BEA: no KAJ: no?allora aspetta che SU: vedi che portiamo tutte una spilla con la mimosa?oggi è la festa della donna, lo sapevi Bea? BEA: eh no.
	<i>Everyone is back in the reception except for Ita and Dub</i>	
	<i>Ita and Dub are back.</i>	
1.18.39	SU: MIMOSA	

1.18.43	SU: FESTA INTERNAZIONALE DELLA DONNA	KAJ: ecco.+1passata* BEA: +1(XXX) SU: tu lo sapevi Mia che oggi è la festa della donna?
1.18.47	ITA: cosa significa festa della donna??????	MIA: sì SU: lo sapevi sì? MIA: sì SU: Ita su lo sa+1pevi*? MIA: +1è stata* grande a mia casa SU: veramente?e cosa fate? MIA: mi eh mio padre a cucina SU: sì MIA: e fatto tutto di lavoro a casa SU: ecco bravo MIA: e mi e mia madre ha rilassata ((laughter)) SU: sì sì sì KAJ: oh bravo bravo! SU: eh ma +1è una fe* MIA: +1mangio* gelato ((laughter)) SU: ((laughter)) KAJ: ((laughter))
1.19.11	SU: BRAVO!!	SU: è una festa che quindi si fa in Moldovia.si celebra da voi MIA: è una grande festa in moldovia SU: hu hu hu ITA: si fa in Irlanda? SU: no..tu la conoscevi Ita? ITA: no!cosa significa la festa della donna! SU: è l'otto marzo vedi ti manda un link anche Annette, l'otto marzo vabbè storicamente è nata da un episodio molto triste KAJ: da una tragedia SU: sì da una tragedia.esatto.di donne che sono morte in una fabbrica e si ricorda questo episodio e si chiama la giornata internazionale della donna non è una festa nazionale però in Italia si fa molto sì.a New York.in italia si fa sì..se ne parla molto se ne ..le donne lavorano meno, a scuola non interroga-non ci sono interrogazioni almeno a me non non la fate in Brasile?Dub?ah sì.ma non è una festa nazionale, vero...Dub.è una festa nazionale in brasile?...dub è diventato sordo KAJ: ((laughter)) SU: dub?...può darsi che prima poverino è anche caduto. DUB: mi senti? SU: ah.sì sì ti sento ti sentiamo DUB: no.io ho chiesto che in brasile sì è un un è una festa internazionale penso io.però non lo so la storia non lo so perché otto marzo è una festa della donna.
1.19.26	DAX: meno male che da noi non si usa così	
1.19.40	<i>ANN writes a link in local chat to a website with the history of International Women's day</i>	
1.20.11	ANN: a New York	
1.20.26	DUB: no conosco la storia	
1.20.34	DUB: sì sì	
1.21.05	ITA: haa hahaha	
1.21.09	ANN: forse muto!	
1.21.15	ANN: ci vuole uno specialista ☺	
1.21.26	KAJ: ahahah annette	
1.21.34	KAJ: se necessita lo portiamo via in elicottero	

Appendix B – Transcripts

1.21.45	ANN: 1908	SU: ((laughter))perché c'è stato ci fu ma non mi ricordo in che anno è successa questa tragedia in questa fabbrica a New York in cui sono morte le operaie che 1908.ecco nel 1908. KAJ: centoventinove donne se non ricordo male SU: sono morte in questa operaie che lavoravano in una fabbrica..ed è una festa internazionale sì ma eh in Irlanda non se ne parla molto no?
1.22.10	ITA: no	KAJ: è leggermente cotto ((laughter))
1.22.15	DAX: signori vi saluto sloggo buone feste a tutti e complimenti	SU: sì ha ragione siamo tutti stanchi.grazie comunque
1.22.20	ANN: fabbrica tessile. Tipico lavoro da donna ☹((KAJ: no è che ha la febbre ((laughter))
1.22.29	ITA: ciao Dax	SU: anche lui?anche lui ha bisogno di uno specialista!
	DUB: ciao daxim	KAJ: eh sì volevo prendere un appuntamento ma ha declinato ((laughter))
1.22.35	ANN: Più che festa, direi “ricorrenza”	SU: ((laughter))oddio.stiamo state tutti male...sì infatti è una ricorrenza KAJ: infatti siamo in un ospedale SU: ecco proprio adatto SU: va bene direi che allora chiudiamo qui che Ita poverina ha un raffreddore incredibile
1.22.56	ANN: picco internazionale dell'influenza!	KAJ: anche lei SU: e problemi agli occhi che vede tutto nero e quindi sono un po' preoccupata
1.23.01	ITA: ha hahaha	KAJ: ((laughter)) SU: e KAJ: sì sì SU: sì e dax che ha la febbre..io sto zitta ho solo un po' di tosse KAJ: ((laughter)) SU: non parlo MIA: non parlo SU: e quindi direi che stacciamo qua e ehm grazie mille a tutti e noi ragazzi ci vediamo lunedì prossimo e ci sentiamo poi per il prossimo giovedì faremo un po' di giochi e un po' di festa
1.23.34	DUB: grazie!!! Ciao!!!	KAJ: va bene..buona continuazione
1.23.34	ANN: GANZO!	SU: grazie KAJ: grazie a tutti voi BEA: grazie MIA: +1ciao* BEA+1ciao*ciao SU: il prossimo giovedì portiamo portiamo lo spumante!
1.24.00		

	DUB: yes by my hover tips don't work BEA: no. they don't work No. SU: zoom. BEA: zoom doesn't work.things are very small and not clear ITA: ((snorting)) SU: Bea, you have a mouse with a [ENGLISH]wheel, a ruota, haven't you? BEA: yes. ((sighing)) I know zoom*((sigh))but zoom isn't good. SU: (XXX)ah ITA: ((snorting and sighing)) ah! BEA: it doesn't work well. SU: no ok then. eh.. Ita do your hover tips work? ITA: yes. SU: eh then you can help the others ITA: ok.what do you want to know? Dub? DUB: ah..is there meat? On the table? No...
ITA: what? You didn't activate the hover tips??? Su wrote it on the wiki!!!!	
SU: THANKS ITA	
SU: YES	ITA: i don't know.
SU: MINCED MEAT	DUB: do you see meat?
	ITA: yes.
SU: YES	DUB: yes?we can make a lasagna..
SU: MINCED MEAT	ITA: yes?
	DUB: yes?... what's ... Ita.
SU: THERE IS NO PASTA FOR LASAGNE	ITA: hold on.my hover tips don't work now.but they did before hand.
<i>Su uses the LAUGH gesture. We can see that Daxim and Annette are trying to look at the objects.</i>	
SU: it's there	ANN: anyway, sorry, but if you hover your mouse on the object, then right click and EDIT, choose EDIT, you can see the names of the objects.give it a try...
SU: (IM to Annette) NOOOO. THEY MAKE A MESS ☹	
<i>The students do not move.</i>	
	GEA: it's a good idea.
BEA jumps (probably a mistake)	ITA: what's mezzaluna?
	GEA: mezzaluna? ((whispering to herself))
ANN: (IM) But now the read the names!	HEL: mezzaluna is a sort of curved knife that has some sort of wood or plastic handles on the sides and, because of this shape, you can put the ingredients you need to chop on a board and you cut them with the mezzaluna by moving it on the board.
SU: (IM to ANN) ☺ I hope they can manage it☺	ITA: ok thanks.
ANN: (IM) My hover tips are not working either	HEL: no problem.
ANN: (IM) sorry	DUB: ITA.tell me what is on the table please
SU: (IM to ANN) no it's a good idea. But I'm afraid to get them to do these things :))	ITA: eh there's there are two eggs ...
	BEA: milk?yes?

SU: cream	DUB: milk, yes.
SU: CREAM	ITA: ((laughing))
ANN: (IM) they have to learn, good God. lol	DUB: and there is a box next to the milk, what is it?...a small box.
	ITA: ((sighs)) it's...
	BEA: what is it ?...
SU: MILK YOU MAKE CAKES WITH ☺	DUB: oh.panna! what is panna
	GEA: sugar?panna?ah yes yes panna... panna is next to the milk. panna, ((to herself)) good God what is panna?
SU: YOU PUT CREAM ON ICE-CREAM	ITA: there's olives.olives.
	DUB: olive, ok.
SU: pinoli	ITA: ((snorts in impatience))
SU: THE FRUITS OF THE PINE TREE	DUB: on the plates.
SU: THE SEEDS	ITA: yes, but my hover tips don't work!...no. pinoli.what are pinoli?pinoli?boh!
SU: THEY ARE SEEDS	HEL: pinoli is a dried fruit. The fruit of the pine corn.the pine corn grows on pine trees,doesn't it?((laughing)) Dax help me.on pine trees?you have many in Val d'Aosta.
SU: WHICH YOU USE FOR PESTO	
ANN: exactly	
SU: DO YOU KNOW PESTO?	
SU: PINE NUTS ((ENGLISH))	ITA: what is pino (pine tree)?
	DAX: they are not on our pine trees.
	Usually it' ehm pine nuts, it's a special type of pine I think it's the mediterranean pine, the marittime pine.
	HEL: mediterranean, isn't it? maybe mediterranean, along the sea
	GEA: along the sea, along the sea
	DAX: +2(XXX)*
	HEL: the mediterranean pine, yeah right we have those pine trees, we have them, they produce a corn and there are pine nuts inside.
	GEA: (XXX)
	ITA: There are chilly peppers
	DUB: chilly peppers and ...
	ITA: yes.
ANN: here in Viareggio too	DUB: parsley?
	ITA: eh ...
SU: YES BRAVO	GEA: parsley yes.
SU: PARSLEY PASTA	DUB: parsley ((pronouncing it correctly))
CELERY	GEA: parsley is an aromatic herb
PINE NUTS CREAM	DUB: yes I know.
MILK CARROTS MINCE	GEA: ok..((inglese)) parsol
PEPPER SALT	BEA: which vegetables do we have?...
	ITA: ((mumbles))
	DUB: carrots, mince, pepper, salt, celery...
	DUB: what is mezzam-.basilico
SU: CELERY CARROTS	ITA: ((laughter))
ITA: what is mezzamolo?	
SU: BASIL	
ANN: 'PARSLEY'	DAX: parsley.
SU: PARSLEY	
ITA: parsley sorry	
SU: CHEESE ANCHOVIES	ITA: ((laughing and mumbling)) [ENGLISH]what the

CHILLIE PEPPERS	DAX: well you have everything to cook a good, a good recipe. SU: ok guys.as you see you have everything:you have anchovies, chilly peppers, spinach, carrots, celery, coarse salt, milk, pasta, cream, oil, peeled tomatoes, olives, (XXX)
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