An Ethnographic Sociolinguistic Study of Virtual Identity in Second Life

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.
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الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ
al-hamdu li-llāhi rabbi l-ʿālamīn

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Abstract

The virtual world Second Life (SL) offers its millions of users a fertile environment in which to socialise and engage in digital communication, immersed in a world where it seems like anything is possible and imagination is the only limit. To become an established resident of this virtual world is to acquire a virtual identity, which in turn requires an understanding and acquisition of phenomena such as how to dress, walk and talk. The acquisition of a SLidentity involves various linguistic acts. Users must familiarise themselves with the creative vocabulary of SL in order to reflect in-group identity. They must recognise the deictic field of the virtual environment and act accordingly through appropriate use of indexical and deictic expressions, to show awareness of the virtual surroundings. The final step towards becoming 'virtual' is recognising, acknowledging and fulfilling pragmatic acts in all of their complexity. These acts, such as those of an instructive nature, have different communicative intentions and short and long-term aims that contribute to the (co)construction of virtual identity. A SL corpus of approximately 200 thousand words and 24 hours of video data was gathered through systematic participant observation and ethnographic data collection methods. Wordsmith Tools (Scott, 2011) was used to examine the corpus observing frequencies, concordances and collocations of lexical items, leading to qualitative discussions of examples. Through the use of SLEnglish and SLArabic, reflecting in-group identity, the use of personal pronouns and place and time deictic expressions, indexing one's personal, spatial and temporal awareness in the virtual world, and through instruction and direction, a noob (Crystal, 2004) or novice can transform into a Resident (www.secondlife.com) or established user, and it is this transformation process and the linguistic (co)construction of a virtual identity that is the focus of this study.
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List of abbreviations and common Second Life terminology

AV/avi/avie: Avatar
CMC: Computer-mediated communication
LL: Linden Laboratories
LM: Landmark
LS: Linden Dollars
perm: Permissions (to edit another person's inventory items)
prim: Primitives (the basic building block of SL)
rez(z): Resurrect
RL: Real Life
SL: Second Life
SLex: Second Life Sex
SLT: Second Life Time
SLurl: Address URL in Second Life
TP: Teleport
CHAPTER ONE

Virtual Identity in Second Life: An Introduction
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1. Overview

A man spends his days as a tiny chipmunk, elf, or voluptuous woman. Another lives as a child and two other persons agree to be his virtual parents. Two "real"-life sisters living hundreds of miles apart meet every day to play games together or shop for new shoes for their avatars. The person making the shoes has quit his "real"-life job because he is making over five thousand dollars from the sale of virtual clothing. A group of Christians pray together at a church … Not far away a newsstand provides copies of a virtual newspaper with ten reporters on staff; it includes advertisements for a "real"-world car company, a virtual university offering classes, a fishing tournament, and a spaceflight museum with replicas of rockets and satellites.

(Boellstorff, 2008: 8)

In my ethnographic adventure in Second Life (SL) I encountered a world where anything seemed possible. I flew through space, partied with vampires, dined with royalty and refurnished my house all in the same day. Boellstorff's words and my own experiences reflect the endless possibilities that SL offers. I saw people pretending, role-playing and acting. Many love to socialise. SL can bring together family and friends who live thousands of miles apart. Some were making money, a few even earning their primary income through SL. Others were learning, or discussing educational and academic matters. People like to explore, express themselves and be creative. Others like to practice a hobby or learn a new skill. Whatever can be imagined can be found, and if not found, created.

In computer-mediated communication (CMC) literature, some writers tend to view the cultural sphere of cyberspace as radically new, post-modern, or even, revolutionary (Webb, 1998; Poster, 2000, 2001). This signifies a break in traditional cultural patterns of community and identity, in addition to communication. Internet communications world-wide have created new spaces for social life, these spaces being qualified as 'virtual'. The notions of person, place and time are contrasted from those in reality and identity is emancipatory, as Benwell and Stokoe claim:
In cyberspace, space, time and identity it would seem are no impediment to doing whatever we want to do, or being whomever we wish to be. Identity on the internet is playful, creative, impressive and limitless, and (so popular discourse would have it) an entirely different proposition from identity in the 'real world' (Benwell and Stokoe, 2006: 243).

Only in a perfect world would we be able to do and be whatever we want: a perfect world like the online 3D virtual world Second Life.

The epigraph from Tom Boellstorff's *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human* summarises the nature of *Second Life*, which can be defined as an online 3-dimensional virtual world that has the special feature of being designed and created by its residents. SL truly lives up to what the name suggests. It is a 'second life' and anyone can have it simply by having access to the internet. SL has millions of residents worldwide, and tens of thousands logged in and immersed in-world at any one time. It is characterised by being the largest virtual world (Harris and Rea, 2009) having thousands of cyber-geographic regions, the name of many of which reflects its inhabitants and communities, such as London, Paris, New York, Chinatown, Bora Bora, Blarney Stone Irish Bar, Habiby's Club, Arab Avatar, and many more. These regions are inhabited by different online communities. The list of possible virtual activities is endless in everyday SL. These facts make SL worthy of in-depth academic investigation and research into its cultural, social and linguistic features in order to understand issues of identity construction in this online medium.

The topic of this research is reflected in the title; it is a sociolinguistic study that makes use of ethnographic methods of data collection and research, investigating the language of English-speaking participants and Arabic-speaking participants of Second Life and analysing aspects of language that have implications for the construction of a virtual identity. Language, as it is used in social circumstances and is spontaneously produced in a variety of situations and contexts in SL, is what is under investigation. The method of data collection was ethnographic in that the researcher immersed himself in the virtual world for a period of four years and collected data through participant observation (Boellstorff et al., 2012). English is the *lingua franca* of SL, but people from every nation reside online and use every language there is to use. The researcher
has an Arab background, which is the reason for choosing to observe Arabic-speaking communities, in addition to the English-speaking communities.

1.1 Current Research

Previous research has been concerned with giving introductory, instructional and descriptive accounts of SL (Rymaszewski et al., 2007; Robins and Bell, 2008) as well as anthropological exploration (Boellstorff, 2008), ethnomethodology (Boellstorff et al., 2012), personal narrative (Guest, 2007; Winder, 2008), sociology (Mennecke et al., 2011), intercultural communication (Diehl and Prins, 2008), multi-disciplinary construction of virtual identity (Ensslin and Muse, 2011), medical and health education (Boulos et al., 2007), business and economy (Laumer et al., 2010) and virtual learning and teaching innovation (Murga-Menoyo, 2011) to name but a few. Boellstorff 2008 arguably provides "the most academic and empirically rigorous exploration" (Ensslin and Muse, 2011: 2) of Second Life in a book-length publication, also following up on ethnographic methodological approaches and data collection procedures (in Boellstorff et al., 2012). Ensslin and Muse's edited book "provides insights into how ‘second lives’ in the sense of virtual identities and communities are constructed textually, semiotically and discursively" (Routledge.com) but also includes other virtual environments such as Massively Multiplayer Online Role-Playing Games (MMORPGs) and even text-only environments. Guest (2007) and Winder (2008) provide journalistic-type accounts of their virtual experiences, also giving valuable information about the mechanics and social structure and culture of the virtual world, which complements the instructional and descriptive accounts provided by Rymaszewski, et al. (2007) and Robins and Bell (2008).

There is however a gap in the current literature regarding more specific linguistic investigation of the language of SLers (Second Lifers - residents of SL). As far as my knowledge goes, there are few studies (Peterson, 2006; Gillen, 2009, Gillen et al., 2012) that adopt the tools and approaches of corpus linguistics to study communication in SL. These works are concerned with language learning (Peterson, 2006; Gillen et al., 2012) and virtual literacy (Gillen, 2009). This study adopts corpus-linguistic techniques and investigates the linguistic construction of virtual identity in a collected SL corpus. The study observes identity construction, that is "the construction of the self [which] is a process that occurs in and through language" (Pieters, 2001: 51) and identity projection,
that is, "meaningful, identity-negotiating acts of interpretation which motivate the linguistic choices of speakers" (Deumert, 2004: 3). The study is "corpus-driven" in its "use of a corpus beyond the selection of examples to support linguistic argument or to validate a theoretical statement" (Tognini-Bonelli, 2001: 84), and it investigates how SLers’ use of language reflects their customs, habits, cultural behaviour and points of difference. This is accomplished through linguistic analysis at three levels: word level, phrase level and clause level. By investigating lexical and pragmatic features of language at the level of the word, phrase and the clause, a holistic understanding of language use and its implications for identity can be formed. The importance of this study lies not only in the necessity to fill a gap in current research, but also for the plain fact that being the largest online virtual world, SL has millions of registered residents and tens of thousands online at any one time, a fact making it more than worthy of in-depth academic exploration, particularly research investigating interaction in a virtual world to see how language influences the notions of society, culture, and identity.

1.2 Aims of the Research
This research aims to investigate how virtual identity is constructed through language in Second Life. The language of SL is observed and analysed with regards to three features: the vocabulary, deixis and indexicality, and pragmatic acts. Vocabulary items that are associated with CMC in general and SL in particular such as rez, AO, TP and sim are investigated, discussing how these items are formed (whether in conventional or creative processes), used in social situations and what implications they have for in-group membership and identity construction. The linguistic features of communication that reflect an awareness of virtual surroundings and context, namely deictic expressions and indexicals such as personal pronouns, pronoun determiners and place and time expressions are also explored. Finally, investigating communication at the pragmatic level, namely, pragmatic acts (Mey, 2001) reveals important aspects of identity. The complexity and communicative intentions of pragmatic acts, such as those of instructing SLers on how to wear virtual clothes, reveal aspects of interaction that have implications for identity construction and (co)construction (Norris, 2011; Omoniyi and White, 2006).
1.3 Statement of the Problem

The central research question is: How is virtual identity constructed through language use in social interaction in Second Life? This question is answered on a number of levels that are presented in the analysis chapters, but can be summarised in the following research questions:

1. What is the role of lexis in the construction of a virtual identity? What are the characteristics of the lexical items that are specific to virtual worlds? How were they formed?
2. How does a user show awareness of the virtual surroundings linguistically through the use of indexicality and deixis?
3. Are pragmatic acts recognised, used, and acted upon in SL, and what are the implications for identity?

1.4 Scope of the Study

The objective of this study is to investigate how virtual identity is constructed and projected through the language of English-speaking and Arabic-speaking residents in SL. As "language acts are acts of identity" (Tabouret-Keller, 1997: 315) and especially in the case of physical absence where it is the only visible and audible manifestations that residents have that gives them a presence, the research in hand will present the characteristics of SLEnglish and SLArabic at three structural levels in terms of the construction of virtual identity, and how it is manipulated in social situations such as initial encounters, casual conversation, and business meetings, to portray these identities. The study comprises six chapters: an introductory chapter, methodology chapter, three analysis chapters and a conclusion.

Chapter one introduces the central research questions, hypotheses aims, objectives, and the scope of the study. It also identifies prior research in the areas of language and identity, virtual worlds in general and Second Life in particular, so as to clarify my path into this research and stress the need for linguistic work in this area. Also, as part of the introduction, an extensive section is dedicated to the definition, clarification, exploration and illustration of Second Life for the unfamiliar reader. The different
genres and domains of life in Second Life that have been explored are mentioned here, as well as the practical issues regarding how Second Life is actually played.

Chapter Two holds the methodology. The data collection and corpus building methods are discussed, in addition to critical and analytical approaches, transcription issues and the advantages and disadvantages of the methods adopted.

Chapters Three, Four, and Five are analytical chapters where each chapter tackles a linguistic issue at one structural level of language that contributes to the answering of the central research question. The first analytical chapter investigates language at the level of the word, that is, an observation of Second Life lexis. Investigating vocabulary in SL and its use in social situations has implications for virtual identity construction. Newly formed vocabulary items are identified using corpus methodology and presented and discussed with regard to their word-formation processes, creativity and playfulness, both quantitatively and qualitatively. Examples given illustrate the use of these lexical items in social interaction and are discussed with regard to their implications for the linguistic construction of a virtual identity.

In the second analysis chapter I explore issues relating to person, place and time. Chapter Four focuses on the aspects of language that reflect an awareness of one's virtual surroundings, namely indexicality and deixis. Person, place and time deictic expressions are observed in interactive situations and discussed with regard to their implications for constructing a virtual identity.

Shifting from phrase level to the level of the clause, pragmatic acts (Mey, 2001) are investigated quantitatively and qualitatively in the corpus in Chapter Five. It is claimed that the recognition, acknowledgement and fulfilment of pragmatic acts in Second Life is the ultimate sign of the acquisition of a virtual identity. This is empirically proven through the observation and linguistic analysis of a number of pragmatic acts, commenting on their complexity, politeness and communicative intention, such as instructing a noob on how to wear clothes.
The final chapter of the study is the conclusion. It discusses the results of the analytical chapters combined and illustrates how they answer the central research question. The hypotheses are dealt with respectively and evaluated with regard to their applicability and viability. The implications of this research for identity, pragmatic, and sociolinguistic theory are discussed, and a section for suggestions for future research is also provided in Chapter Six.

1.5 Virtual Identity and Language

"People tend to spruce up their identities on here" (SW, Second Life)

SW, one of my avatar's closest friends in SL, refers to the emancipatory and idealistic conditions of the virtual world, claiming that it helps users to "spruce up" their identities, that is, to have more freedom to do what they want, hence to be able to improve or renovate themselves in appearance and personality. The term 'virtual' identity is used as opposed to 'real' life identity, that which we play online versus our 'real' selves in normal physical everyday life. This is the semantic connotation of the term as Benwell and Stokoe (2006: 244) put it, that of "'seeming' (rather than being)", of potential rather than actuality (Poster, 1998), of inauthenticity, simulation and symbolisation (Fornas et al., 2002) and virtual identity is a common theme of post-modernity (Baudrillard, 1998). Virtual identity in academic studies is described as "an incipient, yet burgeoning field" (Benwell and Stokoe, 2006: 244) and studies are becoming more and more numerous as the field grows (for example, Turkle, 1995; Herring, 1996; Jones, 1998; Cherny, 1999; Bell and Kennedy, 2000; Talamo, 2000; Crystal, 2001; Barnes, 2003; Thurlow et al., 2004; Benwell and Stokoe, 2006; Winder, 2008; Koles and Nagy, 2012 to name just a few). The sense of 'seeming' or simulation of the 'real' can be viewed in different ways with regard to the relationship between the 'real' and the 'virtual'. Some participants of online virtual interaction separate the real from the virtual distinctly, as if there was a clear boundary, reflected in such quotes as "I look at this as a rp [role-playing] game and thats [sic] it" (MNC, Second Life) and "my sl and rl self are separate" (PQ, Second Life). Also, other issues that reflect a boundary between the 'real' and the 'virtual' are for instance cyber-rape (Dibbell, 1999) and cyber crimes. Although deemed inappropriate online, these are seen to be legally distinct from physical crimes when challenged in real-life courts (Benwell and Stokoe,
2006). This is not as entirely clear-cut as suggested by Benwell and Stokoe though. There have been many arrests for cyber-rape threats and the like, and all one has to do is read the news, as in the Paul Chambers case in 2012 and the Caroline Criado-Perez case in 2013, both reported in The Guardian. Cyber-behaviour can be held legally accountable, but only when it has implications for real-life activity and crime, such as in cyber crime (Citron, 2009). On the other hand, there are numerous cases where it would seem that activities in the virtual "challenge the boundary" between the real and the virtual (Benwell and Stokoe, 2006: 245) but are not criminal. When asked about relationships in SL, PQ claims that "people have them, yes, and in most cases its [sic] as real as in RL", and a classic example can be seen in Example 1.

1. <AVHcreamy12AUG2011.IE>
   1 [10:12] H: I had been dating this guy in sl. We were exclusive for a while. Then we broke up. And although we technically broke up, we were still erm... fooling around and I was very much still hung up on him.
   5 [10:14] AV: nods
   6 [10:14] H: Until I found out that he was making moves on a girl who I thought was a friend of mine. Not just that, but that she was reciprocating. When I confronted her about it (almost disbelieving that what he said was true), she basically got mad that I knew.
   10 Because she hadn't said anything in local. She knew how I felt about him, that we were still involved and still pursued him. In real life, I'm sure she would never do that to a friend. But in sl... apparently anything goes. (1)

This example clearly shows how emotional attachment is present in virtual worlds, and that this kind of attachment is connected to reality through the 'real' emotions that are triggered, shown in "still hung up" (line 3), "disbelieving" (line 8), "got mad" (line 9), and "how I felt about him" (line 10-11).

Virtual worlds in general and Second Life in particular are different for different people and "not all online participants connect virtual events so intimately to the real, but nor do they see them in a deficit formulation" (Benwell and Stokoe, 2006: 245).

1. The details of how examples are presented throughout the thesis and an explanation of names of participants and file naming can be found in Chapter Two in the methodology sections.
The fact that we can be anonymous through the Internet perhaps provides this "escapist, transient and ... postmodern complexion of cyberspace" (Benwell and Stokoe, 2006: 245). Postmodern here refers to the idea that the Internet has laid the foundations and made possible the establishment of a "second order of culture" (Poster, 2000: 13), whereas the modern was merely "the synchronous exchange of symbols and sounds between people" (Poster, 2000: 13), predicting that there are cultural consequences for this kind of innovation that are "devastating for the modern" (Poster, 2000: 13). The postmodern is a new era of graphical elements and 3-dimensional worlds, where person, space and time have taken on new meanings. Bell (2003: 3) claims that "we can be multiple, a different person ... each time we enter cyberspace, playing with our identities, taking ourselves apart and rebuilding ourselves in endless new configurations". We can choose to separate our virtual lives from our real one day, and merge them another, going from being physically and emotionally detached, to being very much attached in a matter of minutes. Emotional attachment is reflected in examples similar to the one in Example 1 and physical attachment can be represented in, for instance, sexual activity. It is known that virtual relationships often go beyond cyberworlds, and the use of other means of communication (such as video calls) facilitates such activity.

Identity has always been deemed a "problematic and complex concept" said to be "non-fixed and non-rigid and always being (co)constructed by individuals of themselves (or ascribed by others)" (Omoniyi and White, 2006: 1). Not only can we ourselves actively be multiple and play with our identities, as Bell puts it, but the virtual environment and the people around us can also have their effects on our virtual identity. I have come across people saying "with you I feel comfortable, I can be myself" (AR, Second Life) and "I love it here, the music is so relaxing" (GT, Second Life). Block (2006) introduces the notion of the "psychological self" which directs one's interaction with the environment, leading to the influences society has on identity. Our psychological self steers us to where we want to go in SL, leading to who we meet and what we end up doing and how we interact with the environment, which in turn has its effects and influences on our virtual identity.
It is debated that interactional sociolinguistics, a branch of linguistic ethnography (Gumperz, 1982, 1999; Eerdmans et al., 2002; Rampton, 2006) contributes significantly to the study of identity (Rampton, 2007) drawing upon four analytic resources:

a) **linguistics** and **discourse analysis** provide a provisional view of the communicative affordances of the linguistic resources that participants draw on in communication;

b) **Goffman** and **conversation analysis** provide frameworks and procedures for investigating situated encounters;

c) **ethnography** provides: a sense of the stability, status and resonance that linguistic forms, rhetorical strategies and semiotic materials have in different social networks beyond the encounter-on-hand; an idea of how and where an encounter fits into longer and broader biographies, institutions and histories; and a sense of the cultural and personal perspectives/experiences that participants bring to interactions, and take from them;  

d) **other public and academic discourses** provide purpose and relevance for the analysis, as well as a broader picture of the environment where the study is sited.

(Rampton, 2007: 4-5)

Rampton provides a good basis for the analysis of discourse with regards to identity, and all the frameworks mentioned were taken into consideration. However, identity is complex in that not only do we have an individual identity (or multiple identities) that we construct, but this identity(ies) is influenced by society and surroundings and can be co-constructed also, that is, others can ascribe identities to us, and help shape our identity. This is the breeding ground of sociolinguistics. Coupland (2001: 18) labels "social identity" as the "home ground" of sociolinguistics and Llamas (2006: 92) supports this by claiming that "a brief look at recent publications in sociolinguistics will reveal the central position that the notion of identity has assumed in the field". Since sociolinguistics is concerned with the relationship between language and society, language plays a central role in the construction, performance and projection of identity. Goffman's (1959) notion of the "presentation of self in everyday life" implies that a person can be several selves during one single interaction, and that these are all acts of identity. Le Page and Tabouret-Keller (1985) also bring forth the fact that language is an identity marker. It is clear, then, from all of these examples that "identity research has become multitheoretical and multidisciplinary" (Omoniyi, 2006: 14) and that
language and identity are inseparable (Joseph, 2004). Omoniyi and White inform us of the role language plays in positioning and constructing identity:

The sociolinguistics of identity focuses on the ways in which people position or construct themselves or are positioned or constructed by others in socio-cultural situations through the instrumentality of language and with reference to all of those variables that are identity markers for each society in the speech of its members. (Omoniyi and White, 2006: 1)

Language is the instrument which is used by people to position or construct themselves or others, and the variables of language, such as vocabulary items, are identity markers in the speech of a community. The central concern of this study is reflected in the ways in which residents of Second Life position or construct their virtual selves or are positioned or constructed by others in socio-cultural situations in the virtual world through the instrumentality of language. The linguistic variables and identity markers under investigation are represented in the lexical items and vocabulary of the language in Second Life, and how this language is used at the pragmatic level, consisting of an investigation of the deictic elements of the language, politeness, and communicative intentions reflected in pragmatic acts (Mey, 2001).

Zimmerman (1998) distinguishes between three types of identities found in talk: discourse (speaker, listener, narrator), situated (advisor, advisee, teacher, student), and transportable (American, Arab) identities.

Transportable identities travel with the individuals across situations and are potentially relevant in and for any situation and in and for any spate of interaction. They are latent identities that 'tag along' with individuals as they move through their daily routines ... they are identities that are usually visible, that is, assignable or claimable on the basis of physical or culturally based insignia which furnish the intersubjective basis for categorization. (Zimmerman, 1998: 90-91)

In this sense, I am interested in the degree to which these transportable identities are oriented to in the SL data. Among the transportable identities imagined to be relevant in the SL data are those of noob (novice) SLer and Resident (expert) SLer. There has been extensive research on the differences between novice and expert identities in non-virtual contexts such as games of chess (Berieter & Scardamalia, 1993), medicine (Ericsson,
Krampe, & Tesch-Romer, 1993), and physics (Glaser et al., 1998). More importantly though, with relevance to this work, learning is described often as the process of acquiring expertise and knowledge within a domain (Alexander, 1997, 2003; Alexander et al., 2004). Further discussion on the characteristics of novices and experts, and differences between them is provided below (section 1.6.2).

1.6 Second Life and Virtual Identity

Second Life is a 3D online digital world imagined and created by its Residents. Since its opening in 2003, it has grown explosively and today is inhabited by millions of Residents from around the globe. (www.secondlife.com, 2011)

Second Life is a three-dimensional virtual world; a program downloadable from the website www.secondlife.com on the internet. Once downloaded and installed on a computer, it is a program similar to synchronous chat, but with graphics and a game-like setting comprising a whole 'world' with many different places to visit, sites to see, things to do, and very importantly, people to meet. It is a form of social media in that it is "internet-based" and "promotes social interaction between participants" (Page et al., 2014: 5). It qualifies as a massively multiplayer online game (MMO) (Steinkuehler and Williams, 2006) as well as being considered as a social network site (SNS) (Boyd and Ellison, 2007). Having millions of users worldwide, and tens of thousands of users logged-in at any one time, Second Life is a vast empire full of linguistic and social significance worthy of in-depth research. The following sections break down Second Life into the stages of a virtual life, commencing from when one logs on, to the advanced stages of life, settlement, family and wealth.

1.6.1 Rezzday

A user's first day in SL is called their Rezzday. Once the program is opened, the login page appears where a user enters their avatar's name and a password to login. This page also shows how many residents are online at that particular time (e.g. 33,449 at 12:00pm +1 GMT, Thursday 26th May 2011) and how many have logged-in in the past 60 days (e.g. 1,354,041, same date and time). When engaged in Second Life (or inworld
as it is referred to), a person is represented by his avatar. An avatar is the digital representation that users choose to represent themselves on screen, chosen from a variety of possible avatars provided by the website upon setting up an account. At the commencement stages, the given avatar is in human form (Figure 1), but it can be changed to virtually anything like an elf, vampire, minotaur (Figure 5), angel (Figure 6) or even a pen, furry rabbit or teddy bear. There are no limitations as to what graphic representation one chooses.

![Figure 1: Avatar in Human Form](image)

Logging in for the first time, a user appears in Help Island, one of the very few Second Life cyber-geographic locations that are designed and built by the developers, Linden Research Inc. (or Linden Lab). This land is where one learns the basics of movement and interaction. Figure 2 shows one step of the step-by-step instructions a user follows when learning how to move in SL.
A user must learn how to walk, use the camera view, run, fly, and interact with objects, which can include picking up and laying down objects, wearing clothing, using furniture animations and pose balls for dancing.

1.6.2 Noob
A distinction has to be made between novice users or noobs in Second Life, and expert users, or Residents. When compared to novices, experts seem to possess significant levels of domain knowledge, in addition to being able to access that knowledge easily and when facing problems, they can reach resolution with little error (Alexander et al., 2004; Glaser et al., 1988). Knowledge of the environment includes having the basic manoeuvring techniques, and once these are mastered by noobs, it is time to explore. Mcreery et al. (2011: 480) claim that "experts and novices exhibit distinct levels of interaction with the environment." A noob is a person who is a newcomer to Second Life, unfamiliar with the customs and traditions or the cultural spheres of SL. In terms of social interaction, a novice is completely unfamiliar with the cultural expectations, whereas experts can be expected to interact more freely with strangers (Yelenesvskaya & Fialkova, 2003). Novices within such a context often perform tasks less efficiently and effectively (Lazonder et al., 2000; Patel et al., 1998). Noobs are known to frequently make mistakes in their interactions with objects such as wearing boxes.
instead of opening them, having clumsy mechanical skills, such as frequently bumping into people, and their non-use of appropriate SL language. Novices take longer to interact with others around them (Yelenesvskaya & Fialkova, 2003). The terms noob and Resident are mutually exclusive in that one cannot be both a novice and an expert at the same time. It is possible to be a novice at a particular activity and an expert in another, for example building and scripting, but this is not the concern here. These terms are used, according to my own extensive experience, throughout all the communities that I visited in SL. Whether the community is social, such as a club setting, intimate, for example in a virtual home among family, or professional, in a business and work setting or a university network, these terms are used and SLers are familiar with them.

The exploration starts with a search. Every SL viewer has a search bar where one can insert a word and search for a relative location, event, land for sale, or even another avatar by name. Whilst searching for 'places' one quickly notices the existence of many different cyber-geographical locations containing different communities such as Habiby's Club, Arab Avatar, Paris, London, Chinatown, Bora Bora, Blarney Stone Irish Bar, in addition to many institutions such as Indiana University Second life Campus, Montclair Estate University, National University of Singapore (NUS), and so many more. Some of these locations are labelled "noob friendly", meaning that they are frequented by residents who are willing to help newcomers and beginners get acquainted and learn the ways of Second Life. These locations are ordered in the search results according to traffic, that is, how many other avatars are present at that particular time with most populated places first in the list. As can be inferred from the list, the places can be anything from residential areas to clubs, churches, replicas of RL towns and cities, universities and other educational institutions, beaches, bars, shopping facilities, commercial areas and sandboxes. A sandbox is a virtual place where a resident can learn to build for free as the built objects will disappear shortly after he leaves. He can also rez (make appear) objects from his inventory which is an extensive list of an avatar's saved belongings, objects, clothes, pictures, snapshots, landmarks and even a list of friends and acquaintances in the form of calling cards. When these skills are somewhat practiced, the "human instinct to establish and maintain social identity" (Chambers, 2003: 274) begins. A person will want to explore and interact with other people at this stage.
1.6.3 Communication and Social Interaction

One of the main attractions of Second Life is the "virtually limitless behavioural possibilities" offered by its "social and creative environments" (Ensslin and Muse, 2011: 1). This fuels the urge to explore. The means of transportation between the thousands of different virtual environments in SL is teleportation. Once a location is chosen through the search facility, a newcomer can leave Help Island and begin exploring and interacting with people. I typed in 'Arab' and received a list of locations that were frequented by Arabic-speaking residents, so I visited one of them (Figure 3) on my third visit to SL. The relationship between place and group membership here is evident in the name of the sim or land "Habiby's". This is an Arabic word and reflects Arab presence. Meeting in such places in SL connects Arab social networks, just as meeting in a university auditorium with a group of academics connects academic social network. At this stage, a user will have also been tutored in how to interact with others using the two main streams of communication: the public chat stream and the private chat stream (or instant messaging - IM). The voice chat option is also available, but it is restricted and not permitted in every location. All one has to do is type into the public chat stream and the text will appear on the screen of all the people within one's vicinity. By right-clicking on another avatar's body, a menu appears with the option instant message that enables private communication that cannot be viewed by others.

Figure 3: AV and Arabic-speaking Avatars at the cyber-location Habiby's

One soon realises that the language of residents of Second Life has certain features that reflect their affiliation and in-group membership, represented in the vocabulary most
notably, such as *rez* and *TP*. "The behaviors of experts within these environments serve as a model for novices during learning (Mcreery et al., 2011: 481). The urge to establish an identity leads to an urge to learn these lexical items, in addition to the fact that not using such vocabulary reflects a novice identity, one that is not always welcomed in the community. More experienced residents may not treat noobs in a welcoming manner, ignore them, and perhaps even mock them. This leads to the urge to learn and *noobs* are expected to direct more questions towards experts and to accept their comments about a variety of issues (Granitz and Ward, 1996). Elaboration on asking questions, which are forms of requests, is provided in Chapter Five.

### 1.6.4 Social Networking and Group Membership

In a study on 21st century skills and behaviour, Mcreery et al. (2011) compared expert users of *World of Warcraft* with novice users with regards to their communication, collaboration and problem solving. It has been argued that social interaction and communication are required to achieve collaborative learning benefits (Delwiche, 2006; Martin, 2008). Experts in Mcreery et al.’s study engaged in high levels of social activity. They contacted peers to socialize or form groups within moments of entering the game world. By contrast, novices did not engage in social ways or communicate with members of the community. ... The lack of social interaction may be due to the fact that novices do not have a preexisting community of practice. Novices simply do not have a list of friends to access and contact for collaborative tasks. (2011: 488)

Second Life is full of groups and virtual communities, in addition to public places. Most places are open to the general public. However, there are privately owned places such as *Torcadino Beach* and *Sunset Coast* that are closed-group access only and from which trespassers can easily be ejected. The majority of highly-popular and publicly frequented places in SL are clubs. They are established as friendly places where people can go and dance, socialise, express themselves and contribute to the earnings of the clubs. Much of the conversation in clubs is of a casual, playful and expressive nature, such as greetings, welcomes, introductions and everyday conversation and socialising. In addition to these clubs are lands pertaining to more subject-oriented groups, such as poetry groups, support groups, religious places, and business and education
establishments. Any SLer can join these groups according to their liking. Some are open to everyone and free to join, others require a fee, and some are closed access and can only be joined by invitation from an in-group member. Affiliation with groups reflects one’s interests, beliefs, and other aspects of identity. By interacting with others, one slowly begins to build a social network of friends, acquaintances, business colleagues, and even more intimate relationships such as partners and family members. A social network refers to "a set of people (or organizations or other social entities) connected by a set of social relationships, such as friendship, co-working or information exchange" (Garton et al., 1997: 1). These networks vary in their strength (Milroy and Milroy, 1992). Some SL social networks are close-knit networks in that they are "dense and multiplex" and "have the capacity to maintain and even enforce local conventions and norms - including linguistic norms" (Milroy and Milroy, 1992: 6) such as one's virtual family members and close circle of friends. A dense network is one in which all members know each other and multiplex refers to the fact that they know each other in a range of capacities. Other social networks in SL are much less dense in that not everyone knows each other, and certainly not in a range of capacities, such as the Virtual Worlds Education Roundtable (VWER), Charlina's Staff and members of Arab Avatar.

1.6.5 Social Life and Personal Relationships
The social context of interaction plays an important role in identity formation and identity shift (Llamas, 2006; Cerra and James, 2012). "Identity is the social positioning of self and other" (Bucholtz and Hall, 2010: 18). Although this definition is a rather broad one, it brings to the fore the social aspect of identity. In SL, a myriad of different social contexts exist that also make way for a plethora of conversational situations. Among the social domains in SL are events and occasions such as virtual weddings (Figure 4), birthdays, religious ceremonies, and parties.

Such events and ceremonies represent where the gap between the 'virtual' and the 'real' is bridged. People claim to have fallen in and out of love in SL (Example 2). In real life these people may be hundreds, if not thousands, of miles away from each other, but they are brought together online. All the aspects of love are present, except for the physical presence. Residents learn to overcome this limitation by appreciating and enjoying each
other's company, sharing the joys of discovery and having a mutual network of friends. It is possible for people to be engaged in intimate relationships that lead to virtual marriage.

Example two is an extract from an interview that shows (in the emboldened text) that friendships are made, feelings are developed, and intimate relationships are formed to
the extent of virtual marriage. An idea is given by SW about what marriage means in Second Life, namely to "devote your life to that special person" (line 20), implying spending lengthy amounts of time with a partner, being loyal and honest, and acting as if it were a 'real' marriage. There are no implications for simulation or inauthenticity here. Other aspects of married life can be fulfilled through different activities or possession of more materialistic elements. Couples can share a home, split the rent, go dancing, or for a romantic walk on the beach, or in the streets of Paris. The companionship is real as all the elements of communication apart from the paralinguistic aspects like facial expressions are there. Even body language can be expressed through gestures, a facility where one can animate one’s avatar in a number of ways like waving, blowing a kiss, and hugging. Some couples take it to the extent of having SLex (virtual sex) which is made possible in a number of ways simply by having a HUD (head's up display), or pose balls attached to different furniture items such as beds which allow the avatars to be animated. Consummating a marriage may lead, as it does in real life, to pregnancy. Couples have the option of having a baby and forming a family, which actually involves the female avatar becoming pregnant and giving birth in a similar way to reality, only in pixel format of course. The newborn baby is a program that cries when hungry and laughs when played with, and once grown must be taken over by a person who plays the role of the son or daughter of the parents.

1.6.6 Earning a Living / Getting an Education

There is more to SL than friendship, love, and social occasions. In order for an avatar to establish himself in SL, certain material issues are involved, such as finding a place to live, furnishing that place, and of course enhancing an avatar's appearance (Figure 5). As the virtual world is almost entirely designed and constructed by its residents, special skills are acquired such as building and scripting (the ability to add animations to objects to enable interaction). A unique characteristic of SL that distinguishes it from other virtual worlds is that it has a currency (Linden Dollars - L$), and that currency can be bought with and is exchangeable into US dollars. This trait attracts a lot of virtual business and entrepreneurship. It also contributes to the process of identity establishment.
Having a virtual home and keeping up with the latest trends for the most part cost money, and although there are many ways to obtain Linden dollars (such as posing at certain places for hours, winning competitions and gambling), one of the most popular ways is to earn income through being employed. Others invest their money or skills into opening a virtual business. MNC told me the following about himself in an interview:

3. <AVNCleedsuniOCT10.INT>
[16:28] MNC: im a club owner ..i own 1/2 of a region, i dabble in buisness adventures and im out to make enough lindens so the game pays for itself

The business side of second life is ever-flourishing. The opportunity to make real money from SL business has attracted a lot of entrepreneurship from the real world. Avatars have established their own businesses by learning or possessing certain skills such as building, designing and making clothes. There has been a case where a plumbing contractor in 'real' life for example (name remains anonymous for ethical purposes) established a multi-million dollar business in Second Life, and he went on to establish his own virtual world. Many others like MNC in Example 3 run small businesses in SL so as to pay for the commodities and luxuries in the game itself. Having a job, a place to live and good clothing is all part of getting settled into the virtual community and being regarded as a Resident with a capital 'R', as the term is used in SL. Moving out of the noob category is essential for acceptance into the virtual community. These materialistic issues are important but they are not everything when it comes to identity establishment.
Second Life has attracted educational institutions from all over the world (such as Indiana University, the National University of Singapore, and the University of Leeds) to open up virtual campuses and offer classes with the task of exploring the realm of virtual learning. Academic research discussion groups like the Virtual World Education Roundtable (VWER) hosted by the Montclair Estate University, which I joined, are also popular (Figure 6). These kinds of academic groups allow for the gathering of scholars from all over the globe without the expense and inconvenience of travelling. Different academic subjects are discussed in a virtual context in a weekly meeting. Conferences and conventions are also held in SL.

![Figure 6: VWER meeting](image)

### 1.6.7 Fully Established Resident: Freedom and Virtual Identity

Identity, as has been claimed, is complex and non-rigid. In the sense of comparing Second Life identity to real life identity, a fully established *Resident* is one who has mastered the skills of the virtual world, regarding movement and interaction, acquired the language of SL and uses it appropriately, has an enhanced avatar, a virtual home and a source of virtual income. Other aspects of leading a virtual life can include having a virtual relationship and perhaps family, and being a member of a virtual social community. These characteristics of an established *Resident* are formulated by myself based on my 5 years experience of the social conventions of Second Life.
Boellstorff (2008) presents a good anthropological exploration of the different aspects of the life of the virtual human, such as the self, the life course, language, friendship, love, family as well as events, groups, money and labour, and property. Although Boellstorff does not present any case study in these aspects of SL, his ethnographic goal is to investigate everyday senses of virtual personhood. He tries to provide a justification as to why people say:

"in Second Life I find I can truly be myself"
"we wear our souls in here"
"I find it easy to be several selves here"

(Boellstorff, 2008: 119)

Boellstorff accomplishes this through participant observation and conducting interviews in an anthropological exploration of Second Life. He describes the sense of freedom that SL provides for its residents in giving them the ability to be and do whoever and whatever they want, and anonymously. People are stripped of the social constraints of 'real' life contexts and situations. He gives the example that some celebrities have joined SL to pursue the freedom from tabloid exploitation and so on by not having to reveal their RL identities. He quotes a resident (2008: 120) in her discovery that a friend of hers inworld (inside the virtual world) was actually a Hollywood star: "last Christmas she finally revealed who she was – she even showed her face to me on webcam" (Boellstorff, 2008: 120). There is also a tendency not just to conceal one's RL identity, but to portray a different identity as these quotations from different residents show:

"the SL me and the RL me are two totally different people. I may appear strong in my online presence but in RL I'm so weak it's not even funny"
"the personality I exude in SL is almost 180 degrees from what I show in public in RL"
"SL is a chance to be someone beside yourself which you cant really do it in RL unless you want to lead a double life"

(Boellstorff, 2008: 120)

Boellstorff (2008) keeps his quotations taken from residents in their original forms, which explains the grammatical mistakes in the last quotation above, and I have adopted the same method throughout the examples taken from the corpus in this study. In my data, there are similar views about identity and freedom to do what one pleases. In an interview with one of my avatar's closest friends in SL, in reply to a question regarding
whether she thinks that people do things in SL that they normally wouldn't do in RL. SW says:

4. <AVSWL ViehomeDEC2010.int>

SW: I think that most people **in rl** are **afraid to try new things**. And with **SL** your **hiding behind the computer screen** and reaching out to **try things**

SW: I actually had a job stripping, that is something i **would never do** in rl

SW mentions that she neither has the body nor the courage in real life to become a stripper, but she possesses both in SL. Also, (in the same interview) in response to a question of whether she thinks that people have distinct identities in SL, SW replied:

5. <AVSWL ViehomeDEC2010.int>

SW: No, I think they tend to spruce up their identities on here

AV: can you elaborate on that for me?

SW: For instance i am a shy person in rl

SW: And i think i tend to be on the wild side in sl

The gap between the virtual and the actual, as we can see in Example 5, is wide. Boellstorff quotes another resident who says that SL "allows you to define your own role instead of being the one you are in RL (in my case, mother wife)" (Boellstorff, 2008: 120). The relationship between 'role' and 'identity' in this sense is that role is a performance which reinforces, supports and confirms identity (Burke and Reitzes, 1981). In this understanding, the actual world is more characterised by role-playing than the virtual, which is the opposite of the general understanding of other virtual worlds such as *World of Warcraft*. The resident in Boellstorff's quotation mentions that she plays the role of mother and wife in the real world and she is offered very limited choice as whether or not to play those roles. Our real lives sometimes force upon us the roles we play, and they may sometimes be undesirable. In SL however, the *Residents* can define and choose the roles they wish to play, whether they are reflective of real life roles or totally imagined and inapplicable to RL. SL differs from a virtual world like *World of Warcraft* in the sense that the latter is a game governed by rules and objectives and once engaged in the game a player takes up one of the different but limited available roles. I can hence argue that if the so-called 'virtual' identity is the one its owner wants to and can freely portray, and the so-called 'real' identity is governed by the rules and constraints of society, is it not the case that the 'virtual' is in fact our real
identity that happens to occur in a virtual setting, whereas our 'real' identity is all about role-playing in the real world?

There is, however, another side to the coin. In addition to all the domains of SL one must not overrule the importance of language. When constructing identity in any environment, and SL is no exception, language always has a strong presence in its shaping. No matter how many materialistic aspects of a virtual life one has, the player would always be regarded as a 'newbie' (Crystal, 2001) or a noob, if they did not possess the language that is associated with SL, and the specific SL terminology. But this fact itself is a social constraint. Acquiring SLEnglish seems to be an obstacle in the way of being accepted into the SL community. A noob is not of Resident status, hence not desired in the community, and is often ignored or avoided. This is clearly contradictory to what Boellstorff and others (Ondrejka, 2004) claim regarding freedom to be and do what you want. We are free to do what we want in SL indeed, as long as we do not expect acceptance into the virtual community, for that requires many things and social constraints do exist after all. Boellstorff does acknowledge this fact as he discusses cases of griefing (2008: 187-196) in SL, and how these cases contradict the freedom factor. My concern here, though, is how the language of SL contributes to acceptance.

1.7 Concluding Remarks
This chapter has been concerned with providing the reader with an overview of this study, stating the aims, objectives, problems and hypotheses. The central research question is concerned with the linguistic construction of identity in the online 3-dimensional virtual world, Second Life. A synopsis of the layout and structure of this thesis has been given, followed by some theoretical grounds on which this study is based. Finally, a lengthy section provided to the unfamiliar reader the particulars of Second Life, discussing the issues of virtual identity, escape, anonymity and freedom, and coming to the initial conclusion that SL society is not one where a person is free to do what he or she likes at all. There is a much wider range of behavioural possibilities, but on the other hand, there are social constraints of acceptance into the virtual community, and language is central in these constraints.
CHAPTER TWO

Methodological and Critical Approaches
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2. Overview
This chapter gives an account of the methodological and critical approaches and concerns associated with the research. The data in this study were collected according to ethnographic methods, through participant observation. A section in the chapter is dedicated to each of these for critical discussion. The following sections describe the data management process, corpus building, and technical issues such as file naming and transcription methods (for the Arabic data). A section is also dedicated to the ethical considerations of the research. The methods of data analysis are briefly discussed, although more elaborate sections are provided in the analysis chapters. The chapter ends with critical observations on issues of embodiment in space and time, and the types of players in SL, as an understanding of the virtual context is important for the formulation of an account of virtual identity. A discussion of the who, when and where of Second Life reveals contextual elements that cannot be inferred from the data alone. A knowledge of types of players according to Bartle's (2004) taxonomy gives insight into players’ goals, intentions, actions, and, as a result, identity. These sections constitute the critical approaches in this chapter and are based on sociolinguistic and pragmatic paradigms. Their appropriateness lies in the fact that they lay the bases of knowledge for the following analysis chapters.

2.1 Ethnography in Second Life
Second Life is a virtual world, and virtual worlds are "places of imagination that encompass practices of play, performance, creativity, and ritual" (Boellstorff et al. 2012: 1). The inhabitants of these virtual worlds engage in social activity that is very real, and they play different roles in the different communities, performing different identities, just as is the norm in the physical world. Ethnography is generally defined by Levon as "the study of how members of a community behave and why they behave in that way" (Levon, 2013: 69) and by Boellstorff et al. as "an approach for studying everyday life as lived by groups of people" (Boellstorff et al., 2012: 1). As a sociolinguistic study of a virtual community, this study is based on the fact that "one of the principle methods
through which sociolinguists come to apprehend the social lives of the communities and community members they study" (Levon, 2013: 69) is ethnography. Duranti describes ethnography as "social organization, social activities, symbolic and material resources, and interpretive practices characteristic of a particular group of people" (Duranti, 1997: 85). Language is a social activity that is characteristic of different communities in Second Life and these different social activities reflect their different languages and cultures: English and Arabic. Ethnography "provides powerful resources for the study of the cultures of virtual worlds" (Boellstorff et al., 2012: 1). The aim of this study is to provide an account of the linguistic construction of virtual identity, and adopting an ethnographic approach allows this as "a major goal of ethnography is the discovery and explication of the rules for contextually appropriate behavior in a community or group; in other words, accounting for what the individual needs to know to be a functional member of the community" (Saville-Troike, 2003: 88).

Ethnography as a field method of research "was developed in cultural anthropology for the collection of data in geographical and cultural contexts where the investigator was a complete outsider" (Horvath, 2013: 8), hence the emergence of anthropological linguistics which was concerned with linguistic variability and had a broad understanding of the social structure (Horvath, 2013) of communities. Saville-Troike claims that the first task, when planning to conduct ethnographic fieldwork is to "define tentatively the community to be studied, attempt to gain some understanding of its social organization and other salient aspects of the culture, and formulate possible hypotheses concerning the diverse ways these sociocultural phenomena might relate to patterns of communication" (Saville-Troike, 2003: 88) which is precisely how this study started out. I wanted to conduct a sociolinguistic study and identified Second Life as a possible community worthy of research. The popularity of the medium and affordances of reach were encouraging to further pursue this aim. An account was set up and an avatar was chosen, and I immersed myself in this virtual world, firstly as an outsider, observing mindfully and realising immediately that there was not one community in SL but a myriad of them. Then came the question of choosing a data population and a method for collecting data. The social structure and social categories of the different communities had to be identified as Horvath (2013: 8) claims that "ethnographies of indigenous peoples attempt to describe their social structure by discovering the social categories that are meaningful to them". Referring to residents of SL communities as 'indigenous peoples' is perhaps inappropriate, because in my opinion membership in SL
communities is a choice rather than being naturally occurring, but a way for identifying the social structure of these communities was necessary. To identify SL communities I used the Second Life website and welcome screen before I logged in to observe what is *trending*, that is, what cyber-geographic places are the most occupied at a particular moment in time, and what events are happening in SL, such as live concerts and conferences. Frequenting such places permitted the exploration of communities, and interaction with residents revealed information about the communities that extended beyond these public places.

Historically, ethnographies that were conducted under the umbrella of quantitative sociolinguistics most frequently studied linguistic phenomena such as phonological, morphological and syntactic features of language (Horvath, 2013: 9), but mindful observation of the virtual environment revealed that the most interesting and research-worthy aspects of language are those involved in the linguistic construction of a virtual identity. In previous studies, "the method of data collection is generally interviews" (Horvath, 2013: 9), and being quantitative, "the data consist of counts of the occurrence of the sociolinguistic variable, noting the constraining and linguistic environments" (Horvath, 2013: 9). It became evident immediately that this would not suffice to be able to formulate an account of the linguistic construction of a virtual identity, but instead, language had to be observed in its actual use among interactants in their natural environments. This meant also that an 'outsider' approach would not be adopted, but rather the data collection method would be one of active participant observation as "ethnography is normally conducted through prolonged observation and direct participation in community life in the form of ethnographic fieldwork" (Levon, 2013: 69).

### 2.2 Participant Observation

Ethnographers have an extremely broad methodological palette ... However, one method above all others is fundamental to ethnographic research. This method is participant observation, the cornerstone of ethnography.

(Boellstorff et al., 2012: 65)

Setting up an account through the Second Life website involved, at the time this research commenced on March 16th 2009, writing a first name and choosing a last
name from a pop-up list provided by the website. The researcher's SL name is *Ashy Viper* (AV in examples). After this stage, an avatar is provided by SL that is very basic and known as a *noob* avatar among *Residents* (Figure 7).

![Figure 7: Noob Avatar](image)

AV represented "the embodied emplacement of the researching self in the fieldsite as a consequential social actor" (Boellstorff et al., 2012: 65), and this quote also represents how Boellstorff et al. define participant observation. AV started out roaming the virtual world and intuitively familiarising himself with the ways of the land and trying to interact with as many users as possible, also spending many hours of the day *inworld*, in what Boellstorff et al. (2012: 66) call the ethnographer’s "extended presence", which "signals commitment and sincere interest, opening dialogue with a variety of informants whose viewpoints and insights can be analyzed and represented in the ethnography". I attended the trending events, which were mostly parties at SL clubs, and participated in communication with other attendees. AV was asked frequently where he lived in Second Life, and was shown other people's SL homes. This revealed that it was imperative to have a SL residence as one of the requirements of recognition of being a *Resident*. It also became clear that, although parties and clubs were a main attraction in SL, they were not the main activity. *Residents* also engaged in other pastimes such as setting up virtual homes, furnishing them, developing and accessorising their avatars, attending group discussions, reading and poetry groups, studying and taking part in
virtual education, establishing and engaging in virtual businesses, and learning technical
skills such as building and *scripting*, to name just a few of a myriad of possible
activities in SL. Boellstorff at al. (2012: 65) claim that "becoming directly involved in
the activities of daily life provides an intimate view of their substance and meaning",
but starting out as a *noob* has its advantages and disadvantages.

As a newcomer, one has to be aware that he or she is viewed as a *noob*, one who is
unfamiliar with the ways of the land, prone to making mistakes, not communicating in
the common tongue, that is not using appropriate SL terminology in context, and not
experienced in the use of the avatar itself and the surrounding environment, not
forgetting the fact that he or she is a *noob* in appearance (Figure 7). Levon (2013: 75)
notes that "It is important to be aware of how you are perceived in the community you
are studying and do everything you possibly can to ensure you are perceived in a way
that is most conductive to collecting the data you need". Levon's claim represents the
advantageous side of being a *noob* which is the fact that the process of becoming a
*Resident* not only has to be completed, but also can be fully documented, recorded, and
analysed. One important point here is the fact I, the researcher, am experiencing this
transformational process, and although many other inhabitants of SL (*noobs* and
*Residents*) are observed linguistically and socially, I am also an object of study in the
research. This is supported by Page et al.'s claim with regards to researching social
media that:

> ethnographic approaches accept that the researcher is central, and that all
> views are partial and therefore the researcher is always positioned in some
> way in relation to the research. The researcher is not an outsider to the
> research site but a crucial part of it (Page et al., 2014: 110)

I did not exclude myself from the research, as being a participant observer I truly
participated in these communities and learned the ways of SL in the same way as
anyone else. At the start of the ethnographic fieldwork in 2009, I had not begun my
formal research registration, and had not therefore considered specific research
questions. Having known these at the time could have influenced the research with
regard to the 'observer's paradox' (Labov, 1972), but at an early stage with only identity
in mind, the researcher could approach the data collection process with a clear and open
mind, relatively clear of bias. Saville-Troike (2003: 88) claims that it is important that
ethnographic observation and description "be approached not in terms of preconceived
categories and processes, but with openness to discovery of the way native speakers perceive and structure their communicative experiences”. The researcher wanted to familiarise himself with the ways of the land, he wanted to learn how to become a Second Lifer, and was open to all kinds of activities that other Second Lifers engaged in. Since there were no specific research questions in mind at the time, this fact facilitated this openness to exploration. Starting off at Help Island, AV familiarised himself with the technicalities of the world such as movement and interaction with objects. After that, the exploration started through the SL search engine, following what was popular and what events and places had most traffic, meaning they were most densely occupied at the time.

The researcher found out that people aimed to enhance their avatars by shopping for new skins, shapes and clothes, in addition to buying or renting land and homes to live in. This required virtual money. As mentioned in Chapter One, the virtual currency Linden dollar (L$) can be transferred into US dollars, and of course Linden dollars (or lindens) can be bought online. Although this is the case, the researcher realised that many people feared online fraud and hacking, and preferred not to use their banking details online, but as a better alternative, chose to earn those Linden dollars instead. As a part of having a virtual life, one needs a virtual job to make ends meet. Popular jobs are those of dancer or host, but there is a wide variety of jobs available, some skilled and some unskilled, and there are even job agencies that help people find jobs.

As a participant observer, the researcher noticed that clubs were by far the most frequented places in SL. This accounts for the large amount of data collected in clubs in this study. Also of importance is virtual business and virtual education. Hence, the researcher took it upon himself to have a lifestyle that was parallel with these entities, in other words, Ashy Viper, as a participant observer, had a personal life which involved family relationships, friends, and socialising; a professional life employed as 'Chief editor' in Charltina's fashion company (earning Lindens); and took part in weekly academic discussion groups to formulate a fuller understanding of virtual education and research. When Boellstorff was conducting his ethnographic study in SL, he frequently encountered the following situation and question:

Participant observation is built on the alignments between engaging in everyday activities, on the one hand, and recording and analyzing those activities, on the other. The trickiness of this alignment often leads to the question, "Are you playing or researching?" The either/or nature of this
question misses that participant observation means that participating - including playing - is absolutely essential. 
(Boellstorff et al., 2012: 69)

The researcher here was asked the same question very few times and only in much more developed stages of the study in the third year of data collection, when he was a registered researcher, possibly due to AV’s successful membership of SL as a player first and foremost. The research was at first led by an exploratory initiative, then gradually becoming a more systematic participant observation process. The data population was identified, the virtual home was established, and engagement in virtual activities had advanced.

2.3 From Participant Observation to Data Collection

The data collection technique for this research started off rather intuitively in 2009 but as I became more familiar with the literature on academic data collection techniques, I developed a more systematic approach to planning and collecting data. The actual gathering of data began quite a while before I officially commenced my academic PhD programme in what I label as the 'player phase' from March 2009 to October 2010. In this phase the aim was mainly exploratory and introspective, dependent much on intuition and observation or "hanging around" as Page et al. (2014) put it. The 'researcher phase' began in October 2010, as I began my PhD studentship and started to develop a more systematic approach, namely by "sampling" (Page et al., 2014) or identifying the data population and the communities for observation in addition to the researcher’s role in these communities. The bulk of the data was collected in 2010 and 2011, but I occasionally logged into Second Life in 2012 and the data collection formerly finished in December of that year. Being intrigued by Second Life, conversations were collected at the end of every instance of being logged in and engaged in the fantasy of this virtual world. Later, a participant observational technique was adopted. Johnstone states that "participant observation is the primary research technique of ethnography or the description of cultures" (Johnstone, 2000: 82). Since ethnography is a technique to understand identity through participating in the culture and gaining that culture’s identity features, it was decided that participant observation was the appropriate data collection method. A daily journal and field notes were kept
throughout this process after October 2010. The purpose of the journal was to keep track of where I had been and who I had spoken to in SL. Field notes were used to identify specific situations that were relevant to the analysis. The journal had 68 entries corresponding to each location I visited on particular days. The field notes were ever-present as they were used in a triangulation technique with the corpus data in order to provide further context and interpretation to the analysed examples. This approach has its advantages and disadvantages. The advantages include enabling the researcher to blend in with the community and fully understand the social habits, traditions and customs associated with it. One of the main disadvantages would be associated with Labov's notion of the 'observer's paradox'. "The aim of linguistic research in the community must be to find out how people talk when they are not being systematically observed; yet we can only obtain these data by systematic observation" (Labov, 1972: 209). To overcome this issue, I started with a clear mind, with no particular questions in mind, but also did my best not to deceive my informants, but rather to have the following note in my Second Life profile:

![Biography]

<table>
<thead>
<tr>
<th>Biography</th>
</tr>
</thead>
<tbody>
<tr>
<td>I'm a PhD researcher specialized in the linguistic construction of SL virtual identity. My SL is my research, although that doesn't stop me from having fun ;)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you speak to me please mention whether it's ok (or not!) for me to use our conversation as data in my research. It's for my PhD dissertation, so strictly academic use only, and you can be anonymised if you wish.</td>
</tr>
</tbody>
</table>

Figure 8: AV's Profile Content

It is common practice to look at someone's profile before deciding whether or not to speak to them in SL, especially in first encounters. The above note sometimes generates
an initial discussion about the research in hand, but then this tends to be forgotten and less overtly reflexive SL-related conversations take place.

As the researcher's virtual self started roaming around and exploring Second Life, familiarising himself with the traits of the virtual world, establishing himself in the communities therein, attempting to conform, making friends, starting relationships, and just 'getting settled' into SL, the participant observational process began to adopt a new and more systematic shape. Since this is very much an empirical study, systematicity was necessary. The casual 'looking around' and intuitive and introspective nature of the research gradually developed into the case where the researcher started allocating specific time for establishing and developing roles for himself in the communities he was interested in. AV’s friendships, intimate and family relationships, academic group membership, and employment in the virtual world meant he had many roles to play: a friend to many, a family member (brother to a virtual sister and uncle to her virtual children), a partner in an intimate relationship, an academic, and a career professional. As a friend and family member, AV played the role of brother, uncle, friend and partner. This involved 'being there' in all these roles, engaging in conversations and family activities, providing moral support, participating in paying rent, renovating the virtual home and being intimate. As a career professional, AV had his working hours and was paid in Linden Dollars according to production. He text-edited all the writing that was produced by Charltina's fashion company. This included descriptions of designer clothing, magazine articles and also blog entries. As an academic, Ashy Viper would attend the academic discussion group Virtual Worlds Education Roundtable (VWER) every Thursday evening. This involved engaging in academic discussions about current trends in virtual education as an active member of the group. Charltina's and VWER also had official SL groups which AV joined. Joining a group enabled a tag over an avatar's head to appear and show affiliation (Figure 9).
In order to formulate an adequate and credible perspective of a subject's identity, that person's professional, academic and social circles and communities that he/she is active in (in this case virtual communities) have to be taken into consideration. Hence, the data population for this research is mostly influenced by AV’s network of people in SL, and can be summarised as follows:

- family and close friends
- professional colleagues at Charlina's fashion company.
- Academics at the VWER (Virtual World Education Roundtable) discussion group
- Arabic-speaking friends and acquaintances in the cyber-land Arab Avatar.
AV’s family and close friends are LV, his virtual sister, MS, her virtual husband (Figure 10, top right), and SW, his virtual partner (top left). AV also frequently spends time in the cyber-geographical location Arab Avatar, among other locations that are Arab-dominant, where he has established friendships with some Arabic-speaking residents and has become acquainted with others. The researcher chose these settings as the environments and sociolinguistic dimensions of his study as each person’s identity is made up of many facets, built up through membership of different environments and settings, so it is important to reflect the whole range of settings in which a person interacts. Identity at home differs from that at work, which differs from the higher degree of formality of the academic discussion group where scholars meet from all around the world. All these need to be observed to gather a full perspective of virtual identity. The Arabic-speaking network of friends and acquaintances represents a
different ethnic identity to the English-speakers and enriches the research by providing a more culturally diverse perspective, one which accords with the researcher’s real life identity.

AV has played an active role as a community member in these groups and communities, as can be summarised in accordance with Agar's (1996, 119 - 127) view of ethnographical research methodology (quoted in Johnstone, 2000: 83):

1- An ethnographer starts out as a learner, in a "one down" position vis-à-vis other people in the group.
2- An ethnographer's research questions arise in the process of participant observation, as do hypotheses about their answers.
3- The relationships an ethnographer has to develop with other people in the group under study are "long-term and diffuse" (p. 120) so the process takes time.
4- An ethnographer goes to the subjects' home turf.
5- An ethnographer's descriptive assumptions are holistic: all phenomena are assumed to be interconnected.

As in the first point above, AV started out as a noob (Figure 7) in SL, and was assisted by SW, who later became AV's partner, and taught him all the mechanics of the virtual world. As for the generation of research questions and hypotheses (point 2 above), being an empirical study with a bottom-up approach (Swales, 2002), these were generated during the actual reading and observation of the corpus. My avatar had been engaged in SL for more than 3 years already at the time of data collection as I finished collecting data in December 2012 and friendships he has made have lasted for a relatively long time. He has also been to the SL residences and/or work places of all the 'family and friends' group members (those of them who have residences and/or work places) as in 4 above.
2.4 Corpus Building

The question of how much data is needed to answer the specific research questions of this study is determined by Reppen's statement:

The question of size is resolved by two factors: representativeness (have I collected enough texts (words) to accurately represent the type of language under investigation?) and practicality (time constraints).

(Reppen, 2010: 32).

It was the true intention of the researcher to formulate a corpus that is truly representative of the English and Arabic used in SL for the purposes of identity portrayal and this was feasible considering the time the researcher had to conduct this research. The corpus is comprised of data in two formats; text and video (with incorporated text). The text data were simply gathered by a copy/paste process of text-based conversations from the public and the private chat channels available in SL, stored in .doc format initially. It was decided that a .txt format was also necessary for its compliance with corpus analysis software such as Wordsmith Tools (Scott, 2011). This allows quantitative analysis. The video data were gathered using an electronic video-recording program named Camtasia Studio 7 (TechSmith Corporation, 2009). This program records the screen, including any audio going in through the microphone and also output audio, in addition to having an edit option, with which the video captions can be manipulated to suit the researcher's needs. Video was used mainly in the Arab virtual environments as the main means of communication is voice chat, which is preferred to text chat as Arabic appears non-cursive and from left-to-right when in text form on screen (it is supposed to be from right-to-left and therefore impractical to use in SL), while text chat is the main means used by English-speakers.

The corpus is comprised of approximately 200,000 words of English data (text format) and 24 hours of video recording of Arabic data, making it an example of small and "specialized corpora" (Flowerdew, 2004). To the best of my knowledge, there is no general corpus collected from Second Life, and even if there were, specialised corpora are characterised by the "methodological advantages" (Flowerdew, 2004: 11) inherent in their use to understand language, making the one I have created unique. Figure 11 shows the distribution of the text corpus according to conversational genres.
As AV was engaged in more than one type of virtual community, it is only logical for the conversations to be of different natures and focuses. I tried to create a balance between English and Arabic with regard to representativeness. Since more of the talk in SL is in English, that justifies a smaller Arabic corpus, but because I wanted to reflect that part of my identity, I wanted to include Arabic. The Arabic data is represented in Appendix A where details about all the data files can be found, including participants, locations, genre of conversation and length of the videos.

The English data in the form of text were collected from different perspectives in the participant observation process, and different chat streams: public chat – data taken at clubs, business environment and academic surroundings; private chat – conversations with close friends and family, some work-related conversations, initial encounters at clubs; interviews – sociolinguistic interviews conducted by the researcher and job interviews at the stage of job-hunting.

As for the video data, which is mostly Arabic, it is comprised of excerpts ranging from 25 minutes to 3 hours long. Some have been cut and edited from the original for appropriateness of the corpus design to suit the research needs. For example, some of
the longer excerpts contained first encounters, private chat and public chat. These kinds of excerpts were divided into smaller ones accordingly. The data population included in the video excerpts was dominantly Arabic-speakers, ranging between Saudi Arabian, Egyptian, Syrian, Palestinian and Arab Americans. Some of them were or eventually became virtual friends of AV, while others are total strangers. There are quite a few conversations that involve more than two interlocutors, often four or more, in which my avatar does not actively take part. This enhances the naturally occurring Arabic data.

The method for selecting which Arabic data to transcribe in the examples given followed the analysis made of the English data. Similar linguistic features to those analysed in the English data were identified in the Arabic data. For example, when observing requests and instructions, similar situations were searched for in the Arabic data and hence transcribed and analysed in order to give a comparative perspective. Although all the English data, apart from the sociolinguistic interviews, is naturally occurring data, the part where AV has little involvement is that taken from the Virtual Worlds Education Roundtable (VWER) academic discussion group. The complete transcripts of every meeting that this group holds are available online and with permission from the moderators of the discussion groups, this also constitutes an important part of the corpus.

Since the Arabic data is mostly in video format, transcription was necessary. However, it was not feasible for reasons of time-consumption to transcribe the whole corpus. A listening methodology was adopted where the researcher listened to the whole corpus repeatedly and transcribed passages of analytical significance. The Arabic examples throughout the corpus were selected in this way, and are not included in any quantitative figures. Dornyei justifies this partial transcription method and terms it 'tape analysis':

In certain types of mixed methods research … where the qualitative component is of secondary importance and is mainly intended to provide illustration or clarification, it may not be essential to transcribe every interview and, instead, we can carry out a tape analysis. This simply means taking notes while listening to the recordings, possibly marking parts of the data … that warrant more elaborative subsequent analysis.

(Dornyei, 2007: 248 – 249)

However, Dornyei refers to audio recordings as opposed to video, and focuses on the secondary importance of qualitative analysis of the data. The researcher would like to stress that the importance of qualitative analysis is not minimised, but rather, all parts of
the data that represent research significance and are used in the analysis chapters of the thesis are transcribed in a 3-tier procedure explained below. The option of future transcription will still be open for future research though.

The organisation of the corpus files was presented in an excel spreadsheet that shows the detail of each file as per its name, setting, participants, format, date, location, words, and source.

2.5 Transcription Methods

The Arabic data in the analysis chapters is presented in the form of a 3-tier transcription following the Leipzig glossing rules (Comrie et al. 2008) as shown in Example 6, where the first line is a phonetic transliteration of the Arabic, the second is a literal word and morpheme-ordered translation of the Arabic to English and the third (in italics) is an idiomatic translation into English. The third line also illustrates some characteristics of the speech delivery according to Jefferson's Transcript Notation (Atkinson and Heritage, 1999: 161). This method allows the reader to focus on the idiomatic English, whilst enabling them to see the syntactic and morphological construction of Arabic and the original Arabic (although in Latin script). Each line of an extract is numbered (1,2,3 etc) on the Arabic part of the 3-tier transcription.

6. AV greeting Saudi male (SM) and female (SF)
   <AVSFSMaaMAR2011.PC>

1. AV marrḥabašabāb
   Hello youth
   Hi guys

2. SM 'ahlēn'āškīf-ak
   Welcome Ash how-you
   Hi:::::: Ash, how are you?

3. SF 'ahlān
   Welcome
   Welcome
   ((pause))

4. SM ši-l-`axbāryā`aximištāg-īnwāyād
   What-the-news oh brother missed-we a lot
   What's new bro? We've missed you alo:::::::t!

43
The first line of each three-tier transcribed utterance is a phonetic transcription in the DIN 31635 method of Arabic transliteration (DIN 31635, Wikipedia.com) because it illustrates all the possible Arabic phonemes that can be presented in the *Times New Roman* font in Microsoft Word, as in the above example. Din 31635 is defined as:


The words are transcribed according to the DIN alphabet shown in Table 1. Morphological elements are separated by a hyphen, giving the reader a better view of the way Arabic words are constructed, and how prefixes and suffixes can be added to roots.

In the pronunciation of some Arabic dialects we find phonemes that are not of standard Arabic origin, but rather borrowed from other languages such as the /g/ phoneme which has no corresponding letter in Arabic, but in some dialects, the (窦) letter and the (كد) letter (see Table 1) usually pronounced /q/ and /k/ respectively are replaced with /g/. These phonemes are transcribed as they are pronounced and in IPA transcription font. The word /qāl-at/ meaning "she said" is pronounced /gālat/ in many Arabian Gulf dialects.
Table 1: DIN 31635 and the 28 Arabic letters

<table>
<thead>
<tr>
<th>Arabic letters</th>
<th>DIN 31635</th>
<th>IPA</th>
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<tbody>
<tr>
<td>أ / ʾ</td>
<td>/ʔaːb/t/</td>
<td>ئ/ʔaːb/</td>
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<tr>
<td>ء / ā</td>
<td>/ʔaːb/t/</td>
<td>ئ/ʔaːb/</td>
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<tr>
<td>ق / q</td>
<td>/ʔaːb/t/</td>
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<td>ك / k</td>
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<td>و / w/u:</td>
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<td>ي / y/i:</td>
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</tbody>
</table>
The second line is a translation of the Arabic to English keeping the in-word morphological order, in addition to the word order in the clauses and sentences. This gives the reader a good insight into the structure of Arabic, as it is in vertical one-to-one correspondence with the first line, so as to make the first line somewhat understandable to non-Arabic speakers. This is illustrated in the examples of multimorphemic Arabic words in examples a - c:

a. kallam-ū-ni  
Spoke – they – me  
They spoke to me

b. gel-t-el-hum  
told-me-to-them  
I told them

c. rāḥ y-ʾmal rīlog  
got (masculine infix) do(masculine infix) relog  
He has gone to re-log,

As can be seen from example a, one word containing three morphemes has a four-word counterpart in its English idiomatic translation, with the constituents of a whole subject-verb-adverbial (SVA) structured clause. The second line here prevents any confusion in the reader when noticing the difference in correspondence between the first and third lines of the transcription. It also plays an important role in demonstrating the grammatical structure of Arabic, and how it differs from one dialect to another as there are multiple Arabic dialects in the corpus. Dialect shifts can be marked by such changes in grammatical structure, which can sometimes be used to portray different identities, but this will be dealt with in the analysis section. It is beneficial though to have this clearly reflected and illustrated in the written presentation of the data.

The third line of the 3-tier transcription is the idiomatic translation. This line is italicised to enable readers to focus on the idiomatic English only if they desire. This line also illustrates some characteristics of the speech delivery in conjunction with Jefferson's Transcription Notation (Atkinson and Heritage, 1984). According to this method, adopted in this study, colons are used in the transcription to show sound or syllable extension or prolongation; ((pause)) is used to show pauses in the flow of the conversation; underlining of syllables is used to illustrate emphasis on that element. Also, paralinguistic features such as laughing or coughing are mentioned in double parenthesis, for example ((laughs out loud)).
7. Encounter with Saudi female friends (SF1 and SF2)  
<AVSFSMaaMAR2011.PC>

1. SF1 ʾāšī  
Ashy  
Ashy::::::::::::::!

2. AV hala  
Hi  
Hi:::!

3. SF2 hala fīk š-AXBāR-ak wēn-ak ʾams mā bayyan-t  
Hi how-you what-news-your where-you yesterday not surfaced-you  
Hi, how ar:::e you::::::? What's new? Whe:::::re were you yesterday?  
You weren't around

4. AV wallāhi kin-t mašġūl bi-l-dirāsah sāmḥ-ū-ni  
And-Allah was-I busy with-the-study forgive-you(pl.)-me  
I was honestly bu:::sy with my studies, forgive me.

5. SF1 mā-ḥib l-dirāsahʾallāh ysāʿd-ak  
Not-like (infixed 'I') the-studying Allah help-you  
I do:::n't like studying, GOD help you!

6. SF2 kin-t-i fāśl-ah f-il-madrasah  
Were-you-(feminine suffix) loser-(feminine suffix) in-the-school  
You were AWful in school!  
((SF2 laughs out loud))

7. SF1 w-inti nafs l- šē’  
And-you same the-thing  
And you were the same!  
((all laugh))

Extract (7) is a good example of how characteristics of speech delivery are illustrated in the three-tier transcription technique. As can be seen in both lines 1 and 2, the words Hi and Ashy are extended, yet the latter contains more colons than the former expressing a longer timed extension. Lines 3, 5 and 6 have elements underlined when stressed and capitalised when loud, as in the original audio in the video caption they are clearly stressed and louder than the rest of the words and syllables in those sentences by their speakers. There are no pauses in this excerpt, but there is laughter immediately after SF2's utterance in line 6, where she alone laughs, and then at the end of the extract when all the participants laugh. Atkinson and Heritage (1984) are in agreement with Ochs (1979) in their use of the underline to mark stressed syllables. Ochs takes it a step
further by suggesting that capital letters can be used to mark increased volume and an
exclamation mark to indicate an exclamatory utterance.

A: ِلا
      No
      NO:……………………!

Here, one resident literally shouts an extended "no" when one of his pawns is eaten by
another player's in a game of Cheesy, which is the equivalent to Ludo, and a very
popular game among Arabic-speakers in the cyber-land Arab Avatar.

Information about the context is also important when understanding the discourse of a
context or even when analysing video data, as obviously the video is not visible to the
reader, hence in the transcriptions and text files a header is included at the beginning of
each corpus file. This includes demographic information about the writers or the
speakers in addition to contextual information about the text, such as when and where it
was collected and under what conditions. The video files have transcript files
accompanying them, and it is in these transcript files that the header is created, and also
sometimes a graphic illustration of the context is included in the form of a picture taken
either in SL using the snapshot option or simply by using the printscreen option on the
computer (Figure 12). Headers often have some kind of formatting that helps to set
them apart from the texts. Atkinson and Heritage (1984) suggest the use of angle
brackets (<>) to mark contextual headings as in the following example:

< File name = spkinnov06.mf >
< Setting = two friends chatting at a coffee shop >
< Speaker 1 = Male 22 years old >
< Speaker 2 = Female 33 years old >
< Taped = November 2006 >
< Transcribed = Mary Jones December 2006 >
< Notes: Occasional background traffic noise makes parts unintelligible >

Example 8 is from a transcript belonging to the corpus of this research. The same
procedure is followed except for leaving out of who transcribed the excerpt, as I did all
the transcription in the corpus.
8. Example header containing contextual information.
<File name = AVFMnwnJAN11.IE>
<Setting = two people chatting over a picnic layout>
<Speaker 1 = AV, male>
<Speaker 2 = FM, female>
<Format = video, taped JAN 2011>
<Notes: Occasional background noise and low volume of FM makes parts unintelligible>

Figure 12: Snapshot of AV's view during first encounter conversation with FM

The setting of this conversation is much clearer with the header and the graphic illustration. The picnic basket is clear, as well as the chequered cloth. A visual of the speaker (Figure 12) is also very important as it shows what position she is in (lying down in this instance). Sometimes, as on this occasion, the picture shows whether a person (or rather his/her avatar) is performing any kind of activity, like smoking. The clothes we wear or choose for our avatars to wear reflect a part of our identity.
2.6 File Naming

An example of a file name, as we observed in example 8 above, is <AVFMnwnJAN11.IE>. The method adopted for naming the individual files has at the beginning and in capital letters the initials of the names of the interlocutors in the conversation, in this case AV and FM, followed by the cyber-location in which the conversation takes place, here nwn for "N9 W N9" pronounced /nuṣṣ ū-nuṣṣ/ which is an Arab-oriented cyber-geographic location. The approximate date of when the caption was recorded comes next, and then (dot) and the nature of the conversation, which in this case is an Initial Encounter. This naming system enables the organisation of the corpus according to who participates in the conversation, where it takes place, its date and the nature of the conversation. So if a reader or a future researcher was interested in, let us say, initial encounters, these can easily be segregated in a subcategory of the corpus. Other subcategories are academic discussion (AD), casual conversation (CC) and interviews (INT).

There are transcripts which are group discussions, as in the VWER discussion group and data taken from public chat where a lot of people are involved. In the naming of these files, instead of mentioning the initials of the interlocutors, I include the initials of the group or setting, such as <VWERmeuMAR2011.AD> or <PBC1aa13APR2011.CC>. The first part states that it is taken from the VWER education group in the Montclair Estate University SL campus in March 2011, and its nature is academic discussion. The second is taken from the public chat channel in Arab Avatar on the 13th of April, 2011, and its nature is casual conversation. Table 2 shows some further examples of file names and their explanations.
Table 2: File-naming codes

<table>
<thead>
<tr>
<th>Filename</th>
<th>Participants</th>
<th>Location</th>
<th>Date</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVFMnwnJAN11.IE</td>
<td>AV, FM</td>
<td>N9 W N9</td>
<td>JAN 2011</td>
<td>Initial encounter/picnic</td>
</tr>
<tr>
<td>VWERmeuMAR20101.AD</td>
<td>VWER</td>
<td>Montclair Estate University SL campus</td>
<td>MAR 2010</td>
<td>Academic discussion group</td>
</tr>
<tr>
<td>PBC1aa13APR2011.CC</td>
<td>AV, Arabic-speakers</td>
<td>Arab Avatar</td>
<td>APR 2011</td>
<td>Casual conversation</td>
</tr>
<tr>
<td>AVSWLVhomeDEC2010.INT</td>
<td>AV, SW, LV</td>
<td>AV’s home</td>
<td>DEC 2010</td>
<td>Sociolinguistic interview</td>
</tr>
</tbody>
</table>

2.7 Ethics

The data collected for this work represent the interactions of real people, and hence this research is covered by a university ethical review process (reference: PVAR 13-068).

As Adolphs and Knight (2010: 42) say, consent normally involves a signature on a consent form obtained from each participant in a study.

Typical practice in addressing ethics on a professional or institutional level suggests that corpus developers should ensure that formal written consent is received from all participants involved, *a priori* to carrying out the recording.

In SL, it is not as straightforward. It is the norm that residents in Second Life do not reveal their real-world identities, except in cases like the VWER discussion group, in which, at the beginning of each session, the members give a brief introduction of themselves and their academic background. Other than this, regarding the contents of this corpus, residents prefer to remain anonymous, and are known solely by their
SL names. As the researcher does not know these people in the real world, there is no way that he can just mail them a consent form and have them sign it. An alternative is to have them express their consent either verbally or in text at some time during our interactions. It is made clear to the participants that any collection of data will be used for research purposes only as mentioned in Figure 8 (page 33), I state that "I'm a Phd researcher specialized in the linguistic construction of SL virtual identity ... If you speak to me please mention whether it's ok (or not!) for me to use our conversation as data in my research. It's for my PhD dissertation, so strictly academic use only, and you can be anonymised if you wish". The participants are asked to repeat a sentence after the researcher that expresses consent, as in Example 9, where consent was given in text form in the public chat stream of SL.

9. Negotiating permission <AVSWLVhomeDEC2010.INT>

[19:50] AV: I would like you both to repeat after me, if you don’t mind me taking this interview as data for my research, and for research purposes only

[19:51] LV: ok

[19:51] SW: ok

[19:52] AV: Mr. Ashy Viper, I have no objection in you using this interview as data for your reseach [sic] and I am content with it.

[19:52] SW: Mr. Ashy Viper, I have no objection in you using this interview as data for your reseach [sic] and I am content with it.

[19:52] LV: Mr. Ashy Viper, I have no objection in you using this interview as data for your reseach [sic] and I am content with it

In 9, a long stream of casual conversation turned into the conducting of a sociolinguistic interview with two of AV's closest acquaintances in SL, his SL partner and his SL sister. The women were asked to repeat after the researcher the expression of consent, which they clearly copy/pasted as evident in the repetition of the typographical mistake. This was done towards the end of the conversation so as to avoid any influence it may have had if done at the beginning and maintain the spontaneity and authenticity of the interaction.
As the conversation is in text form, it was possible for the participants to read and revise what they have said by scrolling up the chat stream text window, and express consent after this. Other residents were asked to fill in an SL electronic notecard in the form of a consent form and give it to the researcher's avatar as an inventory offer (an object that is sent to the inventory, see Figure 13).

It was also decided that the participants be further anonymised by being given pseudonyms in the form of initials for the English-speaking participants and letters for the Arabic-speaking participants (their preference) in place of their SL names. By further this means referring to concealing not only their already anonymous real-life identities, but also their SL identities, as it is known that SL residents take their second lives very seriously, and there is no reason why they should be treated differently, in addition to the fact that some may be found by using their SL names, as they may be referred to in online social media profiles and statuses such as those of Facebook. This method is easily applied to the text data. The video data however is a little more complicated. "Anonymity is more problematic when it comes to audio or video records of conversations in corpora. Audio data is ‘raw’ as it captures vocalisations of a person, existing as an ‘audio fingerprint’, which is specific to an individual. This makes it relatively easy to identify participants when audio files are replayed" (Adolphs and Knight, 2010: 43), but this is not a problem here as the speakers cannot be heard, unless the data were to be played at conference presentations. As SL is a 3-dimensional virtual world where people take the forms of avatars in the forms of pixels on a screen, and the avatars' shape, size, colour, physical features, hair, facial dimensions, clothes and every other characteristic are alterable at any time and quite easily, the element of anonymity is ever existent. The only visible giveaway is the avatar’s nametag which appears above the head. In the video corpora this cannot be avoided or altered. Although the videos can be shadowed, blurred or pixelated, these measures are difficult to apply in practice. Therefore, it is explained to all the participants that a video recording is in progress (they are practically unaware as there is software recording a screen and not the physical and visible presence of a video camera as opposed to real life) and it will be used for research purposes, and those who do not wish for their avatars to participate can simply leave the scene. The video recordings, however, do not appear in the thesis, and therefore anonymisation and the use of pseudonyms through initials is applied to the transcripts. The VWER meetings are public and published in the VWER website.
Nevertheless, the researcher obtained a notecard in SL from the moderator of the meetings stating that the members of the discussion group were aware that the content is public and that I am free to use it as data for this research. No alterations of these texts are required, and therefore, they have been kept in their original form. Figure 13 shows examples of the consent notecard handed to the researcher by different participants.

![Figure 13: permission notecards](image)

2.8 ‘Embodiment’ in Space and Time: the Who, Where, and When of SL

In a virtual world that is ultimately a "body of binary digital information: ones and zeros rendered on a computer screen" (Boellstorff, 2008: 91), but which looks and feels like a place with a sense of direction, time, and lots of people to interact with, the senses of self, time and place take on a whole new perspective. The 'who', 'where' and 'when' dimensions have origins in sociolinguistic theory, as Holmes (2013: 8) claims that "certain social factors are relevant" when investigating language such as "the participants", that is the 'who', and "the social setting" - the place and time. A resident of Second Life is *embodied* (Biocca, 1997; Sunden, 2003; Georgakopoulou, 2006; Boellstorff, 2008) by his/her avatar, in Second Life Time (SLT) and in one of the thousands of cyber-geographic locations on the SL grid. The physical existence of the person at the computer screen is in a certain way 'removed' and/or duplicated and replaced by pixels on a computer screen in the form of an avatar. The personhood of that physical person is replaced by that of the avatar, that is, the author of this thesis is no longer himself, but rather (or as well as) AV in Second Life. He is no longer just the
person sitting on a chair opposite the computer screen, but rather is also the avatar flying through the air and teleporting between different cyber-geographic locations. The time is no longer GMT, but rather SLT. The context is complex as it is simultaneously the same 'real' context as well as a whole new one. A phenomenon like background information is no longer reflected by what an interactant knows about the 'real' person, but rather what information that interactant can gather from their public profile. However, one cannot completely isolate the 'real' world environment from the SL one. In a simple question like "how are you?", the answer is complicated, as the deictic expression you in the question, which normally refers simply to "the addressee" in such a case refers to two people, and the perception of which person is being referred to is reflected in the reply as example 10 shows:

10. <AVSGsweethearts24AUG2011.CC>
[10:40]  SG: Hi Ashy how are you?
[10:40]  AV: Im good love ... how r u?
[10:42]  SG: good thank you... trying decide what to wear lol
[10:43]  AV: my day's been quiet ... got up late

SG's reply to AV's question shows a reference to her virtual self, as she immediately follows her statement of being 'good' by informing AV what she is doing in Second Life at that moment in time. AV, on the other hand, being less acquainted and experienced in SL, refers to his 'real' self by stating that he woke up late that day (in the real world). The deictic word here is you in the questions, and the perceptions of the referents of you are reflected in the replies, as clearly "the addressee" in this case can be more than one identity. This example does not only have implications for identity, but it also shows the complexity of the indexical context of interaction. As Hanks says:

The basic property of the indexical context of interaction is that it is dynamic. As interactants move through space, shift topics, exchange information, coordinate their respective orientations, and establish common grounds as well as non-commonalities, the indexical framework of reference changes. (Hanks, 1992: 53)

The interactants, their locations, actions and time in which the actions take place all affect the indexical framework of the interaction. This subject will be the focus of Chapter Four. Therefore, when considering the indexicality and deictic field of any conversation, it is important to consider the 'who', 'where' and 'when' of the interactions.
that are taking place. The significance lies in the fact that the interactions are in Second Life. How SL affects these factors is worthy of discussion.

2.8.1 The who

When engaged in communication, various factors relating to context have to be taken into consideration, such as who is being referred to in speech (the SL avatar or the RL person), that is the social context, the immediate surroundings of the interlocutors, the physical context relating to place, and also of course the temporal context.

From the above perspective, "the relationship between a focal event and context is much like that between 'organism' and 'environment' in cybernetic theory" ([Ashby, 1956, 1960; Bateson, 1972; Buckley, 1968] cited in Goodwin and Duranti, 1992: 4). In a similar way, it can be said that the relationship between the virtual interaction and context is much like that between "avatar" and "virtual surroundings", adding to it the complexity of the possibility of carrying out multiple conversations in private chat with people existent or removed from the proximity of the public chat area, which can also be engaged in simultaneously.

Throughout this work, the virtual embodiments of persons have been referred to as avatars, a term used in many online worlds. Boellstorff claims that the term was probably first used in the virtual worlds Habitat and Ultima IV in the mid-1980s and that even before the term was coined, observers of virtual worlds noted linkages between sociality, subjectivity and embodiment (Boellstorff, 2008: 128-29). He cites Krueger in the statement that "people have a very proprietary feeling towards their image [i.e., their avatar]. What happens to it happens to them. What touches it, they feel [...] A new kind of social situation is created" (Krueger, 1983: 127-28). In this sense, when communication is involved, we can think of the case being more complicated than just a simple speaker-listener situation. One has to bear in mind that avatars are not just "anchors of virtual perspective" as Boellstorff describes them (2008: 129), they are the modality through which people experience their virtual selfhood. In more linguistic terms, there are complex interlocutors: the persons seated at their computers in their real life surroundings being inches away from the screen in a room or open space of some sort, and their avatars: characters being a varied distance from other avatars inworld.
Avatars can "see" other avatars in the local proximity, and avatars allow others to see whether or not they are present in the more distant proximity. Unlike in the real world, residents have a choice of becoming untraceable to other avatars on the virtual map (there is a setting whereby avatars can become invisible on the map to other avatars of their choice), and they can also direct their attention through the use of their camera rather than through their avatar (the camera view can be set to a long distance away from the avatar), but in general the avatar's vision follows the cursor on the screen (Figure 14) or in the case of an inactive cursor, simply looks forward.

![Figure 14: Looking up and down](image)

The default position for the camera provides a view not much different from that of Figure 14 (see Figure 19: Default view), in addition to having the capability to move into any position desired through the camera controls that are visible in the bottom right corner of the images in Figure 14. This means that the line of sight through the camera can leave the direct vicinity of the avatar and go anywhere, whilst the avatar is still. Different views have different effects on place and personhood, a phenomenon which will be discussed in the next section.

Sophisticated avatars are a trait of established residents. Users who misuse their avatars, or rather lack the knowledge and experience of how to properly control their avatars' movement, are perceived to act in a noobish way. Whilst engaged in conversation, especially through the public chat stream, an avatar is expected to be facing the other, appearing as though he or she is speaking and listening, that is, actively participating in the conversation. It would be unacceptable to use one's camera view and wander around the venue with it whilst being spoken to through the chat stream.
As can be observed from Figure 15, AV is facing towards the participants in the interaction, thus giving a sense of attention and active participation in the conversation. MX, the canine avatar on the left is in "editing appearance" mode. This mode is entered into by right-clicking one’s avatar and selecting the "edit appearance" option from the pop-up menu. This act reflects that he is not an active participant in the conversation but is rather engaged in another activity to do with editing the appearance of his avatar. It would not be expected of MX to be actively participating in this conversation whilst he is in this mode. MO (on the right), on the other hand, seems to be actively participating in the conversation, and in fact is speaking and directing his speech at LV (middle), who is also facing the participants. This is a normal scenario in SL. MX could be engaged in private chat with someone removed from the scene of the conversation, in which case it would make no difference whether he was in "editing appearance" mode or facing the participants. There are other cases where it is appropriate not to face the addressee, such as when communicating while dancing. In such cases, a sideways view is preferred so the couple can be viewed together performing the dance routine and talking at the same time (Figure 16).
Figure 16: Sideways view while dancing

This view gives the participants of the conversation the pleasure of being able to enjoy the sight of themselves dancing together, while at the same time communicating. One last view to be observed here is the front view through which the self is objectified (Figure 17).

Figure 17: Front view
This egotistical view is often used to check appearance and poses. A Resident would not keep the camera in this view whilst engaged in any kind of proximal communication, whether private or public, as it would not allow for the awareness of where other participants in the conversation are. If engaged in private chat with someone removed from the location, this makes no difference. As for people in the immediate proximity, communication with them could be affected, especially the identification of the referents of place deictic expressions (discussed in Section 4.1.2).

There is no accurate measure of appropriateness, especially in a world like Second Life, which encourages freedom and creativity. However, an experienced Resident will have an awareness of the virtual surroundings and this awareness is reflected linguistically in the use and perception of deictic expressions such as personal pronouns and place and time expressions. These differ from their use in RL as a person is regarded to have multiple identities and being in more than one place at one time whilst inworld. Different camera views give off different meanings and have different effects on the communication.

2.8.2 The where

When engaged in virtuality, SLers have to be aware of their virtual surroundings. The spatial and visual aspects of the online dimension affect communication in a way similar to how context affects communication in a 'real' surrounding. Avatars can visibly see other avatars around a 35 virtual metre (vm) radius. Virtual metres are measurements relevant to the size of the avatar itself and its surrounding buildings and environment. They can also see aspects of their virtual environment like hills, large buildings and water areas of up to a radius of 50 virtual metres. This gives them a sense of place and a feeling for surroundings. Second Life is home to different types of players (see 2.9). Different players have different perspectives, and it is important to have a perspective of the game in order to absorb the visual aspects of the online dimension so that the task set out by the player whether to 'socialise', 'explore', 'achieve' or 'kill', (Bartle, 2004) can be carried out successfully. Certain types of players may need to be more aware of their virtual surroundings than others, such as the case for a 'killer' when looking for his prey whilst avoiding capture. Socialisers have to have a good awareness of who they are surrounded by when engaged in public chat, as it is
fruitless to engage in conversation when knowledge of whom one is speaking to is absent. Achievers and explorers may see things yet more differently, as an achiever would for example take into consideration spatial aspects when building a house or buying land, and an explorer would observe and even investigate every visual aspect of the area as that is the objective of exploring within the game-playing mode.

This visual aspect of SL is what characterises it and distinguishes it from conventional online communication, such as Yahoo! chat or MSN messenger. As an illustrative example, it would be possible to run a weekly discussion group similar to that of VWER (or even a conference) and engage in academic discussion through Yahoo! messenger, but SL has the visual element that provides the sense of presence. The differences are many and advantages of SL are significant. As far as the attendees are concerned, they are visible, all sitting down at a round table, seeming as though they are being attentive (Figure 18), whereas in Yahoo! messenger all that is visible is an icon on the right with the person's username. The virtual world is unique in a way that the avatar's presence projects that attentiveness. Interestingly, in both cases, the real person could walk away into the kitchen without anyone noticing their absence, but in SL (and other similar virtual worlds), the presence of the avatar uniquely gives that attentiveness, encouraging the speaker to carry on speaking.

Figure 18: VWER meeting showing visual aspects of SL
Another important visual aspect is that of place. The setting shapes the conversation and affects it in different ways. Knowing and seeing that you are sitting in a university auditorium (Figure 18) affects identity, as one is inclined to act and speak appropriately when in the presence of other academics, as opposed to when in the presence of internet chatters, that is, people who frequent internet chat rooms to socialise in an informal manner. Any conversation, whether spoken or synchronously written is governed by many components of communication. Hymes (1972) proposes his SPEAKING model, in which he claims that "sixteen components can be grouped together under the letters of the code word SPEAKING: settings, participants, ends, act sequences, keys, instrumentalities, norms, genres" (Hymes, 1986: 65). The setting is the time and place of the communication, and the scene "designates the psychological setting" (Hymes, 1986: 65) of the conversation, for example when interactions are redefined from formal to informal. AV could leave a business meeting at Charlina's to go to his virtual home and spend time with his family and later attend a VWER academic meeting. Each context has different components to the others, which is reflected in the language used. The visual element contributes to the setting and scene in Hymes's theory.

When not engaged in formal meetings (sitting down), the default visual setting for a player is to see the avatar from behind and have a good view of what is in front for 50vms (Figure 19).

![Figure 19: SL default view](image)
As can be seen from Figure 19, AV and C are approximately 3vms apart. A sense of distance is also made possible with the proportions of sizes of the surrounding objects like the reindeer, Santa's sleigh and the single floor building that is a retail shop. Santa is about 15-18vms away from the player avatar in the middle distance and the boundaries of the *sim* are visible in the background, as one can see the water in the distance and the pieces of land that are not covered by snow. From the player perspective, one sees space as originating from the avatar itself in the immediate centre and space is therefore relative to that, and from a non-player perspective, as is the case in the virtual meeting above, all 'objects' including the people are situated in relation to each other. However, these perspectives can easily change as the situation changes, changing the indexical frame of the conversation (discussed in section 4.1.4). A fundamental feature of the indexical frame is that the deictic centre and, consequently, the nature of the relation of the centre to referents in the deictic field are in "frequent flux in the dynamics of an interaction" (Glover and Grundy, 1996: 1). Players have the option to adjust the camera controls to view their own avatar, surrounding avatars and/or land from any perspective as illustrated in Figures 20 and 21, each perspective having its own function.

Figure 20: Adjustment of camera position 1
In Figure 20, the camera controls *heads up display (HUD)* can be seen in the bottom right side of the illustration. These arrows are clicked to adjust the camera position. The set of arrows on the right move the camera as a whole (right, left, zoom in, zoom out) and the arrows on the left move the camera in a rotary motion (turn camera left, turn camera right, turn upwards, turn downwards). It is necessary to explain these views so as to get a sufficient understanding of the sense of direction and visibility. In 20 I have turned the camera slightly to the left so as to get SW into view, whereas in 21 I have turned the camera 180 degrees so it is facing my avatar, and I have also zoomed in closer to my avatar so as to be able to take a picture of myself for a portrait. Other sideways perspectives can be chosen, as different camera angles are suitable for different purposes and situations. Facing your interlocutor and giving them attention reflects engagement in conversation, whereas the front view is used for activities of a more egotistical nature, such as taking a self portrait picture. As discussed above, other views are also used such as the sideways view for dancing and a camera zoom view is used for acts of a more intimate nature.
In short, one can summarise the functions of the different camera views as follows:

1. "From behind": This is the default view and used from the 'player's perspective' which enables an awareness of the virtual surroundings to the front and is usually used in communication, walking, and flying.

2. "Sideways view": This view is used in activities such as dancing (Figure 22a), where the animated movements of the avatars engaged in the dance can be viewed and appreciated, whilst at the same time not impeding the communication, as both interlocutors can be seen.

3. "From the front": This is an egotistical view that is used to view the avatar's appearance or in cases of taking a self portrait snapshot, such as those used for profile photos.

4. "Camera zoom": Any object (baby in Figure 22b) can be zoomed into for closer inspection.

The changing of camera angles comes rather instinctively as would the changing of the focus of someone's eye sight whilst communicating. The camera is regarded as the eyes of the SL user, only being more advanced, in that it does not have the same viewpoint restrictions as the eyes do, such as in cases where the camera can be moved beyond
walls to see what is behind them. A higher ability to control the camera movements and good mechanical skills are traits of an experienced Resident. In a discussion about noobs on the official www.secondlife.com blog, one user wrote:

In my opinion it's [the characteristics of a noob] more based on how someone acts towards others, how they move through the world and their understanding of SL's social workings. Second to that would be their technical understanding of how things work in SL (building, animations, etc.) and how they appear.

For example: Most people will give other avatars a equal amount of 'personal space' as is expected in their own RL. A 'noob' will typically go barreling into people and stand uncomfortably close.

(community.secondlife.com).

The sense of self space exists, as can be implied from the above quotation when the Resident mentions feeling uncomfortable when noobs invade personal space. It is obvious here that the spatial dimension or 'the where' of the virtual world cannot be separated from 'the who', as it is the people who occupy the virtual space and what happens in the virtual space that affects the avatars after all.

2.8.3 The when

Second Life has its own time zone (SLT) to facilitate perception of time, as it is known that people log in from all around the globe. The SLT clock is visible in the top right-hand corner of any viewer screen (Figure 19). Discussions about time usually take place between SLers merely to differentiate between SLT and their physical real world time zones. When announcing events, SLT is used (Figure 23) as everybody can relate to it.

Figure 23: Event announcements
It can become a little confusing, as one can see in Figure 23, that two times are mentioned. The time mentioned in the title of the message is followed by GMT, as it refers to the time that the user received the announcement in their local time zone, and is not the announcement itself. The details are found below. In the image on the left 1pm is mentioned, and on the right, 11:30 slt is mentioned. Interestingly on the left, there is no mention of the time zone, as it is taken for granted that SLT is referred to. A further investigation of examples and how SLT is perceived is reserved to the analysis section in Chapter Five (5.3.3). It suffices here to claim that users need a knowledge of the difference between SLT and one's real life time (or RLT) and that SLT is to be used in event announcements.

2.9 Types of players in Second Life

No discussion of who, where and when would be complete without discussing types of players and their roles in the game/virtual world. According to Bartle's (2004) taxonomy, players are of four types: achievers, socialisers, explorers and killers. What is rather unique to Second Life is that all these player types can be found, unlike other "traditional" games, where one or perhaps two can be found.

1) Achievers: are players who like to gain. "It's the fact that the game environment is a fully-fledged world in which they can immerse themselves that they find compelling; its being shared with other people merely adds a little authenticity and perhaps a competitive element. The point of playing is to master the game" (Bartle, 2004). But what does mastering the game involve in a virtual world like Second Life, where one creates his own aims and plays the game as he pleases? It proves that the general ideology of freedom can actually be contested, or it can be theorised that there are multiple ideologies, one from the game creators that gives one the freedom to do as one pleases, but another from the perspective of other players, one of expectancy where advancement in the game is based on certain types of achievements, some materialistic (house, belongings, money) and others abstract (social circle, established role in the community, job, linguistic skills). If these are gained, advancement is measured by acceptance into the community, leadership, and the acquisition of an established "Second Lifer" identity is recognised.
2) **Socialisers**: "are interested in interacting with others. This usually means talking but can extend to more exotic behaviour [...] The game world is just a setting; it's the characters that make it so compelling" (Bartle, 2004). There is overlap between the types of players in Second Life, as of course, in addition to wanting to establish oneself, a Second Lifer would be expected to socialise. Part of the 'expectancy' is to have a social circle and be active in it. This may involve having an intimate relationship with another SLer, having a family, maintaining friendships with neighbours and professional relationships with co-workers etc. There are of course some people who just like to frequent clubs and talk to people, but these types of players either have not realised the advancement element of SL, or rather simply choose not to pursue this.

3) **Explorers**: "are interested in having the game surprise them, i.e. in interacting with the world. It's the sense of wonder which the virtual world imbues that they crave for; other players add depth to the game, but they aren't essential components of it, except perhaps as sources for new areas to visit" (Bartle, 2004). These types of players exist in SL, and also the element of overlap exists, as avatars can explore in their spare time, days off work, or when many members of their social circle are offline, and there is a lot to explore in SL. From personal experience, I know people who have alternative accounts (different avatars and identities) for exploration purposes only.

4) **Killers**: are those "interested in doing things to people [...]. Normally, this is not with the consent of the "other players", but killers don't care; they wish only to demonstrate their superiority over other fellow humans" (Bartle, 2004). This view is rather debateable when applied to Second Life. A "killer" in SL is one who frequents role-playing simulators and plays the role of 'killer' or 'villain', but there are also the roles of 'victim' and 'enforcer' of some sort. In this case, a player would choose his/her role and would willingly be killed/abused/raped as it would be part of the story line of that particular simulator.

All of these types of players can be found in Second Life, and there is overlap between them. Players can change their type or role whenever they please. My mode as a researcher started off as an explorer (roaming SL and discovering its ways) and then went on to be a socialiser (meeting people and observing them), and eventually an achiever (having a virtual home, relationship, identity). This is what makes Second Life so significant and so academically research-worthy, in addition to the fact that different
identities are 'playing these players', whether the SLidentity of a person, or whether traits of real life identity come into play, or a bit of both.

2.10 Conclusion: Structure of the Analysis

This research was conducted in the virtual world Second Life by setting up an account, acquiring an avatar and being immersed inworld. An intuitive beginning led to more systematic participant observation and ethnographic methods of data collection and corpus building. I identified a data population and different roles for my avatar in social, professional and academic communities. Transcription methods and file-naming procedures were decided upon, while also considering research ethics under university review. Empirical investigation of the corpus led to the formulation of research questions and linguistic analysis of the corpus at three different levels: word level, phrase level, and clause level, using two approaches: computational (quantitative) using WordSmith Tools (Scott, 2011) and descriptive (qualitative) analysis of the use of discourse in online interaction (Boellstorff et al., 2012). Word level analysis is the focus of Chapter Three where the use of SL-vocabulary at the lexical level is investigated morpho-pragmatically, commenting on the lexical features and word-formation processes of these lexical items, in addition to their use in social context. Deictic expressions and indexicality are observed in Chapter Four, creating an understanding of the concept of the deictic field and the relationship between avatars and their contextual virtual surroundings. This is done by observing personal pronouns, place, and time adverbials, and investigating their social use and implications for reflecting awareness of person, place and time in the virtual. Chapter Five contains an investigation of pragmatic acts (Mey, 2001). If a pragmatic act is recognised, acknowledged and fulfilled in a virtual context, this has clear indications for the construction of SLidentity.
CHAPTER THREE

*SLexipedia*: Word Formation and Social Use
Chapter Three

*SLexipedia: Word Formation and Social Use*

3. Introduction

In his book, *A Glossary of Netspeak and Textspeak*, David Crystal blended the two words *lexicon* and *encyclopaedia* to form *lexipedia*, a word he used to describe the nature and purpose of his publication as "a cross between a dictionary (lexicon) and an encyclopaedia" (Crystal, 2004: vii). For each term in the glossary there is information one would look up in a dictionary, and the sort of knowledge one would expect to find in an encyclopaedia, such as an etymology of the entry and a hint of its sociolinguistic use, along with cross-references. For example:

newbie A newcomer to a chatgroup or virtual-world environment, especially one who has not yet learned the way to behave when participating in the dialogue. >>chatgroup; netiquette; virtual world

(Crystal, 2004: 79)

My coinage, here, of the neologism *SLexipedia* compounds the initialism SL with Crystal’s term, *lexipedia*, to provide a word to describe the Second Life-specific lexis in the corpus. This chapter investigates the creative and innovative word-formation processes of SL English (*SLEnglish*) and Arabic (*SLArabic*) vocabulary by its residents. Since use of language reflects and constructs identity (Goffman, 1959) and "speakers position themselves in relation to others by using specific linguistic forms that convey social information" (Sterling, 2000: 2), the final concern of this chapter is the manner in which these SL terms are used in conversational interaction *inworld*, to reflect the social purposes and circumstances in which these words are utilised. A coherent *SLexipedia* will provide more insight for forming an account of SL identity, or *SLidentity*.

It is argued that communication in SL shares many attributes with internet chat, as they are both forms of computer-mediated communication (CMC). The language of SL stands out though in this fact and develops its own attributes, as Pojanapunya and Jaroenkittboworn (2011) point out. This is due to the influence of the virtual surroundings in SL having graphic qualities, and the capability of the avatars to communicate using both verbal and non-verbal strategies such as eye contact, gestures, body posture and facial expressions.
Compared with other text-based forms of communication in virtual worlds with similar chat applications, this type of communication [text-based chat in SL] provides users with more vivid verbal and non-verbal interaction through avatars' expressions and postures. With their 3D digital bodies, users can socialize and perform various activities that bear a very close resemblance to those in the real world. Through this medium, the language and the way SL participants communicate with each other are likely to have certain characteristics.

(Pojanapunya and Jaroenkitboworn, 2011: 3592)

It is these characteristics that this research aims to determine in addition to investigating their role in the formation of a virtual identity. Second Life gives its users a plethora of so-called freedoms with the purpose of it being a form of anti-reality. Language is supposedly one of these freedoms. But, learning the specific SL code is part of the SL group membership process, as it leads to a sense of belonging and affiliation, and also alienation, or in-groups and out-groups, carried over from real life group socialisation processes. In order for any user to be considered a Resident by other Residents (purely socially and by no means technically, as every user is considered a resident by the program), that person has to become familiar with and practice using SL code, if they do not want to be considered a noob. A competent user of SL code, in whatever language it may be communicated in, is placed higher up the SL virtual identity hierarchy and perceived by other residents as a well-established Resident and not a noob. There are, of course, a number of non-linguistic factors that affect group acceptance like not dressing like a noob and having a sophisticated avatar, rather than the one provided by Linden Lab to a user when he/she first opens an account. These seem to be social constraints that are brought from the real world to the virtual one.

The purpose of this chapter is to investigate the social use of SL-specific vocabulary at the syntactic level of the word, and comment upon what implications this use has for virtual identity. This involves discussing word play and how language in Second Life is characterised by playfulness, followed by theoretical background of word-formation process and finally an analysis observing and discussing the word-formation processes of these words, particularly the creative word-formation processes SLers invent to come up with new words that are specific to SL.
3.1 Word Play

There is little doubt that the nature of the computer as medium fosters playfulness. (Danet, 2001: 24)

Since Second Life is advertised to be ideologically based on freedom and creativity, an escape from the constraints of reality and giving a player the ability to act as one pleases, as in the website definition "Second Life is an online 3D virtual world imagined and created by its Residents" (www.secondlife.com, accessed March, 2010), it is perhaps expected for dwellers of this virtual world to develop their own linguistic code that is characterised by playfulness. Danet, writing about computer-mediated communication, goes on to claim that "another factor promoting playfulness was the anonymity of the medium. Textual chat modes were especially carnivalesque because they generally masked identity" (2001: 32). Sometimes it is the nature of the virtual world that requires there to be certain site-specific terminology in addition to subversive behaviour of chaos and humour when it comes to language use. Instances of such reference in Second Life includes the SL currency known as the linden dollar (L$) and the means of transportation between worlds and lands, which is teleportation (TP) as well as typographical features of language such as the alternation of capital and small letters and non-conventional use of punctuation marks such as those found in Example 11. There is a tendency to form initialisms, which make the language an in-group one, as outsiders would not immediately understand these forms. Androutsopoulos (2006: 419) tells us that Netspeak (or chattish) has been described as "a series of abbreviations and symbols" that "pose big problems" to noobs. Being a form of synchronous computer-mediated communication, the language in Second Life is influenced by Netspeak (Crystal, 2001) and Textspeak (Crystal, 2004) regarding its brevity, grammatical tolerance and typography: "the art and technique of creating and composing type in order to convey a message" (Woolman, 1997) or "font frenzy" as Danet (2001) calls it. For instance, in Example 11, CP typographically enhances her comment with colons, a graphic heart and capitalisation, following it up with a vocalisation that is extended and elaborated with alternating upper and lower case characters.
This typography is clear as the heart shape substitutes the word 'love', and the fluctuating capitalisation and decapitalisation of the 'o' letter shows typographical language play. These typographic norms, which are common practices in SL, differ from the economical norms associated with the language of chat. The motivation here is the subversion of the norms of standard English for language play and emotive purposes. In addition to typographical features, the language of SL is rich with new words created through conventional and creative word-formation processes. There are a number of lexical items that are site-specific to SL. New vocabulary items have emerged, some in the form of neologisms (TP, SLex), others semantic extensions of existing terminology such as lag (slow connection speed affecting movement in SL) and rezz (or rez, to 'resurrect' - make appear - an item, or oneself in the virtual world, Example 12). These are all forms of how it is possible to play with language in a virtual environment that is "imagined and created by its residents" (secondlife.com, 2010). In American TYPEPLAY, Steven Heller, Senior Art Director at the New York Times writes "The personal computer has become a canvas on which type has become the equivalent of paint. Digitization has made it possible for the tutored and untutored to play at will, indeed create art with letter forms" (cited in Heller and Anderson, 1994: 12). Example 12 shows how the word resurrect has transformed into rez and takes verb endings such as the [-ed] past tense, though an economical form of it [-d]:

The following points summarise the forms of language play that can be found in the data, and that are also common in CMC more generally:

a. the use of common and novel acronyms and initialisms such as rofl (rolling on the floor laughing) (Example 13)
b. expressing one's emotional responses by the use of graphical emoticons such as 😊 for happy, 😞 for sad and :D for laughing.

14. <PCbeachwood10AUG2011.party>  
:D :p :D :p :D

c. Capitalisation for loudness or emphasis,

15. <VWERxmasprtyDEC10.CC>  
[15:17] AG: never knew you could have it WITHOUT booze!!!!

d. Creative graphic prolongation and extension of the spelling of words for prosodic effect to show emphasis.

16. <PClonukMAY11.CC>  
[17:16] Blonde: awwwwwwww

17. <PCaaAPR2011.IE>  
A: /welkəmu:/:  
Welcome him!  
Welcome hiiiiiiiiiiiiiiiiim!

In 16, we see extension of the letter 'w' which represents a prolonged pronunciation of the word *aw* to express sympathy or admiration. The capitalisation of the whole word in 15 clearly emphasises that word, and in 14, we see in addition to the extension, alternating emoticons expressing laughter (:D) and cheek (:p), indicating cheeky laughter. Similar cases can be found amongst Arabic-speaking residents in Second Life. In 17 we see the prolongation of the final vowel in /welkəmu:/ and hence its equivalent in the three tier transcription and translation method. What also can be seen in this example is the fact that this is the English word *welcome* with the Arabic morphemes [/u:/ you pl.] and [/hu/ him] affixed to it, though the full Arabic form is /welkəmu:hu/ in which the [him] morpheme is fully formed rather than ellipted, as in the SL form. Mixed-code and cross language agglutination is a common feature of *SLArabic* – the particular type of Arabic used in Second Life – with English being the lingua franca in SL. Cross-language affixation is not uncommon, neither is it
unexpected in SL, although it is a linguistically significant phenomenon worthy of comment. There are many cases of English words having Arabic morphemes attached to them in the corpus, especially in cases of:

- plurality /lāND-āt/ (lands), incorporating the Arabic noun plural morpheme -āt,
- determination /'al-mayk/ (the-mic), incorporating the Arabic determiner 'al-
- preposition /fil-rī/ (in real(life)), incorporating the Arabic preposition fil-
- and possessiveness /stāyl-ak/, (your style), incorporating Arabic the second person plural possessive morpheme -ak.

Holes (1995: 81) states that “The principle of Arabic derivational morphology is that of root and pattern.” What we witness here is that the English words are treated in the same way as Arabic root words (or base morphemes), and thus the possibility of adding inflectional and derivational morphemes is created. This has resulted in the coinage of words such as those mentioned directly above, in addition to other words such as /Isakaynah/, discussed in (3.3.4) below. On language typology, Sapir mentions analytic and synthetic languages:

An analytic language is one that either does not combine concepts into single words at all (Chinese) or does so economically (English, French). ... In a synthetic language (Latin, Arabic, Finnish) the concepts cluster more thickly, the words are more richly chambered, but there is a tendency, on the whole, to keep the range of concrete significance in the single word down to a moderate compass.

(Sapir, 1921: 58)

Sapir's definition differs somewhat from Eifring and Theil's (2004: 5) in that they claim that analytical languages (also called isolating languages) are those languages which have words that "tend to consist of only one morpheme" and "have no inflection". Synthetic languages are those that contain words that "have more than one morpheme" and that these languages vary in their degrees of synthesis from "mildly synthetic (or rather isolating) such as English, having limited inflections, "highly synthetic" such as Arabic, Greek and Sanskrit, which have plenty of inflection, derivation and compounding, and "polysynthetic" languages such as those spoken by the Eskimo and American Indian languages. The fact that Arabic is a highly synthetic language means
that it permits adding inflections to foreign words treating them as roots when it is phonologically feasible, such as in the points above showing English words taking Arabic morphemes.

Cross-language morpheme inflection, typography, capitalisation and acronymy are all instances of language play that is characteristic of Second Life. This playfulness has led to the unique formation of new words in order to fill lexical gaps in communication. The forms of language play such as the heart shape to replace the word 'love', the repetition of the exclamation mark and alternative capitalisation and decapitalisation of letter in example 11 for instance are all emotive and affective (Bednarek, 2008) uses of language. In this case the text is a conversation opener displaying emotion and inviting other users to join in and discuss the tune with their emotional attachment. Some of the new words are formed in the known and well-documented word-formation processes such as acronymy, while others are quite innovative in their word formation technique, either being SL-specific or bringing together two languages in one word as in the case of SLArabic.

3.2 SLexipedia - Word Formation

Word formation is the study concerned with the origin of words and how new words are coined and invented. Many scholars of morphology, lexical semantics and etymology have been interested in word formation processes (e.g. Adams, 1973; Bauer, 1983; Durkin, 2009; Katamba and Stonham, 1993; Lieber, 2004; Stageberg, 1981). Bauer claims that "any discussion of word-formation makes two assumptions: that there are such things as words, and that at least some of them are formed" (1983: 7). Bauer's two main branches of morphology, inflectional morphology and word formation, serve us well here. Inflectional morphology is the branch of morphology that "deals with the various forms of lexemes", while word-formation "deals with the formation of new lexemes from given bases" (Bauer 1983: 33). Figure 25 shows Bauer’s classification of word formation into two types, derivation and compounding, with derivation composed of class-maintaining and class-changing forms, and compounding identified according to the word class of the resultant compound form, limiting it to only nouns, verbs and adjectives. Although Bauer is referring to English here, the same applies to Arabic. Stageberg (1981) classifies eleven types of word formation processes, including both compounding and derivation as the main processes, but adding more in Figure 24:
Figure 24: word formation processes with examples from Stageberg, (1983: 128)

Scholars (such as Adams, 1973; Durkin, 2009; Katamba and Stonham, 1993; Lieber, 2004) who have worked in this field have similar taxonomies regarding the types of word formation, and all agree on compounding and derivation (or affixation) as the main processes. However, Stageberg’s 1981 taxonomy will be used as a basis here as it has eleven different categories of word formation processes. Not all of Stageberg’s categories will be given attention as some are irrelevant regarding the data in the SL corpus; only those that appear in the data shall be discussed and are emboldened in Figure 24. Additional word formation processes will be presented and discussed as the creativity and innovation of creating new words is presented. Table 3 summarises Stageberg’s word formation processes that are discussed with his examples and example words taken from the SL corpus.

Table 3: Stageberg’s word formation processes

<table>
<thead>
<tr>
<th>Process</th>
<th>Stageberg examples</th>
<th>SL examples</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compounding</td>
<td>Cornflakes, smalstalk, darkroom, brother-in-law, player-manager, high school, hang glider</td>
<td>inworld, Rez Day</td>
<td>Inworld: being immersed in SL Rez Day: An avatar’s birthday (the anniversary of the day an account is set up)</td>
</tr>
<tr>
<td>Derivation</td>
<td>Teleplay, coachdom, counsellorship</td>
<td>Tpd, tp’d, tping, rezd, rezzing, laggy</td>
<td>TPd: Teleported, Rezd: Resurrected (highlighting past tense morphemes)</td>
</tr>
<tr>
<td>Clipping</td>
<td>Lab, dorm, prof, exam, math</td>
<td>Alt, AV, perm, rez, sim, resi</td>
<td>Alt: Alternative account, AV: avatar, perm: permissions, resi: resident</td>
</tr>
<tr>
<td>Acronymy and Initialism</td>
<td>Radar, MP, NATO, UN, UNESCO, OK</td>
<td>SL, RL, SLT, LS, MOTD, AFK, TP, LM</td>
<td>LS: Linden dollars, AFK: away from keys (absent from the keyboard), LM: landmark</td>
</tr>
</tbody>
</table>
Figure 25: Basic divisions of morphology showing word formation (Bauer, 1983: 34)
By new, the researcher refers to the fact that they are either completely new formations that have established themselves in SL_English and/or SL_Arabic, or they are existing words that have experienced significant semantic extension or pragmatic alteration in the way they are used in context, usually in a way specific to SL. This section is concerned with presenting an account of how the entries in the SL glossary are used in social circumstances, with the aim of discussing their role in the formation of a virtual identity. The glossary entries are organised alphabetically and also proceeding from the term that occurs most frequently (and its derivations) to that which occurs least frequently.

The next sections are presented according to the word-formation processes of the words being analysed in context: acronymy, compounding and blending, derivation, and clipping. Examples from the corpus in both languages (English and Arabic) are discussed regarding the use of these vocabulary items in their social context and the implications for the acquisition of a virtual identity.

3.2.1 Acronymy
Economy is a characteristic of CMC (Baron, 2000; Crystal, 2001; Danet, 2000; Herring, 1996, 2001; Yates, 1996) because of the "rapid-response dictates of CMC" (Benwell and Stokoe, 2006: 260) and various forms of abbreviation are ever-present, although extensions and elaborations also exist for affective and emotive purposes (see 3.1). Clipping and alphabetism are both types of economising formation processes. Alphabetisms are of two main types: initialisms and acronyms. There are some differences among scholars regarding the definitions of the terms acronym, initialism and abbreviation (Bauer, 1983; Cannon, 1989, Stageberg, 1981). Bauer states that:

An INITIALISM [original caps] is one type of alphabetism. In an initialism, the initial letters of the words in a phrase are taken to replace the phrase. These letters are pronounced as a sequence of letters.

An ACRONYM is an initialism which is pronounced according to ordinary grapheme-phoneme conversion rules.

(Bauer, 2006: 500)

However, Cannon (1989) refers to both as initialisms, but names Bauer's initialisms as abbreviations. Stageberg (1981: 123) on the other hand defines Acronymy as "the
process whereby a word is formed from the initials or beginning segments of a succession of words” He states that “In some cases the initials are pronounced, as in MP, (military police, or Member of Parliament)” as is the case with Bauer's *initialisms* and “In others the initials and/or beginning segments are pronounced as the spelled word would be. For example NATO (North Atlantic Treaty Organization) is pronounced /neitol/ and radar (radio detecting and ranging) /reida:/," as in Bauer's *acronyms*. Stageberg does not separate these two terms as Bauer does; therefore Bauer's categories are more useful for precision in this analysis.

Having affiliations with *Netspeak* and being characterised by economy and extravagance, where texting is the form and the context is mostly informal and less rule-governed, it is expected that initialisms and acronyms are frequently present in a corpus of *SLEnglish*. The most recurrent of the Second Life initialisms are *SL* (Second Life) and *RL* (Real Life) with 458 and 201 occurrences respectively in the SL corpus, that is a rate of 2.5/1000 words for *SL* and 1/1000 words for *RL* (see table 6). These were recovered from the corpus using *Wordsmith Tools* (Scott, 2011) and they both appear in the keyword list for the SL corpus as is to be expected. *SL* is also used in other initialisms to refer to something specific to SL. *SLT* for example means Second Life time which is fixed at -8 GMT, the time that Residents refer to and live by *inworld*. The frequency and distribution of the other initialisms and acronyms across the corpus are also shown in Table 4. *TP* (short for teleport) stands out as one of the frequent initialisms, especially in casual conversation (CC). When people want to move around from one place to another, they *TP* each other to their whereabouts. This is not frequent in academic discussion (AD) as the meetings take place in a fixed location and there is little moving around. The six times that *TP* does occur in AD is when a member of the discussion who is already there offers a *TP* to someone coming in. *LL* (Linden Laboratories) however is mentioned frequently and much more in AD than in CC. This is because *SLers* do not usually concern themselves with the producers and designers of Second Life, while members of the VWER academic discussion group frequently mention *LL* in their suggestions for development of SL and critical discussions about entities within it that concern LL.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Total # (%/1000 words)</th>
<th>Casual Conversation (CC)</th>
<th>Academic conversation (AC)</th>
<th>Interviews (INT)</th>
<th>Automated response (AUTO)</th>
<th>Business meeting (BM)</th>
<th>Full form</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL</td>
<td>458 (2.25/1000)</td>
<td>121 (0.5/1000)</td>
<td>226 (1.1/1000)</td>
<td>91</td>
<td>7</td>
<td>13</td>
<td>Second Life</td>
</tr>
<tr>
<td>RL</td>
<td>201 (1/1000)</td>
<td>101</td>
<td>24</td>
<td>62</td>
<td>14</td>
<td>-</td>
<td>Real Life</td>
</tr>
<tr>
<td>TP</td>
<td>61 (0.3/1000)</td>
<td>46</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>Teleport</td>
</tr>
<tr>
<td>HUD</td>
<td>34 (0.15/1000)</td>
<td>12</td>
<td>3</td>
<td>-</td>
<td>19</td>
<td>-</td>
<td>Head’s up display</td>
</tr>
<tr>
<td>LL</td>
<td>32 (0.15/1000)</td>
<td>-</td>
<td>32</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Linden Laboratories</td>
</tr>
<tr>
<td>IM</td>
<td>29 (0.14/1000)</td>
<td>15</td>
<td>10</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>Instant Message</td>
</tr>
<tr>
<td>AO</td>
<td>25 (0.13/1000)</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>Animation Overrider</td>
</tr>
<tr>
<td>SLT</td>
<td>17 (0.08/1000)</td>
<td>-</td>
<td>17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Second Life Time</td>
</tr>
<tr>
<td>LM</td>
<td>17 (0.08/1000)</td>
<td>5</td>
<td>10</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>Landmark</td>
</tr>
<tr>
<td>L$</td>
<td>5 (0.02/1000)</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>Linden Dollars</td>
</tr>
</tbody>
</table>
SL is used mainly as a noun modifier, as in the example cases below:

18. <PBChereandthereOCT10.CC>
   [19:55] SW: who is Lashay?
   [19:55] AV: OMG, I love her, she is my SL sister
   [19:55] AV: LV [typing her name showing its resemblance to my own]
   [19:55] SW: lol

19. <PBChereandthereOCT10.CC>
   [20:00] SW: And he was telling how much he wanted to be with me. He had just broken up with his sl gf.

20. <PCbbMAY11.CC>
   [16:11] VM: my SL daughter comes from leeds

In all three of these cases SL is used as noun modifier of the words ‘sister’, ‘gf’ (girlfriend) and ‘daughter’ giving these words the positioning identity characteristic that they are 'in SL only' and not biological or exist in real life. In addition to relationships, SL can be used to premodify objects such as the sun in 21 or even abstract entities in the virtual world, as in SL drama in 22.

21. <AVOGclubMAY10.CC>
   [16:49] OG: maybe u need more sl sun to get more color lol

22. <AVHcreamy12AUG2011.IE>
   [10:02] H: Interesting. This is a very good club to be. A lot of sl drama, relationships, voice

OG and I were discussing how my avatar was not appearing in the form that it should be, but rather it was plainly grey in colour. She added humour to the conversation by stating that it might need some more SL sun. H recommends a club to friends which is highly interactive. There are social feuds and lots of drama, and this is rather specific to SL, as one would not expect the attendants of a party at a club to all know each other and interact in real life, especially with the feature of being able to communicate with people across the hall or dance floor, which would be realistically almost impossible. This is a characteristic of virtual communities. The use of SL in 8-12 overtly as a modifier reflects an awareness of the virtual surrounding and its contrast to 'real' life as the modifications of the different nouns place them in the virtual. More examples are discussed in (4.2.2) where the terms here and in SL are contrasted, but it is worth mentioning here that the most frequent collocate of SL is the preposition in with 236
(51.5%) occurrences while in SL occurs 184 times (40%). Where SL is not a modifier it usually refers to Second Life, the virtual world, or the 'game' in general (23 and 24).

23. <VWERampittheatresMAY-JUL2011>
M: I first heard about SL way back (check my avatar's birth date)

24. <VWERampittheatresMAY-JUL2011>
AJB: so – what kind of assessment are we talking about ... I’m asking because – I don’t see why we should assess the tool – we asses the learning, irrespective of the tool
Prof. D: If you assess an RL classroom, then it makes sense to assess SL. Otherwise, not so much.
AJB: how? the mode should not be assessed, should it – should it be the learning that is assessed?

In 24, SL is used in an academic setting as a subject of discussion involving virtual learning and teaching. Here SL is used as a 'tool' and is contrasted with RL.

The substantial part of the corpus is casual conversation (CC), representing 66% of the corpus as a whole (see 2.4), and this reflects the dominant casual nature of SL. The SLers who participate in CC are people who are simply living out their second lives like AV's SL sister LV, who has been married, had four children, and been divorced in SL. These are the users who I would argue have an avatar-identity, that is one of an avatar living in SL as a real person would live in RL. In this case, everything such users mention exists or happens in SL, so the need to literally mention SL ceases to exist. The objects mentioned in 25 are all unmodified nouns referring to SL objects, but there is no need to mention in SL, or SL bed, SL baby as this is implied from the context of the conversation.

25. <ADARstacey'sJULY2011.CC>
[18:34] AD: the bed i put in the house has a lot of animations, its the one we had in the ranch house on our first sim, we never got to use it though
.
.
[18:41] AR you arent thinkin a baby already are you?

The reference to the bed and the ranch house is one of presupposition and implicature, as in a virtual context and doing what they are doing (furnishing a virtual home), AD and AR, the participants of this conversation, know that the referents of the objects they
mention are to be perceived as in SL. The context is a virtual one, in virtual space and time, and the identities involved in the interaction are virtual avatar-identities. When such a Resident feels that he/she needs to say SL in conversation, it is to make a distinction between SL and RL, to avoid confusion as in 18 and 19, where SL sister is not to be confused with real world sister, and SL gf is not to be mistaken for real life girlfriend, or when Second Life in general, that is, the program itself, is mentioned, as in 26.

26. <ADARstacey'sJULY2011.CC>
[19:06] AR: omg i love that gown
[19:06] AD: sl is bad, i still dont see you
[19:06] AR: i'm next to you
[19:07] AD: ahh, there you are :-)

In 26 AD is referring to Second Life as a program saying it is 'bad', meaning that the loading process is slow. After a short while, AR becomes visible in the gown she is wearing and AD expresses his content with the smiley face emoticon :-). Later in the same conversation AR mentions the anonymising nature of the SL program relating to identity claiming that it can be deceiving, giving it agency.

27. <ADARstacey'sJULY2011.CC>
[19:06] AD: she always told me she was older, but would never say for sure
[19:06] AR: But i guess sl deceives everyone with the way we portray ourselves

In many of the SL examples above, the use of the initialism is to do with contrasting it to its 'real' life counterpart RL.

Although this initialism is not exclusive to SL, but used in any other virtual environment (Rua, 2007) to refer to the real as opposed to the virtual, it is the second most common initialism in the SL corpus with 201 occurrences (1/1000 words) and it is not mentioned in Crystal's glossary (2004). An observation of how RL is used is important because of its frequency and the fact that it contributes to the SL observation as they are regarded as opposites.

Being classified in the same grammatical class and having the same grammatical functions in any sentence, one would perhaps expect that SL and RL are similarly
distributed across conversational genres. As it is the spontaneous conversational use in
different social circumstances that is our concern, this proves not to be the case. Where
almost half of the quantity of the occurrences of SL came from academic discussions, in
the case of RL, half of the 201 occurrences appear in casual conversation, and a large
number in sociolinguistic interviews in which the questions target the differences
between SL and RL.

Some of the occurrences of the initialism bring out the distinction between SL and RL,
but they are limited in frequency. Example 28 is taken from an academic discussion
about language and virtual identity, hence the essentialism of the distinction between
what happens in 'real' life and what happens in here referring to Second Life. The use of
here places the speaker in the virtual deictically, and so RL acts as the natural there
relating to here.

28. <VWERampitheatresMAY-JUL2011.AD>
JR: In RL so much of what we say is communicated through body
language. In here words take the higher ground with endearing tolerance for
language barriers and other cultural differences

29. <VWERampitheatresMAY-JUL2011.AD>
Prof. D: I’ve found that some students who have a serious problem with
anxiety reading aloud their work in RL have an easier time here in SL.

29 also shows the contrast between the two 'places': RL and SL. Prof. D highlights that
the anonymising features of the here encourage students to read aloud, something they
are very anxious to do in front of a 'real' audience. In both the above examples one
notices how SL is considered in terms of spatial deixis the ‘here’ as opposed to the
implied ‘there’ of the real world (see 4.1.2).

In casual conversational circumstances, or such situations as first encounters, questions
asked in relation to real life identity have to be clearly stated as they can be easily
misinterpreted. When a question of age emerges inworld, the expected reply is for one
to reveal their SL age, that is, the number of days since the SL account was first opened.
This information is also visible in a SLer's public profile. 'Real life' age is not expected
to be asked about or mentioned as it is the habit of many Residents to separate RL and
SL, keeping anonymity intact. From the conversation in 30, it is clear that “roffo”
knows SS's real life age, and hence is requested not to give away traits of her real life identity:

30. <PClar's27AUG2011.CC>
[00:02] SS: n shhshh roffo dont be givin away my rl in here :P

RL in 27 also has implications for deleted elements such as 'information' or 'age', and here once again positions the speaker in the virtual surrounding. There are many instances of the use of RL when compensating for deleted elements according to the context of the conversation. "RL calls", "My RL is bad", or even "my RL is coming" with the ellipted element being 'husband' or 'wife' for example. Usually, when immersed inworld, the context is perceived to be the virtual one, and the RL is 'the other'. If a resident states their preference of not mixing the two worlds, it would be somewhat inappropriate to ask about 'real' world information, as in 31.

31. < AVPCsweetheartsJULY2011.IE>
[11:03] CM24: ya so how ol d r u in rl i dont mean to b rude

CM24 apologises up front for her question about age knowing that it may be inappropriate. If she only asked "how old are you", the hearer would have taken the question to be referring to his/her SL age. This is a face-threatening act mitigated with an apology.

Another frequent occurrence of RL is during leave-taking, as real life can intervene with a person's hours spent online, and so it is common for residents to state that RL requires them to leave Second Life at that particular time.

32. <PCclubNOV10.CC>
[16:47] BB: hate to tip and run but rl calls..have a great night all

33. <AVSGsweethearts24AUG2011.CC>
[11:47] SG: rl time for me......thank you for sharing...

There is also an acknowledgement that real life is the 'real' and Second Life the fake, or the game, and that reality always comes first. RL is prioritised over SL.
RL acts as a constant reminder that Second Life is the virtual and not the reality. Residents do not forget that they are performing identities which are often perceived to be different from their real life ones. Boellstorff quotes a resident saying "the SL me and the RL me are two totally different people. I may appear strong in my online presence, but in RL I'm so weak it's not even funny." (Boellstorff, 2008: 120). In an interview with a resident in my data, he had this to say:

MNC obviously distinguishes between the two worlds (lines 5-6) and acts accordingly. He acknowledges that there are activities that residents take part in inworld that are perhaps socially rejected in reality. As a person with real life responsibilities pursuing a career as a construction worker, he knows that in his life gambling and drinking have negative repercussions and can be hazardous and irresponsible. He cannot partake in these activities in real life and therefore pursues them in SL where there are no social constraints against them and certainly no repercussions. His statements that he does not drink or gamble (lines 9-10) are somewhat linguistically ambiguous with the absence of the implication as to in which life, and hence the question is needed in the following line to disambiguate the fact. The social use of the initialism SL is associated with
freedom, escape, role-playing, deceit, perfection and anonymity, whilst RL is associated with social constraints, limitations, responsibilities, imperfection, laws, and consequences of actions of grievance. MNC also uses a typographic gesture of respect and embellishment in lines 3 and 13, showing the extravagant and playful nature of SL language.

Since English is the lingua franca of Second Life, it is not surprising that the SL-specific terminology has crossed over from English to other languages, Arabic being merely one of them. Here we find that the clipped forms (see 3.2.2 for a definition of clipping) used by Arabic-speakers in context are only those of English origin, but have undergone Arabic forms of clipping.

If one translated Second Life into Arabic, it would be /ḥayāt ṭāniya/ which does not appear in the Arabic corpus even once. The program is called Second Life and that is how it is referred to inworld. Table 5 shows the different realisations of the collocation in Arabic, which is treated as one unit here.

<table>
<thead>
<tr>
<th>Transcription</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>/sekend layf/</td>
<td>6</td>
</tr>
<tr>
<td>/seken layf/</td>
<td>22</td>
</tr>
<tr>
<td>/sakan/</td>
<td>16</td>
</tr>
<tr>
<td>/seken/</td>
<td>20</td>
</tr>
<tr>
<td>/sekend/</td>
<td>5</td>
</tr>
<tr>
<td>/ʾal-sekend/</td>
<td>5</td>
</tr>
<tr>
<td>/ʾal-seken/</td>
<td>14</td>
</tr>
</tbody>
</table>

As we can see, the full form /sekend layf/ is one of the least frequent in the corpus. Reduced forms like /seken layf/, /sakan/ and /sekent/ are preferred. The dropping of the final /d/ is understandable, as it is a way of making the phonological structure of the word fit into the one of the most common verbal-noun structures CaCaC in Arabic (Holes, 1995: 120). Here the capital letters of CaCaC are used to represent root consonants and small letters to represent non-root consonantal affixes and vowels. Users
of Arabic make this modification in an unconscious fashion, because it is built into their linguistic competence to do so. However, as far as the pronunciation is concerned, the form /sekən/ with the ‘shwa’ type vowel phoneme in the second syllable is preferred to the /a/ vowel as the figures show, as it is closest to the English pronunciation. The choice of the pronunciation with /a/ in the second syllable is also seen as appropriate by many though, as the word /sakan/ coincidentally means ‘residence’ and is quite fitting to the nature of the virtual world. The verbal noun /sakan/ ‘residence’ is actually derived from the verb /sakana/ (past) - /yaskunul/ (present) which means ‘to reside’. However, /sakan/ appears only in a context when its immediate collocate is not /layfl/, as Arabic-speakers deem it strange to say what would translate into residence life, so when used in collocation the tendency is to pronounce it as speakers of English would.

Another interesting feature is the not uncommon use of the definite article /ʾal-| (the) when mentioning the name of the program or the virtual world. Second Life is treated as a proper noun and normally (excluding contrastive contexts) in English would not need the use of a definite article. In Arabic though it is common to have proper nouns with the definite article the attached as an external morpheme or “proclitic” /ʾall/ (Holes, 1995: 163), as in the names of countries /ʾal-ʾirāq/ (Iraq), /ʾas-s ʿādiyya/ (Saudi Arabia), /ʾal-ʾurdun/ (Jordan), /ʾaj-jazāʾir/ (Algeria) though this is not always the case as in /ʾumān/ (Oman) and /lubnān/ (Lebanon). Even with proclitic ‘the’ attached as an external morpheme, the dropping of the final /d/ phoneme is preferred as shown in the statistics in Table 5.

37. 〈PCaaAPR2011.CC〉
A: yā jamā’a taraʾal-seken rahi:b
Guys (I tell you) the-‘Second’ is great.
Guys SL is great!

In a group conversation (example 37), one user is expressing his feelings about SL in general stating that it is ‘great’, using the informal clipped form. “In all varieties of Arabic, singular nouns are masculine or feminine (by form, meaning, or convention),” (Holes, 1995: 164). What we notice here is the use of a masculine gender adjective /rahi:bl/ to refer to SL, whereas if one takes the translation /ḥayāt ṯāniyal/, it is a feminine noun and thus would require the use of the feminine form of the adjective /rahi:bal/. Instead of assigning gender based on the actual translation of the words
‘Second Life’, the user rather thinks of it as a program /barnāmaj/ which is a masculine word. Another justification would be that even though the user pronounces the word with the ‘shwa’ vowels rather than the /a/ vowels to resemble the word /sakan/ ‘residence’, the second way of pronouncing it would require a masculine adjective to follow also as the word /sakan/ ‘residence’ is masculine.

Another instance of clipping, or form reduction, is witnessed in the words real life. As the case is for Second Life, Arabic-speaking residents do not have a tendency to use the translation /ḥayāt haqi:qiyya/, but have a preference for the English words. The reduced form is /ri:l/, and amongst Arabic-speaking residents is almost of the same amount of usage as its full-form counterpart as shown in table 5. It is used much more frequently when it is in the collocation /fil-ri:l/ meaning in real life.

<table>
<thead>
<tr>
<th>Word(s)</th>
<th>Translation</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ri:l layf/</td>
<td>Real life</td>
<td>12</td>
</tr>
<tr>
<td>/ri:l/</td>
<td>Real</td>
<td>14</td>
</tr>
<tr>
<td>/fil-ri:l/</td>
<td>In real (life)</td>
<td>27</td>
</tr>
</tbody>
</table>

Table 6. Realisations of real life in Arabic.

Phonologically, real is pronounced with a /i:/ (long, close, front, unrounded vowel) rather than with the diphthong /iə/ as in the RP English pronunciation. This is due to the fact that the diphthong does not exist in Arabic pronunciation, and /i:/ is the closest to it.

38. <PCaaNOV2010.cc>
A: tʿrefī hada min ʾaṣḥābi f-il-sakan f-il-ri:l
Do you know anyone of friend-s-your in-the-second life in-the-real life
*Do you know any of your Second Life friends in real life?*
B: lā yā satār
No oh God
*Oh my God no!*

This question is asked by one female Arabic-speaking resident to another. The first speaker (A) has a Lebanese dialect and it is assumed that she originates from that area, or was brought up there. She asks her question to her Saudi Arabian interlocutor assuming it is normal for someone to meet his/her SL friends in the real world. B’s
response however is not surprising as Saudi Arabian women have many more social constraints than the Lebanese, imposed on them by their conservative society. It would not only be improper, but rather dangerous for a Saudi Arabian female to know her SL friends in the real world, especially Saudi Arabian men in Saudi Arabia. The acts these female residents perform in SL, such as freely talking to members of the opposite sex or dressing provocatively, would have significant consequences in RL. In 38, interlocutor A finds it necessary to distinguish the contextually ambiguous word *friends* and collocate it with *in SL* to mean virtual friends rather than real life friends. There is clearly a conceptual difference between the two worlds amongst SL dwellers, in that they are 'allowed' to have certain types of friends in real life (females) and can 'get away with' having male friends in SL. There is a separation of identities and when they are in one world, they are absent from the other. This can be linked to the concept of isomorphism (Boellstorff, 2011) in a sense that when users separate the two worlds, the relationship between a user and their avatar becomes one of oneness. They are embodied by their avatar and live temporarily in the virtual world.

Teleportation is the means by which avatars transport themselves from one *sim* to another, or within one single *sim*, such as between floors in a building. There are sometimes teleportation devices that an avatar can stand on, click the remote and be teleported. There are *landmarks* (LMs) in the form of electronic cards that can be saved into one's inventory. Each landmark has a teleport option when opened, which enables any avatar to be transported to the specific location the LM represents. One of the most popular ways of transportation, however, is avatars teleporting other avatars. In the private chat window between two avatars there is a teleport option, which enables any avatar to teleport any other avatar to their location. So it is expected to see sentences like "shall I teleport you?" or "teleport me" in conversations, although, previous evidence has shown that extended forms are rather unpopular in casual conversation, with the clipped forms being preferred. Table 7 compares the distribution of the full form *teleport* and the initialism *TP*.  

92
Table 7: Comparison between the distribution of teleport and TP

<table>
<thead>
<tr>
<th>Lexical Item</th>
<th>QTY raw (per/1000)</th>
<th>Automated messages (2000)</th>
<th>Academic Discussion (47500)</th>
<th>Casual Conversation (127000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teleport</td>
<td>41 (0.2/1000)</td>
<td>35 (1.75%)</td>
<td>5 (1%)</td>
<td>1 (0.0000008%)</td>
</tr>
<tr>
<td>TP</td>
<td>61 (0.3/1000)</td>
<td>3 (0.15%)</td>
<td>5 (1%)</td>
<td>53 (0.04%)</td>
</tr>
</tbody>
</table>

The table shows the frequency of the lexical items and mentions the total word count for each genre along the top line. Clearly TP is the favoured term in casual conversation, being used 53 times in a total of 127000 words equalling 0.04%. This is a large amount when compared to teleport which is hardly used in casual conversation and present only once. Teleport is more recurrent in automated messages that the SL program gives when a teleportation is completed. In the formal setting of an academic discussion (AD) they are equally used, which shows that full forms and initialisms are equally favoured. Examples 33-35 show TP and teleport in casual conversation, academic discussion and automated response respectively:

39. <ADARstacey'sJULY2011.CC>  
[19:56] AD: ok sweety, im going to check out the new store, different location now i guess  
[20:00] AR: ok tp me

40. <VWERampitheatresMAY-JUL2011.AD>  
M: The downside of that option, however is that you cannot teleport out — you show up on other grids bald and naked

41. <AVSGsweethearts24AUG2011.CC>  

In 39, AD is telling AR that he is going to a new location, and since it is also new to AR, she does not have the landmark (LM) to it, and cannot teleport there herself, so she asks him to TP her when he arrives. Teleport is a verb, and it is interesting to see the resulting initialism used as a verb in context also, as in 39 where TP is an imperative form. M in 40 is using a formal style of English in an academic context; hence we notice the absence of contracted forms (cannot) and the extended form teleport. Example 41 is merely an example of the automated text that appears on one’s screen.
after each successful teleportation upon arrival. This is generated by the SL program software. AR's use of TP reflects the identity of a Resident, whereas M's use of the full form reflects the identity of the academic community, and 41 reflects the identity or 'robot talk' (Coeckelbergh, 2011) of the SL program.

There are less frequently used initialisms and an acronym that are worthy of discussion as they are specific to SL and their use also reflects in-group identity. These are the acronym HUD short for 'Heads-Up Display', LL 'Linden Laboratories', AO 'Animation Over-rider', LM 'Landmark', LS 'Linden Dollar' and SLT which stands for 'Second Life Time'. These are all present in the corpus. These initialisms and acronym stand for some very important entities in Second Life. For example, without a HUD one would not be able to animate one’s avatar, and hence seem unreal or noobish. The HUD itself acts as a control for one’s AO which is the actual animation scheme, so for example there is a ‘cool AO’, ‘gangsta AO’, ‘sophisticated AO’, ‘sitting down AO’, ‘lying down AO’ and so on, which can be used to animate one’s avatar. Landmarks (LM) are everywhere, and are essential to travel between different virtual locations. They can be transferred between users, given in welcoming gestures when one first arrives at a particular land, or made at any time and place through the program’s option menu by selecting ‘create landmark here’. People earn Linden dollars (L$) by working, the time in Second Life is referred to as SLT, and without Linden Laboratories (LL) there would be no SL in the first place. These initialisms all represent important parts of a Resident’s virtual life.

42. <ADARstacey'sJULY2011.CC>
[18:45]  AR: i got my kiss delux hud... .

[20:07]  AD: the AO you have on now came with the shape you are wearing

AR's and AD's competent use of these terms indicates that they are familiar with these entities and their use in Second Life, which in turn is an indicator of an experienced Resident. The use of the acronyms also indicates economy to speed up communication. An AO is actually ‘worn’ on one’s avatar and animates the way in which the avatar walks and moves. Not wearing an AO makes the avatar look lifeless, and hence unreal. AD knows this and hence appropriately uses the verb wear to refer to something other than clothing. Residents will make an effort to makes their avatars seem as real as
possible, a trait that is characteristic of noobs. In 43 TA is offering to give a landmark to anyone who would like to visit an exhibit she has discovered in Second Life.

43. <VWERampitheatresMAY-JUL2011.AD>
   TA: I have an LM for a wonderful Macbeth exhibit too if anyone would like it.

One notices the use of the indefinite article *an* instead of *a* as it is not only written the form of an initialism, but is supposed to be read in that way also, as opposed to being read as the word *landmark*, where it would require *a* for its indefinite article as the pronunciation starts with a consonant phoneme. Her use of the initialism *LM* not only reflects her familiarity with the SL word, but also presupposes that the listeners, in this case attendees of the VWER meeting, are also familiar with it.

We have seen that acronymy exists in SL, which is after all a form of social media (Page et al., 2014), and the form of communication in SL is CMC, which has as one if its features "a series of abbreviations" (Androutsopoulos, 2006: 419). An experienced resident has to familiarise himself and appropriately use these terms in conversational contexts, and noobs have to learn these initialisms and acronyms as Androutsopoulos (2006:419) also tells us that they "pose a big problem to internet novices". Using these forms is also economical. The lexical items observed are frequent nouns and verbs that needs to be used in SL, so using economical forms of them speeds up communication as well as marking in-group vocabulary. They are frequently occurring, so not really a problem for novices after a short time. SL and RL are treated almost like opposites, often expressing the difference between the virtual and the real world. These are frequently used as noun modifiers (*SL sister, RL husband*) or in the phrasal expressions *in SL* and *in RL* indicating place. Other initialisms such as *HUD, AO, LM, LS, LL* and *SLT* are specific to Second Life and have to be learned by noobs, as once learned as used appropriately in conversation, reflect an in-group identity, one of a person who is experienced in SL.

3.2.2 Clipping
Clipping refers to "the process whereby a lexeme ... is shortened, while still retaining the same meaning and still being a member of the same form class" (Bauer, 1983: 233).
The process involves "cutting off the beginning or the end of a word, or both, leaving a part to stand for the whole, as we have already seen with /sekən/ and /riːl/. The resultant form is called a clipped word. [...] Clipping results in new free forms in the language and sometimes in the creation of new morphemes" (Stageberg, 1981: 122). Some of Stageberg's examples are disco (from the source discotheque), deli (delicatessen), memo (memorandum) and chute (parachute). As brevity is a characteristic of Netspeak, and clipping leads to economised forms of the source word, it is only natural that Second Life has brought us words such as those in Table 8. However, such words are not characteristic of all forms of CMC, such as blogs and wikipedia (Page, 2012).

Table 8: Clipped forms and their full forms

<table>
<thead>
<tr>
<th>Clipped Form</th>
<th>Full form</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>av, avi, avie</em></td>
<td>Avatar</td>
</tr>
<tr>
<td><em>Alt</em></td>
<td>alternative (account)</td>
</tr>
<tr>
<td><em>Rez</em></td>
<td>Resurrect</td>
</tr>
<tr>
<td><em>Sim</em></td>
<td>Simulator</td>
</tr>
<tr>
<td><em>Perm</em></td>
<td>Permissions</td>
</tr>
<tr>
<td><em>/sakan/</em></td>
<td>Second Life</td>
</tr>
<tr>
<td><em>/riːl/</em></td>
<td>Real Life</td>
</tr>
</tbody>
</table>

My argument for investigating clipped forms is based on the fact that their use in social situations reflects experience, and in turn implies the construction of a virtual identity in two ways: firstly, since communication in SL is CMC, it is mostly synchronous and is (among my English-speaking subjects at least) mostly text-based. Participants in conversations in SL, as in most synchronous CMC applications, "seek to exchange messages quickly to approximate real-time, face-to-face conversation, and the modality of the typewritten text" (Squires, 2010: 462). This contributes to giving the conversation a 'real' feel with regards to the pace of the interaction, and clipping words shortens the time it takes to type them, hence making the interaction speedier. Secondly, communication in SL is a form of internet interaction that "tends to represent a 'casual' space for written language use" (Squires, 2010: 462, citing also Herring, 2007).
Quantitative observation through corpus techniques (Table 9) reveals that some of these clipped forms are used more frequently in the casual conversation genre of the interactions in the corpus, when compared to the more formal academic discussions and interviews.

Table 9: Distribution of words and their clipped realisations across the corpus

<table>
<thead>
<tr>
<th>Clipped form</th>
<th>Full form</th>
<th>Total raw (% of variants)</th>
<th>CC</th>
<th>AD</th>
<th>INT</th>
<th>AUTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>av/avi/avie</td>
<td>Avatar</td>
<td>44 (50%)</td>
<td>33 (37.5%)</td>
<td>7 (8%)</td>
<td>4 (4.5%)</td>
<td>0</td>
</tr>
<tr>
<td>alt</td>
<td>alternative (account)</td>
<td>14 (100%)</td>
<td>5 (35.7%)</td>
<td>9 (64.3%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>rez(z)</td>
<td>resurrect</td>
<td>23 (100%)</td>
<td>20 (87%)</td>
<td>2 (8.7%)</td>
<td>0</td>
<td>1 (4.3%)</td>
</tr>
<tr>
<td>sim</td>
<td>simulation</td>
<td>45 (77.5%)</td>
<td>6 (10.3%)</td>
<td>35</td>
<td>4 (6.9%)</td>
<td>0</td>
</tr>
<tr>
<td>perm(s)</td>
<td>permission(s)</td>
<td>13 (22.5%)</td>
<td>0</td>
<td>13 (22.5%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>prim(s)</td>
<td>primitive(s)</td>
<td>7 (58%)</td>
<td>3 (25%)</td>
<td>3 (25%)</td>
<td>1 (8%)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 (42%)</td>
<td>4 (33%)</td>
<td>1 (8%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 (100%)</td>
<td>21 (52.5%)</td>
<td>19 (47.5%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Clipped forms are considered variants of the full forms as some of them, such as *avatar* have more than one clipped form. The total number of full forms and clipped forms that are found in the corpus are considered 100% for that lexical item, that is, for example *avatar* occurred 40 times and its clipped realisations 44 times, making a total of 84, which is the 100% of that word and its variants. This means that the 44 times that clipped forms appear make up 52.5% of the total. This gives us good insight into the frequency of the clipped forms compared to the full forms across the different conversational genres.
Here I present some examples to show a quantitative observation of these words in the corpus, followed by a qualitative discussion of the social use of each lexeme separately.

**Avatar / AV / avi / avie**

Every Resident is virtually embodied by an *avatar*. Crystal (2004: 11) defines *avatar* as "The onscreen visual identity adopted by someone entering the environment of a virtual world". Avatars are, however, "not just abstract anchors of virtual perspective; they [are] the modality through which residents experience virtual selfhood" (Boellstorff, 2008: 129).

In the corpus, the word *avatar* takes more than one form (Table 8), reflecting the playful nature of the language of Second Life and the nature of variation in human communication. The variants are: *avatar* (full form), *AV* (clipping), *avi* and *avie* (clippings with two variants of the diminutive morpheme –y). Clipped forms are expected such as *av*, as too are pet names with the diminutive endings like *avi* and *avie*. These variants all appear in the corpus and are distributed amongst different genres of conversation shown in Table 9 above.

The full form *avatar* occurs 44 times (50%), that is more frequently than any one of its individual clipped versions, but altogether, there are also 44 occurrences (50%) of the clipped forms. The full form is used by 21 different people, and the various clipped forms used by 19 different users, so they are similar in quantity but differ in distribution across the population of the corpus. Out of 44 (50%) occurrences, *avatar* is mentioned 41 times in formal settings; 40 (45.5%) of which in academic discussions and once in an interview setting (1.1%), which is the stand-out figure. It is only mentioned 3 times (3.5%) in casual conversation, whereas if one looks at the majority of the occurrences of the clipped and nicknamed forms *av*, *avi*, and *avie*, their informal nature places them among the norms of casual conversation in informal surroundings occurring 33 times constituting 37.5% of all occurrences of *avatar* and its realisations. Example 44 shows both the full form and clipped forms each used by two different SLers:

44. <PCbbMAY11.CC>

1  [16:13] VM: he lived 5 miles from my mum
2  [16:13] VM: anyway i met him down there
3  [16:13] AV: female AV? ... 
4  [16:13] VM: then a week later again
5 [16:13] AV: keep him away from your mum's AV then!
6 [16:13] VM: no he had a great male avatar - best i ever saw
8 [16:14] NPH: haha
9 [16:14] AL: Giggles.....
10 [16:14] VM: then he admitted he only used that now and again to transfer stuff
12 [16:14] VM: his main avie was female

Example 44 is a conversation which takes place in a club. The word avatar appears once (line 6) in its complete form with the other three occurrences being abbreviated. As the first two occurrences (lines 3, 5) are in the clipped form AV, and they precede the full form in the conversation with there being no signs of miscommunication, the other residents are familiar with this form and its use. As AV asks the question “female AV?” and receives a negative reply with an emphatic structure, the Resident VM feels the need to use the unclipped form avatar to express the emphasis. When she later repeats the word, she uses the diminutive form avie (line 12), hence showing us that she uses both the full and the diminutive forms as part of her vocabulary, which clearly shows that different speakers appear to have different preferences. 45 shows another person using a diminutive form:

45. <ADARstacey'sJULY2011.CC>
[18:49] AD: i cant even hug with this avi :-(

Here, AD and his interlocutor are in an intimate relationship with each other and he types this sentence after attempting to perform a hug animation with his avatar and fails. The frustration is expressed in the modality of the verb phrase combined with the intensifier (can’t even) and also through the sad face emoticon in final position, showing the affective use. The setting is emotional and quite informal and hence the diminutive form avi is chosen to be used.

46. <AVSWLVhomeDEC10.INT>
1 [18:57] SW: I have an alt with red hair. But that isnt me
3 [18:58] SW: Red hair... the whole av i dont feel it
4 [18:59] SW: I tried to give her an identity. But I feel awkward with her
6 [18:59] SW: She makes me feel like i do in RL
Example 46 is also a conversation between residents who share an intimate relationship with each other, SW being AV’s SL girlfriend. There is no degree of formality and they are in an intimate setting and hence the use of the clipped form av by SW (line 3) is expected. Other features of this part of conversation that reflect the informal nature are the absence of some of the punctuation marks and the grammatical tolerance as in not capitalising ‘I’ in lines 3 and 6. In line 1 there is an example of how the word alt (a clipped form of alternative) can be used interchangeably with avatar and its realisations but only when the user has more than one Second Life account, as it refers to an alternative account and not one’s main avatar. It is not uncommon for a SLer to have a secondary account, to explore and experiment with aspects of their identity by becoming members of different virtual communities, pursuing different daily activities and hobbies, interacting with different groups of people or for mere technical purposes like transferring items. When SW states that she feels "awkward" (line 4) in the form of her alternative avatar who has red hair and that she makes her “feel like [she does] in RL” (line 6) we see users play with their identities. Her main avatar makes her feel comfortable, she has many friends, is very socially active and describes herself as “brave”, and “the person she would like to be” previously in the same conversation. In SW’s case, her alternative accounts have different virtual lives with different social circles. The physical appearance of each avatar is different and when she states that she feels different in each one we see the importance of the physicality of the avatar to its owner, who really seems to see it as a reflection of him/herself. The word av here is used simply with denotative meaning to objectify the avatar, as is alt, to denote the avatar and this is not used in its diminutive form to be referred to socially and as a pet name. In lines 1 and 3 SW uses alt and av, but in 4-6 she uses her and she. This distinction shows that for this user avatar and av are not identities in themselves. The avatar gains an identity by being used by the player. This given virtual identity is reflected in the use of other SL-vocabulary such as RL (line 6). More interesting uses of diminutive forms can be seen in 47 and 48:

47. < AVZFleedsuniNOV10.INT>
[17:49] ZZ: customers who come into my shop
[17:49] ZZ: one said "hi i like ur avi, u're cute"
[17:50] ZZ: i replied "can u focus on my photos on sale?"

48. < VWERampitheatresMAY-JUL2011.AD>
TA: I am a total introvert, I flourish in SL, behind an **avie** and/or computer screen.

In 47, ZZ is reporting on a conversation that took place between him and a user with a female avatar. In this example the avatar ( avi ) and you ( u’re ) coexist for the speaker. 'Your' and 'you're' in the forms of ur and u're respectively show that the possessive form, which modifies avi, separates the avi from the real person, but immediately after brings them together as one again with the direct reference to the hearer using 'you are' ( u're ), signalling that the avatar is the same person, or has the same identity, as the real person behind the screen. However, in 48, the speaker sees her identity and the avatar as separate things, signalled by the choice of the preposition **behind an avie**. For this self-confessed introvert, SL allows her to “flourish” and paradoxically the mask of the avatar frees her from herself.

**Alt**

Alt is another example of a clipped form, originating from alternative, referring to a Second Life user’s alternative account (more than one is possible). It appears in the corpus 9 times across user types, as it is used in academic discussion (64.3%) and also in casual conversation (35.7%). Interestingly the full form is not used at all, explaining the use of the clipped form in both genres by 8 different people. Some people claim that they have a ‘wild side’ (see Example 100, page 149) and practice things that are even in Second Life to some extent socially inappropriate with their alternative account, with which they are unknown to their main account’s social circle. Other users simply like to experience the virtual world differently through a different character bearing a different name and avatar. Whilst still socialising with the same people and performing the same daily activities as in Example 49, that person is known to some and anonymous or even deceiving to others. The deictic use of the pronouns is discussed in Example 99 (page 147).

49. < AVHcreamy12AUG2011.IE>
1 [10:04] H: But this **av** is an **alt**
2 [10:04] H: And although I am not hiding who my main is
3 [10:04] H: The reason I've been logging on as her is because I associate
4 my **main** with having certain relationships with people who hang at this
5 club
6 [10:04] H: Whereas even though it's still me. And all my friends know it.
7 I don't feel like I have the same um... expectations with this **av**
Realistically though, a logical reason for being deceptive is usually eventually revealed, and in H’s case, she lets her friend know that she is using an alternative account, but her reason being as follows:

49. (continued)
8 [10:05] H: And they all keep thinking I’m hiding from someone
9 [10:05] H: But I’m really not
10 [10:05] H: They look different
11 [10:06] H: But I'm still me
12 [10:06] H: And on my main I dated a guy in here for a few months.
13 But we broke up. :(
14 [10:06] AV: :( 
15 [10:07] H: I feel more sad when I'm here on my main than on my alt.
16 If that makes sense.

Here H says “they [the av and the alt] look different. But I’m still me” (lines 10-11). As complicated as the issue of identity already is (Benwell and Stokoe, 2006), having a complicated 'real' world identity and more than one virtual identity, having an alternative account makes a user feel and act differently. It is as if the user can reject the sad identity and only inhabit the happy one by choice. Their identity is multifaceted in the real world, and multiple in the virtual world and also vice versa. There are many more examples that further support this argument. ‘JN’ in 50 has a male alt, presuming in reality she is female.

50. < VWERampittheatresMAY-JUL2011.AD>
JN: I have a male ‘test alt’, but I rarely ‘use’ him

JN’s alt is a ‘test alt’ through which she conducts social experiments regarding gender issues that she has mentioned at the VWER meetings during academic discussions. The fact that she rarely uses him contributes to the fact that the alt has a secondary nature, and is used for purposes other than to live out one’s Second Life in the relatively ‘usual’ way. Examples 49 and 50 illustrate how users use alts differently. Boellstorff (2008: 132) provides some good insight into alternative accounts reflecting on the question of the isomorphism between user and avatar. He states that alts are used for different purposes and categorises them as “the banking alt”, “the building alt”, the “testing alt” and “exploring alts”, grouping them all together as “escape alts”. We see this in example 48 above. H wants an escape from the feelings she gets when inworld in her
main avatar. Boellstorff provides a similar example to that of 49, stating that as he and friends were in a park (in SL) one day, an avatar named Mona approached and asked if she could ‘hang out’ with the group for a while. They agreed, mentioning that none of them had met her before, and she stated that the avatar she was using was an alt: “This is a spare alt I have only used a couple of times. I was out on a date from hell and had to get away. … this alt is my getaway” (Boellstorff, 2008: 132). She wanted to escape from the person she was with, without having to exit the program completely, so she logged out and back in with her alternative account information. That way, the person she wants to avoid has the impression that she is offline and cannot contact her. This seems to be a recurrent trend in SL, where it is not just an escape from reality, but also an escape from one identity to another in virtuality as these alts help "insulate residents from inworld social networks" (Boellstorff, 2008: 132). The different types of alternative accounts, are frequently referred to as escape alts for this reason.

Different isomorphic relationships, in turn, reflect different identities as alts are "used to embody alternative selfhood" (Boellstorff, 2008: 132), where a user can have a primary account as a "proper housewife" while the alt is a "sexy escort" that is "used for deceptive purposes" where users would attempt to seduce their partner in Second Life to test their faithfulness (Boellstorff, 2008: 133).

Prim, rez, sim

The clipped word prim originates from the source primitive, and refers to the basic unit for building in SL. Primitive however is an adjective and prim(s) is a noun, which is why the full form is not used. Everything is made up of prims. If one imagines a chair with a base, four legs and a back rest, each piece constructing the chair is made up of one shape and these shapes are put together to form the whole, hence a chair may be made up of 6 prims. This explanation is relevant here as the word prim(s) is often used in conversations about building, redecorating and buying a structure or an item of furniture. Prim(s) has 40 occurrences in the corpus and appears almost equally in casual
conversation and academic discussion. It is used by 12 different residents and the full form does not appear.

52. <PBChereandthereOCT10.CC>
[19:26] SW: that fireplace is 11 **prims**

**Prim** is often collocated with *count* and the plural form *prims* most frequently with a number as there is always a concern for the prim count; that is the amount of primitives allowed in a particular piece of land. The researcher’s allocated land in SL for example, on which a virtual house is built, had a limit of 453 *prims*. This amount cannot be exceeded.

53. <AVSWhomeOCT10.SC>
[17:48] SW: ok now do we have to watch our **prim** count?
[17:48] AV: uummm I think we have something like 250 **prims** or something
[17:49] SW: according to land permits you have 453 total
[17:49] AV: actually its 453 **prims**
[17:49] AV: yeah
[17:49] SW: we used 172 already

54. <VWERxmaspartyDEC10.CC>
[14:36] CR: keep an eye on the **prim** limit Iggy...i used quite a few
[14:36] IO: okies Claudia

**SLers** who experience any sort of building, redecorating, or buying furniture and setting up a home in SL have to become familiar with this term and be aware when nearing the *prim* limit in a particular area. In 53, two residents are making a home, whereas in 54 academics who are members of the Virtual Worlds Education Roundtable reading and research group are preparing for a Christmas party. The use of this word is an indication of in-group identity rather than being an act of creativity and language play. Androutsopoulos (2006: 423) tells us that "participants have a variety of resources" to construct their identities and one of these resources is their "use of in-group language". There is a shared lexicon which residents have, and *prim* is a word that does not change in form or figure, but is rather part of the technical language of SL.
When one logs into Second Life, his/her avatar rezzes, that is 'appears' or 'spawns' *inworld*. The word *rez* originates from the verb to *resurrect* and in this context means to appear after a period of absence, that is going online after being offline. The similar use of *spawn* is very popular in video games, especially those of the combat genre, as every time a player ‘dies’ in the game, the character respawns as in *Destiny* (2014). In SL, the term *rez* has a broader use, which is to refer to anything appearing onscreen including the avatar, the surrounding buildings, and items that are brought out of the inventory and placed to *rez* on the ground in permitted areas. The official Second Life glossary in the SL online help system defines the term in the following way:

*Rez:* To create or to make an object appear inworld. To *rez* an object, drag it from your inventory or create a new one using the Build window.


There are 66 total occurrences of *rez* and its 9 different spelling variants and inflections (see 3.2.3) in the corpus as shown in Table 10. In the table, one notices *rez* is more frequent than *rezz*. Thus it would seem sensible to use the former as the main spelling for this section, in addition to the fact that the SL official website prefers *rez*. Based on experience in Second Life, and evidence taken from the way *rez* and its realisations are used in the corpus, the definition above is rather limited.

<table>
<thead>
<tr>
<th>Word</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rez</td>
<td>16</td>
</tr>
<tr>
<td>Rezz</td>
<td>7</td>
</tr>
<tr>
<td>Rezzed</td>
<td>14</td>
</tr>
<tr>
<td>Rezzing</td>
<td>5</td>
</tr>
<tr>
<td>Rezing</td>
<td>3</td>
</tr>
<tr>
<td>Rezed</td>
<td>3</td>
</tr>
<tr>
<td>Rezd</td>
<td>3</td>
</tr>
<tr>
<td>Rezzin</td>
<td>2</td>
</tr>
<tr>
<td>Rez’d</td>
<td>1</td>
</tr>
</tbody>
</table>
Rez is not just used to refer to the creation of objects or making them appear *inworld* from the inventory, nor does it only entail the resurrection of an avatar every time a person logs on or teleports *inworld*, but it is the actual appearance and loading of the world itself, that is the avatar’s surrounding environment, including buildings, furniture, landscape and other avatars. Examples 55 and 56 support this.

55. <VWERampitheatresMAY-JUL2011.AD>
KK: just waiting to fully *rez* … little sluggish

56. <ADARstacey'sJULY2011.CC>
[17:56] AD: good prices on this furniture
[17:56] AR: waiting for it to *rez*
[17:58] AD: a lot of stuff outside as well

In 55 KK is referring to his own avatar fully appearing (*rez* could be replaced with *appear*, indicating this is a possible synonym), as the loading process sometimes takes time depending on one’s internet connection speed. A user sometimes first appears as a cloudy substance, slowly gaining shape while remaining a grey colour.

In 56 AD and AR are out looking at furniture to purchase for their virtual home. On arrival at a furniture store, AD notices the 'good prices' and points this out to AR. Assuming that both their connection speeds are similar, this indicates that AD arrived at the location before AR and perhaps *TP'd* AR in. Arriving second, the whole environment (the building and everything in it) takes time to load and appear - or *rez* - and AR points this out in line 2. It can be seen from this example that *rez* is not limited to the spawning of the avatar or a particular item, but rather the whole place has to *rez*.

It is clear that the word *rez* is a clipped form (with some semantic shift from *resurrect*) and it means ‘to (make) appear in SL’, and as a verb takes the various verbal inflections. The online Oxford English Dictionary (OED) defines *resurrect* in the following way:

*resurrect*, v.
1. a. *trans.* To restore (a dead person) to life; to raise from the dead or from the grave. Also in extended use.
   b. *intr.* To rise again from the dead; to be restored to life.
2. *trans.* To revive or revitalize (something which has fallen into inactivity, disuse, or obscurity).

(www.oed.com)
Rez differs from resurrect in that does not necessarily mean the restoration of someone or something from the dead or inactivity, but rather to appear or make something appear. An item of clothing for example can be rezzed, or the avatar itself, while actively teleporting between virtual locations, rezzes at every new arrival. The uses of rez are specific to SL and indicative of in-group identity. While saying that something has rezzed in real life sounds strange, so too does claiming that something has appeared in Second Life, and only a newcomer to SL would be expected to make that sort of ‘mistake’, as this would certainly imply that the user is not yet of Resident status. This is underlined by the fact that the word appear only occurs twice in the SL corpus, once referring to an item appearing in the inventory, and the other occurrence is synonymous with 'seem', whilst rez refers to something appearing inworld.

Sim is a clipped form of simulation which refers to the fact that each place is an imitation or a pretention of a 'real' world place, such as London, although not restricted to this, as imaginary worlds exist also such as Alien Adventure. However, in SL the word sim is restricted to the region in which one’s avatar is present. A sim can be any sort of environment (urban, country, tropical, space, underwater, science fiction, horror). There are virtually no limits to what can be created by residents. The word is used interchangeably with place, region, area and similar words. Examples 57-59 illustrate the use of sim.

57. <VWERxmasprtyDEC10.CC>
[15:30] CR: Hattie.we keep a skating rink up year round on the Penn sim....you're always welcome to use it

58. <AVKKlars24AUG2011.IE>
[22:43] KK: I've seen many amazing sims, the creativity astounds me,,

59. <AVPQresOCT10.BM>
[21:55] PQ: I have rental property here
[21:55] PQ: I own the sim
[21:56] PQ: care to fly
[21:56] PQ: I will show you the sim

In 57, CR refers to the name of the region resembling the US state of Pennsylvania, and that there is an ice rink in that sim. KK expresses her amazement at the creativity in the design of the virtual places she has been to in 58, and PQ mentions that she is the owner
of the area in which she lives and works out of, and at the end of a business meeting offers a tour in 59.

*Sim* occurs in the corpus 45 times, and is used by 21 different people, mostly academics, but among them 5 *SLers* who are not in academia. The full form *simulation* occurs 13 times and only among academics. In total, the realisations of this lexical item are used in academic discussion 90% of the time and in casual conversation 10% of the time. This tells us that *sim* is a technical word and the words *region, area* and *place* which occur 19, 22 and 115 times respectively are preferred to *sim* in casual conversation, since they are used by a variety of people that are not participants of academic discussion.

Distribution of the use of clipped words varies across the data population. The words *rez* and *av* are used more by non-academic *Residents*. *Sim* is mostly used by academics and *prim* is used by both. *Sim* is related to technology, and so is *prim* to a lesser extent (building and scripting). Their use is determined by the nature of the conversation, as in AD the conversation is more technical. Academics unconsciously "demarcate their in-group culture" (Danet, 2001: 325) as different kind of users to other *SLers*. This also is related to the fact that *sim* can be synonymous with *place* and *region*, whereas *prim* has no direct synonyms and hence is used by both academics and *SLers* equally. Another way of distinguishing themselves from others is by using full forms like *simulation, permissions*, and *avatar*, which are scarcely used in casual conversation.

### 3.2.3 Inflection and derivation

In morphology, inflection and derivation are distinguished functionally. "Inflection denotes the set of morphological processes that spell out the set of word forms of a lexeme. The choice of the correct form of a lexeme is often dependent on syntactic context" (Booij, 2006: 654). The different forms can be illustrated in an inflectional paradigm (Bauer, 1983), such as:

```
play, plays, played, playing
```
where the emboldened letters are inflectional suffixes that are added to the stem play. It is argued that inflection does not produce new words, but only new forms of individual lexemes (Bauer, 1983), the use of which is determined by the syntactic context. Derivation, on the other hand, is "the morphological process that results in the formation of new lexemes" (Lyons, 1977: 522), by the addition of derivational affixes to a word (or a stem), in which case a derivational paradigm (Bauer, 1983: 11) would look like (Bauer's example):

- nation
- nation-hood
- nation-al
- nation-al-ize
- nation-al-ist
- nationa-al-ist-ic
- nation-al-ity

Stageberg states that "derivation is the forming of new words by combining derivational affixes or bound bases with existing words, as in advise, emplane, deplane, teleplay, ecosystem, coachdom, counselorship, re-ask" (Stageberg, 1981: 120). This is not always the case as the stem that the derivational affixes are attached to need not necessarily be full 'words', that is free morphemes. Consider popul- as in the paradigm:

- popul-ar
- popul-ar-ise
- popul-ar-ise-ation
- un-popul-ar
- popul-ar-ity
- popul-ar-ly

and so on. We observed cases of inflection with the various forms of rez above. There are also instances of inflected words such as laggin and derivations such as laggy, the former having the colloquial conversational form of the present participle suffix (-ing) and the latter following the rules of orthography by doubling the voiced /g/ and adding <y> to achieve an adjective form. Both these forms have the base lag which is listed in the OED as follows:

**Lag v.**

4b. in Physics: the retardation in a current or movement of any kind; the amount of this retardation; more widely in general use: a period of time separating any phenomenon or event from an earlier one to which it is related (causally or in some other way); (www.oed.com)
In Second Life however, *lag* has some semantic extensions to its meaning of slowness, referring to the time it takes for the *sim* to *rez*, any dilatoriness in the avatar's movement and delay in the time in which it takes for text to appear on the screen after typing.

60. < ADARstacey'sJULY2011.CC>
[17:09] AR: when did you put a shirt on?
[17:09] AD: at the first furniture store that was so *laggy*
[17:09] AR: see how much i noticed LOL
[17:10] AD: it may not have *rezzed* till now

In Second Life, *lag* is frequently collocated with *rez* in the sense that it refers to the time it takes various objects or even the environment itself to appear on the screen. It has negative implications and frequently associated with frustration. Variants of *lag* in the corpus reflect this as it appears in all-caps (LAG, LAGGIN, LAGGING) and the final <g> is repeated numerous times (LAGGG, LAGGGGG) to show emphasis and frustration. The capitalisation of the letters is sometimes "interpreted as shouting" (Danet, 2001: 18) and represents another way that language can be played with. *Lag* is also an item included in the "in-group language" (Androutsopoulos, 2006) and its use indicative with in-group identity in Second Life.

### 3.2.4 Compounding and blending

"When two (or more) elements which could potentially be used as stems are combined to form another stem, the form is said to be a *compound*" (Bauer, 1983: 28). We understand from this that "compounding is simply the joining of two or more words into a single word, as in *hang glider, airstrip, cornflakes, busybody, downpour, cutoff, skywarn, alongside, breakfast, long-haired, devil-may-care, high school*" (Stageberg, 1981: p. 121). As we can see, the compounded words can take three forms, separated, unseparated or hyphenated. There are three instances of new words in the lists that are compounded which are *inworld, full perm* and *rez day*. *Inworld* is clearly compounded from the words 'in' and 'world' and simply refers to something being or happening online in SL, that is being connected to the SL servers and present or immersed in the SL world. It also bears the meaning of referring to anything that takes place within the virtual environment of SL.
Inworld is frequently used as a contrast to the real world. Hence, by ‘work’ MNC refers to his real life occupation.

The other two entries in this category are more complicated as they are formed by more than one process. Full perm, refers to the specifications of objects having 'full permissions', that is the ability to be copied, transferred from one avatar to another, and modified. This compounded unit is made up of the free morpheme ‘full’ and the clipped form ‘perm’.

This can be regarded as a new and innovative way of compounding. Full perm is a compositional compound comprised of an adjective and the clipped form of a noun. Objects in SL have 'permissions' as part of their feature. When discussing a particular object, or especially when considering buying a particular object, such as a dress, a resident would usually take into consideration the permissions that the object holds, that is, whether the new owner can transfer the object or not (transfer/no-transfer), copy the object (copy/no-copy) and/or modify it (modify/no modify). Modify is a useful permission to have with a dress as it allows the new owner to lengthen, shorten, widen or modify the dress in any way possible graphically in case it does not fit the avatar’s body. Residents, however, do not come into SL knowing these things immediately, they have to be taught by other residents as in 62 where AR asks AD the meaning of the compounded word, and AD explains accordingly.

Rez day (resurrection day) is the Second Life equivalent of the real world birthday, that is the day a user's account is started. This compounded form is also comprised of the
clipped form \textit{rez} (see 3.2.2.3) and the free morpheme ‘day’. \textit{Rez Day} is preferred in social use to the initialism \textit{SLB} (Second Life Birthday) as the former is present in the corpus whilst the latter is absent. The term ‘birthday’ does appear, but only when the referent is the ‘real’ world birthday of the person.

63. \textless PCMystclubDEC12.CC\textgreater  
[14:31] DM: awww happy birthday jester ... for tomorrow  
[14:31] JS: Thanks,,, I hate only being 27!

A \textit{Resident} is entitled to celebrate this day and expect congratulations. Some even take it to the extent of organising a Rez Day party.

64. \textless PCbbMAY11.CC\textgreater  
[16:04] VM: YAY midnight - I am 4 :-)  
[16:05] AV: HAPPY REZ DAY!!!!!!!

VM is obviously four years old in Second Life and not in real life, but what can be noticed here is that it is actually 4pm SLT when she says that it is midnight. VM is using real time instead of SLT to determine when her birthday starts.

These three frequently-used and popular compound nouns (\textit{inworld, full perm,} and \textit{rez day}) are truly specific to Second Life and part of in-group language. Their use is indicative of a SL virtual identity. To use alternatives, such as \textit{Second Life Birthday}, is deemed peculiar and \textit{noobish}. They are part of Second Life terminology and to be an \textit{SLer} requires one to use the appropriate terms.

3.3 \textit{SLexipedia} - Novel Word Formations
The above well-documented word-formation processes have been followed quite naturally in the production of vocabulary items that are mostly specific to SL, but some of which are familiar in other virtual contexts. The prominent processes are acronymy and clipping, but a few words have been produced by derivation, inflection, and compounding, some of which have undergone semantic extension, such as \textit{lag}. However, as SL is featured to be associated with playfulness, especially in language, some items of SL-vocabulary have been observed to be produced through quite creative
and perhaps even novel means. For example, some already new forms such as the initialism *SL* has been combined further using other word formation processes to produce new words. It is not an unknown process for an initialism to have an inflection added as an affix, such as *KO’d* ('knocked out' in boxing) but the researcher has not encountered the documentation of such processes in the literature on word-formation. The following sections demonstrate the creative word-formation processes encountered and the resulting words from them.

### 3.3.1 Initialism-inflection and initialism-derivation

Acronymy, inflection and derivation are well-documented word-formation processes. However the processes of *initialism-inflection* and *initialism-derivation* are not previously documented but are discovered in the data and can be defined as the attachment of an inflectional or derivational affix to an initialism which is regarded as a stem to produce a new word. Initialisms are, as observed above, widely used in the SL corpus. What is linguistically intriguing is that some initialisms have developed into more complex lexemes. A good example is the word *SLers*, which in context would have the extended form *Second Lifers*, referring to *Residents*. Although this word is rarely used, it does appear and is understood by the interlocutors of the speaker in the corpus. *SLers*, which from experience is pronounced /sɛləz/, is comprised of the initialism *SL* with known derivational affix: the agentive [-er] morpheme and inflectional affix: the [-s (pl.)]. The source of the agentive nominal structure is either a verb + [-er] such as in *drive – driver*, *eat – eater* and *teach-teacher*, or a proper noun such as in *London – Londoner*, *Dublin – Dubliner*. The *SL* initialism is clearly a proper noun.

65. <VWERampitheatresMAY-JUL2011.AD>

IO: I’ve found that so many *SLers* are eager to promote their work…so I’d just ask the estate manager.

IO: I keep thinking that machinima is that “killer app” to show non-*SLers* what is possible here

By *SLers* IO clearly means people who use Second Life, as he makes the distinction between those who do and those who do not. This is during an academic conversation, whereas in casual conversation users of Second Life are better known as *Residents*. 

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Another example of initialism-inflation can be observed in the various affixes added to the already initialised ‘teleport’ (TP), forming tp'd, tpd, tping, tp'ing, and tps clearly with the additions of the past tense morpheme where the incorrect use of the apostrophe indicates a missed out <e>, the present participle and the third person singular 's', and possibly the plural 's' respectively. The initialism here is treated as the stem or base (free) morpheme, and - to an extent characterised by tolerance of spelling and grammatical errors - the bound inflectional morphemes are affixed to it resulting in the forms above.

66. <PCbeachwood10AUG2011.party
[11:06] BMM: Cmmoom Beachwooderz... the dancefloor is able to handle some more partyprims...sooo get those TPs out and bring ur mates down / in / up

67. <AVSRSweetheartsJUL2011.IE>
[10:19] SR: oh hold on, he may have TP'd

68. <AVJZClubNOV10.CC>
[21:25] AV: 1 sec, tping home

In examples 67 and 68 TP is treated as a verb with the past tense suffix in 67 and the present participle in 68. Here it is observed that the rules of grammar are generally followed, even though the past suffix in 67 takes the form of <’d>, as the Resident perhaps sees this more appropriate since the suffix is attached to capital letters. In 66 however, TP is a nominal in the context “get those TPs out”, and it is in plural form, and acting as a request to teleport friends in to the location of the party.

3.3.2 Acronym-word blending
Stageberg (1981) mentions that blending involves two ‘words’ and making them one. One thing we have learnt from the previous sections (TP’d, rez’d, /alsakan/) is that some words in Second Life in-group language do not follow the rules of morphology that are known to us. The initialism SL has indeed become a word in the sense that it can be blended with others to form new ones. Words like SLEnglish, SLArabic, and SLidentity have been used by the researcher to reflect others used in the game. It can be argued however, that these are forms of compounding and not blending since they don’t involve a reduction in the form of any of the morphological constituents. However, the
word \textit{SLex} involves blending the initialism \textit{SL} with the word \textit{sex} and refers to the activity of cyber-sex in Second Life. In the process, the initialism SL, pronounced /ɛs ɛl/, appears to become an acronym, in that it is pronounced /sl/ and blended with \textit{sex} to become /sleks/ not /ɛsɛleks/. It is a unique process of acronym-word blending as in Example 69.

69. <AVSWLVhomeDEC10.INT>
   [19:19] SW: yes some even go further than the \textit{SLex}
   [19:20] SW: some bring it outside of SL and use yahoo or something similar.

When asked about relationships in Second Life and the general appeal towards \textit{SLex}, SW told the researcher in an interview that it is a very intimate process, depending on the power of the language involved. But, as in 69, she says some people take it further by using other forms of software that allow them to see each other through webcams and perform cybersex in its better known form. Comparatively speaking, \textit{SLex} is exclusive to Second Life and when it is performed through other media, it is referred to as cybersex.

Potentially any word can have \textit{SL-} added as an initial affix to mean 'specific to Second Life'. \textit{SL} is not a recognised prefix for the process to be referred to as 'affixation', nor does the blended form \textit{SLex} abide by blending rules. Therefore, the term \textit{SLisation} (S-L-isation) has been coined to refer to such processes of attaching \textit{SL-} to any word or part of a word with the condition that the word (or part of a word) begins with a vowel to produce a euphonious and pronounceable resulting form. Another example is \textit{SLURL} discussed in 3.3.3 below.

\textbf{3.3.3 Initialism-compounding}

Another form of word formation that involves the initialism \textit{SL} is when it is compounded with URL (Uniform Resource Locator) to result in \textit{SLurl}, during which the initialisms combine to become an acronym as the resulting form has "word value" (Baum, 1955: 105). This process of acronym compounding is also quite unique.

70. <VWERampitheatresMAY-JUL2011.AD>
   Prof S: What is the difference between an \textit{LM} and a \textit{SLURL}?

   IO: @Professor, a \textbf{landmark} is an inventory item, where a \textbf{SLURL} is just an address
IO explains that a *SLurl* is just an address in Second Life, and differentiates it from a landmark stating that the latter is an item one can save in one’s inventory. The compounded acronym *SLurl* occurs 44 times in the corpus, 10 of which in academic conversation, and the other 34 in web-address forms as in 71.

71. < PClar's3AUG2011.IE>

This message appears as an automated response by the SL program onscreen in the public chat stream every time someone arrives somewhere by teleportation. *SLurl* is mentioned in an address line, that looks like a URL web address, but is actually an address in Second Life, which in this case happens to be in Halsey Island. The Second Life program recognises addresses in this way and this term is rather technical, and hence does not appear to be used in casual conversation among Residents but is used in academic discussion. If a Resident was asked for their SL address, the answer would probably involve the name of the sim, such as "I live on Halsey Island" rather than an answer in the shape of a SLURL. This term is regarded as SL terminology, even if not coined by SLers, but was probably coined by the makers of Second Life. Perhaps the same can be said about *prims* and *full perm* as both these terms appear in the software. Regardless of the etymology of these terms, they are in fact existent and recognised by Residents, therefore part of SL terminology, and their use is indicative of in-group identity.

### 3.3.4 Cross-language root formation

Another case where *Second Life* has been involved in the formation of new words that can also be categorised under *SL-isation* is cross-language root formation. As has been observed in the Arabic corpus, *SL* has been referred to as *sakanl*, and we have seen the closer-to-English variation *sekənəl*, along with the addition of the external morpheme *the*. What has been reserved until now is the fact that the researcher came across an interesting case where *sakanl* became a root (base morpheme) that underwent a certain type of transformation. Arabic-speaking residents used existing patterns of words of nationalism in Arabic to transform *sakanl* to a word which refers to themselves (meaning ‘residents’, that is, “citizens of Second Life”). That word is *sakāynahl* and it
coincides with /xalāyjah/ (people from the Gulf), /bağādlah/ (from Baghdad), /maṣārwah/ (from Egypt). This is a very innovative technique and can be found in the data as in Example 72.

72. <AVFMnwnFEB2011.IE>
A: ʾē min mata ḫint fi l sakān layf ya fūfū
- Yes. from when you in Second Life oh Fofo?
- Yes. How long have you been in SL Fofo?

B: m min ’arba’ šhūr kiḍa
- Erm from four months about
- For about four months

A: ’rba’ šhūr kēf ’it’afaṭi ’al-ḥ
- Four months … how you know(fm) about it
- Four months … How did you come about knowing it?

B: ṭarīg ṣaḥābi /al-sakāynah
- through friend-s-my the-seconders
- From my friends the second-lifers.

This example is from a first encounter experience with a Saudi Arabian female (Fofo for short). Whilst getting to know Fofo, the researcher asked her how long she has been in Second Life and how she was introduced to it. Fofo does not hesitate to say that she has been in SL for four months and she was introduced to it through her real life friends, who were already in Second Life, hence she names them /al-sakāynah/, that is the residents of Second Life. To refer to her friends with such a term is to give them an identity equivalent to that of Resident. The word is unique in its formation and is indicative of national identity, inferring that SL is treated as a national background or place of origin.

3.3.5 Cross-language affixation
SL-specific terminology is communicated in English even by non-English speakers, and we observed the cases of Second Life and real life. There are many borrowed words from English that are used by Arabic-speaking residents such as land, mic, rez, profile, welcome, design, blog, ban and so on. During communication, when the need for these words is present, Arabic-speakers do not hesitate to attach Arabic morphemes to them, regardless of whether those morphemes are internal or external. Internal morphemes are
the equivalent of bound morphemes in English, and they are usually inflectional such as the [s (pl.)]. External morphemes are those morphemes which in Arabic are attached to the word by affixation, but when translated into English, they are separate words, as in the case of the prefix /‗al/ in Arabic which is the definite article ‘the’ in English and can be prefixed to most nouns, and also the final /k/ phoneme representing an external morpheme which is the equivalent of the English possessive pronoun ‘your’. Examples of these words are:

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>/‗al-länd/</td>
<td>the-land</td>
</tr>
<tr>
<td>/maik-ak/</td>
<td>mic(rophone)-your</td>
</tr>
</tbody>
</table>

In the transcription, the morphemes are separated by a hyphen, and the same method is followed to separate morphemes in the English transliteration of the words. In Arabic script however, there is no form of separation between the morphemes as Arabic has a cursive script, that is, all the letters are joined to each other. Table 11 shows the English borrowed words in the Arabic corpus that have undergone Arabic derivations. They are ordered according to frequency and the table shows the transcription, translation, number of morphemes the word consists of, a list of the morphemes of each word, classification of the morphemes and the frequency in the corpus.

As we can see from the table, the most common combination of an English base and an Arabic morpheme is the (determiner /‗al-/the + noun) with a total of 133. This is innovation in word formation and it is taken a step further in the fact that 78 (58.5%) out of the 133 consist of common nouns, whereas 39 (29.3%) are a combination of a determiner and the acronym AO (animation over-rider), and 16 (12%) are a determiner and the clipped form av. These new words have crossed into Arabic and not only are they recognised by Arabic-speakers as Second Life terminology, but they are used in innovative ways by the attachment of Arabic morphemes.

A: ʾinti šāḥbat /‗al-länd yā fūfū
- you owner(fm) the-land oh Fofo
- Are you the owner of the land Fofo?
74. <AVRBAaaMAR2011.IE>
B: 'al-ʾay-ō māl-ak wāyid ḥilwa ḥarak-āt-ah
- The-AO yours very nice movement-s-his
- *Your AO’s movements are really cool.*

75. <PCaaNOV2010.cc>
C: ‘ṭī al-mayk li-ġer-ak
- Give the-mic to-else-you
- *Give the mic to someone else*

76. <AVSSfuturecityAPR2011.CC>
SS: ‘al-āv māli mā ‘ājibni
- The-av mine not like-I
- *I don’t like my AV*

In 73, A is asking the question of whether Fofo is the owner of the land. There is no use of the Arabic interrogative word /ḥala/ which is the equivalent of the subject-auxiliary inversion in yes/no questions in English, as it is A’s rising intonation that makes it a question. A is not referring to any land, but rather the land that they are in, hence it has already been determined and the word land accepts the definite article external morpheme ‘the’. Example 74 is a statement in that B is complimenting someone’s AO (animation over-rider) as that person’s avatar is moving in an eye-catching way. The use of the definite article with AO here is justified in the choice of the ‘your’ pronoun. In Arabic, ‘your’ can have two forms, either as a separate word as we see in 74, or as an external morpheme attached to the word as we see in 79 below in the form of final /kl/. As an attached pronoun, the context would not require the presence of the definite article, and would be /ʾay-ā-ak/ [AO-your] translating as *your AO*. However, saying AO on its own would sound strange and not Arabic without ‘the’ attached and followed by the separate ‘your’, because the combination in fact translates as “The AO that is yours”. The same case is repeated in 76 only in this instance a clipped form of the word avatar is used as the base morpheme of the word which is a noun.
Table 11: Arabic affixation of English borrowed words

<table>
<thead>
<tr>
<th>transcription</th>
<th>Translation</th>
<th>No. of morphemes</th>
<th>Morphemes</th>
<th>Grammatical category of morphemes</th>
<th>Types of morphemes</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ˈal-lānd/</td>
<td>The land</td>
<td>2</td>
<td>The + land</td>
<td>Determiner + noun</td>
<td>External + base</td>
<td>42 (21%)</td>
</tr>
<tr>
<td>/ˈal-ˈay-ō /</td>
<td>The AO</td>
<td>2</td>
<td>the + AO</td>
<td>Determiner + acronym noun</td>
<td>External + base</td>
<td>39 (19.5%)</td>
</tr>
<tr>
<td>/ˈal-māyk/</td>
<td>The mic</td>
<td>2</td>
<td>The + mic</td>
<td>Determiner + noun</td>
<td>External + base</td>
<td>19 (9.5%)</td>
</tr>
<tr>
<td>/bil-lānd/</td>
<td>at the land</td>
<td>3</td>
<td>At + the + land</td>
<td>Preposition + determiner + noun</td>
<td>External + external + base</td>
<td>17 (8.5%)</td>
</tr>
<tr>
<td>/ˈal-ˈāv/</td>
<td>The AV</td>
<td>2</td>
<td>The + av(atar)</td>
<td>Determiner + clipped noun</td>
<td>External + base</td>
<td>16 (8%)</td>
</tr>
<tr>
<td>/welkamːuː/</td>
<td>Welcome him</td>
<td>3</td>
<td>welcome + you (pl.) + him</td>
<td>Verb imperative. + pronoun pl. + pronoun</td>
<td>base + External + external</td>
<td>15 (7.5%)</td>
</tr>
<tr>
<td>/prɔfail-ah/</td>
<td>His profile</td>
<td>2</td>
<td>Profile + his</td>
<td>Noun + possessive determiner</td>
<td>Base + external</td>
<td>12 (6%)</td>
</tr>
<tr>
<td>/prim-āt/</td>
<td>Prims</td>
<td>2</td>
<td>Prim + [s(pl.)]</td>
<td>Noun + sound plural</td>
<td>Base + internal</td>
<td>11 (5.5%)</td>
</tr>
<tr>
<td>/land-āt/</td>
<td>Lands</td>
<td>2</td>
<td>Land + [s(pl.)]</td>
<td>Noun + sound plural</td>
<td>Base + internal</td>
<td>10 (5%)</td>
</tr>
<tr>
<td>/stāyl-ak/</td>
<td>Your style</td>
<td>2</td>
<td>Style + your</td>
<td>Noun + pronoun possessive</td>
<td>Base + external</td>
<td>6 (3%)</td>
</tr>
<tr>
<td>/māyk-ak/</td>
<td>Your mic</td>
<td>2</td>
<td>Mic + your</td>
<td>Noun + possessive determiner</td>
<td>Base + external</td>
<td>5 (2.5%)</td>
</tr>
<tr>
<td>/link-āt/</td>
<td>Links</td>
<td>2</td>
<td>Link + [s(pl.)]</td>
<td>Noun + sound plural</td>
<td>Base + internal</td>
<td>5 (2.5%)</td>
</tr>
<tr>
<td>/rez-u/</td>
<td>Rez it</td>
<td>2</td>
<td>Rez + it</td>
<td>Verb imp. + pronoun</td>
<td>Base + external</td>
<td>4 (2%)</td>
</tr>
</tbody>
</table>
The second most frequent combination (26 times), although a lot less frequent than the first, is the English noun with the attachment of the Arabic sound plural /-āt/ in the form of the Arabic plurals of prim, land and link.

77. <PCaaAPR2011.CC>
B: ’al-sekən malyān land-āt lil-‘arab
- The-second full land-s for Arabs
- Second Life is full of Lands for Arabs

78. <AVSSfuturecityAPR2011.CC>
SS: ‘aṭānī linkāt li-mawāqi’ ‘at‘allam fiha ‘al-binā’
- Gave-he-me link-s for-location-s I-learn in-them the-building
- He gave me links to locations where I could learn how to build.

The Arabic sound plural form is added successfully in 77 and 78 to land and link respectively. In 77, there is also a mention of Second Life, which is expressed in English with the Arabic determination attached as an external morpheme word-initially.

There is also the [noun + possessive determiner] combination as in his profile, your style and your mic. This combination appears 23 times in the Arabic corpus. Here we notice that mic is a clipped form of microphone, but this is a well-known clipped form and not SL-specific.

79. <PCaaJAN2011.cheezy2>
D: ḡabīb-i māyk ʾijanen
- Love-my mic-your makes-crazy
- Dude your mic's crazy!

80. <PCaaJAN2011.cheezy3>
E: šift škātib fi prōfail-ah
- See-you what-write-he in profile-his
- Did you see what he has written in his profile?

The word /ḥabīb-il (used in Example 79) in Arabic is very common especially among youth. It is quite diverse in its meaning. Its literal meaning is my love and frequently used in courting, poetry and song lyrics. However, it also has other social uses between friends and even acquaintances in that it simply means friend or colloquially dude. It is also used frequently in compliments as in example 79, where D is complimenting someone’s style on the microphone as if he was some radio presenter. The collocation
“your mic” here does not have a possessive meaning in such a way like ownership, that is the person speaking does not own the microphone. What is meant here rather is “your style/method on the microphone” is colloquially “driving us crazy”, that is, it is great. In 79 we witness a simple addition of the final position possessive pronoun his to the noun profile to express ownership.

The last combination present 19 times in the corpus and being the least frequent, although not by a marginal difference, is the imperative form of the verb which already has the implied pronoun morpheme [you] combined with another pronoun as in welcome him and rez it. Welcome is clearly not a Second Life specific word, but it is a custom in Second Life as part of the greeting process to welcome people, and especially welcome people back if they go offline for a period and return to the virtual world. As discussed at the beginning of this chapter (3.1), the welcoming process can be quite outstanding as the word /welkəmu:/ (welcome him) not only appears in its normal form regarding its length, but there is frequently a version with a clear graphic prolongation in the writing of the text or the pronunciation of the word to show emphasis. Rez however, is an SL-specific word and one of the glossary entries. It is in form a verb, and therefore Arabic-speakers see fit to use it in context as a verb with verbal affixes.

81. <PCaafutureMAR2011.IECC>
F: rez-u hina xal-na n-šūf-u
  - Rez-it here let-us us-see-it
  - Rez it here, let’s see it.

In 81, we see the imperative form of rez which already has the implied pronoun you and also has affixed to it the pronoun it as an antecedent of a previously mentioned noun (an inanimate object). By rez it the speaker is asking his interlocutor to make the object virtually appear on the ground in front of them so they can see it and use it for whatever purpose.

Affixation by inflection, as has been observed in this section, is a common source for new words that have emerged from SL in both languages: English and Arabic. We have witnessed the combination of morphemes across languages, morphemes combined with acronyms, initialisms and clipped forms, which in turn have established themselves and have been treated as free morphemes. These are all signals of the dominance of English
as a lingua franca in Second Life and how language play is practised with both languages. SL-specific terms are English and they are indicative of in-group identity, and therefore it is expected to see Arabic-speakers use these terms to show an acquisition of this virtual identity. As the use of verbs involves different tenses, and the use of nouns involves different numbers and possessive forms, the norm has become to add Arabic inflectional and derivational affixes to these vocabulary items. This maintains understanding and arguably keeps the language of communication Arabic, whilst at the same time, using appropriate SL terminology to reflect experience and advancement to Resident status, as opposed to sounding noobish.

3.4 Conclusion

In this chapter, we have seen a series of SL-specific words which are considered to be in-group language, and appropriate use of these words in conversational contexts reflects in-group identity. Androutsopoulos (2006) reports on a series of quizzes launched by the Bild, "Germany's most popular tabloid newspaper". These quizzes were dedicated to the use of language on the internet. The quizzes "consist of a mixture of German and English lexical items, framed by a metalinguistic discourse that constructs the ‘language of the Internet’ as ‘a series of abbreviations and symbols’ that pose a ‘big problem’ to Internet novices." (Androutsopoulos, 2006: 419). The vocabulary items discussed in this chapter are not different to the types of abbreviations and symbols that Androutsopoulos refers to in the sense that they pose a problem to SL noobs. Although I can argue that this problem is not long-lasting as these terms are frequently used and acquired quickly by users. I have not encountered any corpus examples of miscommunications or trouble in talk. Noobs can be differentiated from Residents in that the latter use SL-specific vocabulary and the former face problems when deciphering the language of Second Life at first and have to learn, but do so quickly. This chapter has also investigated and concluded that SL-specific abbreviations (mainly nouns and verbs) such as SL, RL, AO, LM, and TP are used for economical purposes to speed up communication, whilst playfulness is a characteristic of affective and emotive language use (Bednarek, 2008), such as "I ♥ THIS T U N E ! ! ! :::::: HOOOooOUUlalalala :)". This kind of playfulness is characterised by extravagance and embellishment rather than economy. People are creative and take time to express emotion and affective responses in their phatic communication. What this chapter has
accomplished is to demonstrate that SL-specific vocabulary is linked to the coinage of the terms and their playfulness (Danet, 2001) and creativity, and to show how these vocabulary items are used in discourse.

Second life has been a source for the formation of new words in the English language. Familiar word formation processes like acronymy, clipping and compounding have been observed in such words as SL, RL, TP, inworld, Rez Day, rez, sim. Further new words have been derived from these words by adding derivational prefixes and suffixes such as the plural [-s] as in TPs in "get those TPs out" and tense derivation like the cases of TP’d, and rezzed. Cross language derivation has been witnessed in which Arabic-speakers have added Arabic internal and external prefixes and suffixes to English base morphemes such as /’al-länd/ (the-land) and /rez-ul/ (rez it). More new words have been formed through processes which have not been previously been witnessed and documented by scholars in the field. One of the processes is the addition of the initialism SL to some words in initial position to add a meaning of “specific to Second Life”. This initialism becomes an acronym when compounded with other words such as SL English, SL Arabic, and SL identity (which I have coined) and when compounded with another initialism to form acronyms like SL url (initialism compounding) and blended with words such as in SL ex, a process the researcher refers to as acronym-word blending. The final process that was noticed was cross-language root formation and transformation. Arabic-speakers took their clipped version of Second Life /sekənl/ and made it a root (base morpheme), and then performed a transformation according to a known linguistic pattern to form a word which denotes nationalism in /sakāynah/ which also in turn had the possibility of adding the determiner ‘the’ to it in the form of an external suffix.

The vocabulary items formed according to familiar word-formation processes are indicative of in-group SL virtual identity when used by Residents. To further show their importance, these items have undergone morphological changes in creative and even novel ways as they are needed to form new words. These processes reflect the creativeness of the nature of Second Life. They are similar to CMC in other media platforms in that they also feature "non-standard typography and orthography" that is considered to be a defining characteristic of computer-mediated language (Herring, 2013: 8) including acronyms and clippings. The playfulness and creativity driving these
phenomena have been emphasised by Cherny (1999) and Werry (1996), but Kapidzic (2010) has more recently suggested that only a few of these non-standard words have become conventionalised in mainstream CMC, while unique formations are less common. Second Life-specific vocabulary is exemplary of these "less common" words and is restricted to the site from which it originates.

What can also be concluded is that SL vocabulary, which is English, carries over to be used in other languages such as Arabic, and is exposed to morphological variation to derive Arabic words with SL-specific English roots. This proves that SL-specific vocabulary is for all to use, regardless of nationality and language background. The acquisition of a virtual identity in Second Life involves learning to use these items accordingly and appropriately in a social context. This is how SLidentity is constructed at the lexical level in Second Life.
CHAPTER FOUR

Virtual Worlds are *Places*: Deixis and Indexicality in Second Life - Implications for Identity
Chapter Four

Virtual Worlds are Places: Deixis and Indexicality in Second Life - Implications for Identity

4. Introduction: A Virtual Place

Second Life is a 3D world where everyone you see is a real person and every place you visit is built by people just like you

(www.secondlife.com, 2014)

Second Life’s (2014) own definition of their virtual place is one that emphasises the “real”: a “place” “built” by real people and it also refers deictically to the potential user, “you”. Without the people who build Second Life, the grid would be empty. The word build here takes on a wider meaning than its dictionary entry. Every physical graphical aspect of a virtual location is built out of prims (see 3.2.2 Page 101), such as trees, plants, and furniture, as well as the obvious buildings. Only the land, water and sky is essentially and primarily provided by Linden Laboratories. The virtual world is also made real by the company: "everyone you see is a real person". As people roam through SL embodied by an avatar, they can see other avatars. These are, like themselves, people online and similarly immersed in the virtual world, each with their own aims and objectives. Being embodied by an avatar and aware of the surrounding environment with regard to people, place and time is of central concern to this chapter. The laws of physics will inform us that we cannot be in two places at once, but when online and engaged in Second Life, a resident is physically sitting at a computer in the 'real world' and also present on the SL grid in the 'virtual world' or in SL. Recognising that we are in a virtual world and appropriately engaging with our virtual surroundings is part of the process of acquiring a virtual identity. Knowledge of how to move in SL and teleport around the SL grid is a necessity, but at the same time is not a complex skill to master. However, the cognitive process of knowing we are in two places at one time poses a linguistic challenge, and one worthy of investigation. Our perceptions of the world are expressed through linguistic means in our communication with others, and the language we use reflects our perceptions of the virtual setting, including place, time and persons
(whether participants are involved in interaction or not), all involving what we call *indexicality*.

*Indexicality* is the property of language that covers how lexical items pick out particular referents (Grundy, 2000), or as Mey defines it:

> Indexical expressions are a particular kind of referential expression which, in addition to the semantics of their 'naming', their *sense*, include a *reference* to the particular context in which that sense is put to work.
>
> (Mey, 2001: 54)

A knowledge of context is required for the understanding and correct interpretation of these lexical items as they are "pragmatically determined" (Mey, 2001: 54) and this indexical relationship is expressed though the use of *deictic expressions or deictics*, the unit of *deixis* which Green defines as "the encoding of the spatiotemporal context and subjective experience of the encoder in an utterance." (2006: 178).

This chapter investigates the use of person, place, and time deictics such as personal pronouns (e.g. *I, you, she*), adverbials of place and time (e.g. *here, there, yesterday, tomorrow*), and the notion of indexicality in the SL virtual environment, an environment where a new sense of space, time and personhood is acquired. It suggests that the use of these deictic expressions in the social context of SL reflects a user's perceptions of the virtual context, which in turn has implications for virtual identity. If a user perceives himself to be immersed in the virtual world and linguistically shows himself to be deeply embedded in his virtual surroundings, then we can say that he has acquired an important aspect of virtual identity. Such deictic elements are used also to distinguish when users slip in and out of this identity as they situate themselves in the real and the virtual worlds simultaneously. For this reason, I coined the term *SLidentity*, not only for its formation compounding an acronym with a word, but also for the connotation created with this word, as it incorporates 'slide', suggesting sliding from one identity to another and back again in an interesting way. This metaphor removes the rigidity of fixed identity nicely. The empirical data analysis for this chapter involves both quantitative and qualitative analysis techniques and methods, investigating deictic expressions in the SL corpus. *Wordsmith Tools* (Scott, 2011) was utilised for the quantitative element, as it aided in searching for deictic terms, showing raw frequency and collocates. In order to contextualise this account of deixis in SL, the results were
compared with similar search results in a non-online corpus, namely a corpus of political speech.

4.1 Deixis and Indexicality

This work builds on previous research on indexicality and social and personal identity. It has been argued (Eckert, 2000; Keisling, 2005) that "repeated use of different variants in different self presentational styles associated with locally relevant social groupings can cause particular variants to become semiotically associated with particular ways of being and acting" (Johnstone and Keisling, 2008: 7), which is the essence of indexicality. Silverstein (2003) introduced the ways that relationships between linguistic forms and social meanings can occur at various levels of abstraction in what he terms 'orders of interaction'. In this sense, indexical expressions are those which index or indicate a state of affairs in a particular context. Indexical expressions, therefore, can be lexical items that, as repeatedly used variants, indicate in-group affiliation and identity.

When words like here, I and now are used in speech, they require a knowledge of the context of the utterance in order to be correctly interpreted. Such words are termed deictics or deictic expressions, and deixis refers to the phenomenon that covers this entity, that is, that the understanding of the denotations of some words is reliant on the knowledge of contextual information. They are unlike lexical words such as nouns and adjectives, in that the interpretation of these words does not entirely depend on context. Deictic expressions have often been termed "indexicals" (literally, words that point) and Nunberg (1998: 146) defines them as "expressions whose interpretation requires the identification of some element of the utterance context, as stipulated by their utterance meanings". The term deixis is derived from Greek, meaning 'to show' or to 'point out', and deictic expressions typically include demonstratives (this, that), personal pronouns (I, you), tense-markers (-ed past), adverbs and adverbials of time (now, tomorrow, in the morning) and space (here, in front of you), and motion verbs (come, go) (Huang, 2007: 132). For example, if the context was unknown, the interpretation of a word like here would be impossible. SL provides an additional dimension to the interpretation of these deictic expressions, as words like I and here can refer to any of two proximities, the
avatar and the immediate surroundings of the avatar's position in SL, or the 'real' person and his/her immediate surroundings in the 'real' world.

Deixis is a well-researched topic in pragmatics and has been dealt with by a number of scholars (Levinson, 1983; Horn, 1988; Yule, 1996; Nunberg, 1998; Grundy, 2000; Hanks, 2005; Huang, 2007, among others). Huang states:

Deixis is directly concerned with the relationship between the structure of a language and the context in which the language is used. It can be defined as the phenomenon whereby features of context of utterance or speech event are encoded by lexical and/or grammatical means in a language.

(Huang, 2007: 132)

It is important here to make a distinction between deixis and indexicality. They are used interchangeably by some scholars such as Huang. As I believe, indexicality refers to the wider concept referring to the pragmatics of pointing. As De Fina (2006: 351) points out, "language practices index ... identities" in ways that reflect gender, race, group or dialect affiliation and so on. Deixis is one aspect of indexicality where this is done through grammatical means by using, for instance, adverbials of time, such as 'on Saturday', 'last November', and place and person noun phrases, such as 'the city', 'the neighbours' and /ṣāḥbīl [my friend – Arabic]. Deictic expressions are those expressions that refer to the case where grammatical means are used for this same purpose including the use of personal and demonstrative pronouns (I, we, you, they, this, those, lintal [you - Arabic], lanal [I - Arabic]), time (now, tomorrow, /ams/ [yesterday - Arabic]) and place (here, there) adverbs. Levinson’s (1983: 54) definition of deixis is also structural, describing it as "[the] single most obvious way in which the relationship between language and context is reflected in the structures of languages themselves". Considering examples 82 - 85, it would not be possible to identify the referents of the emboldened deictic expressions without having knowledge of the context in which they were spoken. It should be mentioned here that Examples 82 to 85 and remaining examples in this chapter are either constructed examples to illustrate the theory, or examples from the SL corpus. Where a metadata tag is given in the form of the filename, the example is taken from the corpus; otherwise, the example is constructed.

82. You and I could meet there Friday.

83. Now you're telling me this!
84. She told her friend about it in that corner of the playground.

85. <VWERampitheatresMAY-JUL2011.AD>
OH: Hi everyone, and welcome to our weekly Virtual Worlds Education Roundtable meeting. We meet here each week at 2:30 pm SLT for an hour.

One would have to be part of the interaction to know who is speaking (i.e. the referent of I) and who is being spoken to (the referent of you) in 82, where there in 82 and in that corner in 84 refers to, and when the interaction took place to be able to identify which Friday in 82 and when now is in 83. If 82 was found written in the form of a message in a bottle which had floated ashore from the sea, it would be impossible to know the referents of the words (who is meeting and when) as there is no knowledge of contextual elements. The words this and it in 83 and 84 respectively are cohesive and intra-textual, but still deictic, whereas playground in 84 is a noun, and when preceded by the definite determiner the, becomes identified and determined and is thus indexical in that it is impossible to know which playground it refers to without knowledge of contextual information. In 85 however, the time adverbial 2:30 pm SLT is the only time expression that is not deictic in the sense that the specific time referred to is clear and can be understood by anyone who is familiar with the SLT time zone. The other emboldened words in 85 are deictic in a similar way to those in the previous examples, notably each week is deictic in that one does not know which part of the week that is recurrent without knowledge of the context.

Examples 86 and 87 illustrate that not all grammatical words are deictic in their use, but can be used in a non-deictic sense: they do not have the same usage as the emboldened words in the examples above.

86. If you drive fast, you will probably get a speeding ticket.
87. Susan hopes that she will be elected as chairwoman.

In 86, you is used as impersonal, and can generally mean 'anyone', so in a case such as this, it is said to be used non-deictically. It is argued by Huang that only first- and second-person pronouns are deictic in nature and that third-person pronouns such as she are non-deictic in their unmarked usage, whereas when they are used deictically, they are marked. She in 87 has a clear referent or antecedent so there is no necessary knowledge of context required in order to know the referent, whereas in 88 without the knowledge of the direct physical context of the utterance at the time it was uttered, that
is, where the speaker is gesturing or pointing towards, it would be impossible to understand. Hence, the third person pronoun *she* here serves as a deictic expression.

88. *She*'s not invited to the party, and neither is *she*, but *she* is.

Many deictic expressions are from a closed grammatical class. There is a limited set of such words, some of which can be used non-deictically. Generally, scholars have discussed three categories of deixis in the literature of linguistics and the philosophy of language based on semantic criteria, namely person, place and time. Table 12 shows some examples:
Table 12: Examples of deictic expressions in SL

<table>
<thead>
<tr>
<th>Type of Deixis</th>
<th>Closed class deictic expressions</th>
<th>Deictic expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>Personal pronouns: subjective: I, you, he, we, they Objectives: Me, her, us, you (pl), them Absolute Possessive Pronouns: Mine, hers, yours, ours, theirs</td>
<td>Possessive determiners in noun phrases: My, his, her, your, our, their my SL brother, her SL bf, your avie, our club</td>
</tr>
<tr>
<td>Place</td>
<td>Demonstrative pronouns: This, these (proximal), that, those (distal) Place adverbs: here, there, above, below</td>
<td>Place adverbial collocations: In the corner, over there, on the table, across the road, over the hill, under the bridge, in Arab Avatar, at the university, up above, from the roof</td>
</tr>
<tr>
<td>Time</td>
<td>Time adverbs: now, then, yesterday, today, tomorrow</td>
<td>Time adverbial collocations: Last/this/next + Monday, week, month, year, summer A + second, minute, hour, day, week, month, year, decade, century, fortnight + ago In a minute, hour, day, while</td>
</tr>
<tr>
<td></td>
<td>Definite article + noun: the man, the land, the owner, the builder Demonstrative determiners in phrases: this place, these chairs (proximal) that avatar, those animations (distal)</td>
<td></td>
</tr>
</tbody>
</table>
4.1.1 Person deixis

Personal pronouns like I, she, you, we, me, us, and them are deictic expressions when their referent can only be identified by knowing the context, that is, by being in the place and time and knowing the interactants. You can also be used non-deictically (when the reference is general rather than to a particular identifiable person) as observed earlier in 86 and other personal pronouns can be non-deictic when used for anaphoric reference (she in 87). Grundy takes it further by stating that you "is also used in English in a much wider range of social contexts that would be represented by a single second person reference term in most other languages" (2000: 26). Formality is expressed in other languages such as Arabic and French by using a different form of you (Ihadritakl) in Arabic or a different pronoun (vous) in French.

89. dikto:r ḥaḍirt-ak ʿind-ak maja:l ʿt-šūf-ny
doctor (university lecturer) formal-you have-you space you-see-me?
   Doctor, do you have time to see me?

Example 89 is a question asked by a student to his lecturer in the colloquial Iraqi dialect of Baghdad, in which the student sees it as appropriate to use a formal interrogative technique as the lecturer is obviously regarded as superior to the student. You is in the form of a suffix and is already present in the interrogative form /ʿindak / (have-you) but is seems inappropriate to use this form without the formal supplement /ḥaḍritakl / (Ihadritakl in Baghdadi dialect). Saying "do you have time to see me?" would be disrespectful in Arabic, and the use of honorifics is a must in a situation such as this. The use of honorifics deictically is sometimes referred to as social deixis (Levinson, 1983; Huang, 2007).

Just as you is a deictic expression, so too are the first person pronouns I and we and the possessive forms your, yours, my, mine, our, ours. In the case of we in 90 the addressee can be included in the reference or may be excluded, also depending on context.

90. Which way are we supposed to go?

If this was an interaction between two friends, the addressee would typically be included in the reference, whereas if it was two friends asking a guide in a treasure hunt, the addressee would be excluded from the deictic reference. "Many languages
grammaticalise exactly this distinction between addressee inclusive and addressee exclusive uses of we” (Grundy, 2000: 27), Arabic included.

4.1.2 Place deixis
When we mention a particular place adverbial in an utterance, it is often the case that a knowledge of the context is required to make out the reference.

91. I’d like **that blue shirt** please.

In 91 the reference of the demonstrative description *that blue shirt* can only be identified if the context indicates which of the several possible blue shirts is being chosen. This makes it different from the non-deictic description *the blue shirt* for example, entailing that it is the only blue shirt that is distinguished from the rest of the garments. *That* is a distal demonstrative to most English speakers, the plural of which is *those* and the proximal demonstrative in English is *this* (pl. *these*) (Diessel, 1990). Other place deictic expressions include *here* (proximal), *there* (distal), *where, left, right, up, down, above, below, in front of, behind, come, go*. An example that illustrates how context is involved in determining the reference of these items is in the case of a typical situation at the door to a house (Figure 26) where someone either says "do come in" or "do go in". If two people were approaching an open door and the resident of the house was standing just outside the door with his guest, it would be appropriate to say "do go in" as the addressee would be moving away from the deictic point of the utterance, whereas if the resident was already inside and the guest outside, he would say "do come in" as the guest would be invited to move towards the deictic point of the utterance. This is a semantic feature of the deictic verbs *come* and *go* (Figure 26).
A very similar case is expressed when saying for example "I'm going to Edinburgh" and "I'm coming to Edinburgh" with the latter denoting that the addressee is in Edinburgh and the speaker's movement would be toward the addressee, whereas it is implied that he would be moving away from the addressee in the former.

Other place deictic expressions are *over there* and *in the corner*. It is clear now that the referents of these expressions can only be determined from the immediate and direct physical context of the utterance.

### 4.1.3 Time deixis

Some deictic expressions whose reference can only be determined in relation to the time of the utterance in which they occur are visible in Table 12. Formulating such a list of time deictic expressions is relatively easy, although using them is not always so straightforward. In a statement that came out in December for example that says: "I hope Manchester United do better this year", it is understood that the year refers to the football season calendar that is from August - June, whereas another statement that came out at the same time using the same deictic expression was "Lionel Messi has broken the record for number of goals scored in a year this year", the reference is to the calendar year (in this case 2012). Grundy (2000: 31) explains a related phenomenon that occurs in the case of an utterance including the deictic term *today*. He says that when
"Today's always a bad day" is said as he gets out of bed on a Monday morning, today refers to Monday, but in: "I'll see to it today" or "I filled up with petrol today" it refers to some unspecified moment in that day that remains unexpired or has already passed.

One other noteworthy fact about the use of time expressions in English is that the terms yesterday, today and tomorrow are privileged over the names of the days of the week, so for example we cannot say: "I'm going to finish this chapter on Wednesday" when either today or tomorrow is Wednesday. Another classic example from Arabic with today (ʾal-youn/l) is a common humorous 'no smoking' sign, usually hung up in business establishments or waiting areas and other similar spaces:

92. ʾal-tadxīn masmūḥ youm ʾī youm lā ʾal-youm lā
The-smoking permitted day yes day no: today no
Smoking is permitted every other day, today it is not.

Obviously, no matter what day a reader reads this, it would prohibit him from smoking on that day, even if he came into that establishment on two consecutive days. From these examples we can conclude that "deictics in the present sense are morphemes (or a string of morphemes) that in most languages make up closed paradigmatic sets" (Hanks, 1992: 46). These morphemes or words relate the utterance to the context in the deictic field (Hanks, 2005).

4.1.4 The deictic field

Actors engage in verbally mediated interaction under specific social conditions that both constrain and enable their abilities to relate to one another and to the world around them.

(Hanks, 2005: 191)

The conditions that Hanks refers to are commonly treated in the literature on linguistics and the philosophy of language as context, a term that Hanks states "covers phenomena as varied as the immediate interpersonal setting of face-to-face interaction, the spatial, ideological, or historical surround, speech communities, language markets and discursive formations" (Hanks, 2005: 191). What Hanks is concerned with is the immediate linkage of deixis to elementary social relations of speaker, addressee, and
object and the phenomenal context of utterance. He argues that referential practice takes place in what he has called a deictic field. (Hanks, 2005: 210). The organisation of this field can be summarised in Botha's (2001) diagram (Figure 27):

![Diagram of the Deictic Field](source: Botha, 2001: 61)

The deictic centre includes the speaker, situated at the place of speech, at the time of speech. The deictic field is composed of:

(1) the positions of communicative agents relevant to the participant frameworks they occupy (that is who occupies the positions of speaker [Spr], addressee [Adr], and others as defined by the language and the communicative practices of its speakers), (2) the positions occupied by objects of reference, and (3) the multiple dimensions whereby the former have access to the latter. (Hanks, 2005: 193).

The requirements of any social interaction which involves language would be that there exist participants who are the speaker and the addressee(s), and maybe other listeners as third persons, depending on the context. What also plays a vital role in the way in which the interaction proceeds is the positions of the objects surrounding the participants and
the context of the interaction, which include the time, place, background historical information, and ideologies behind the interaction. Figure 28 is a conversational interaction between two SL participants in which the deictic field is shown.

![Figure 28: The Deictic Field](image)

It is clear that there are two participants in this interaction: the player (AV), seen from the perspective of his head and looking down his body, and the woman (FM) in the near distance. The objects placed around them that may be significant to the interaction and that the participants have or may have access to are: the cigarette, the picnic basket, the tea cup, and the picnic cloth. It is obvious that the player, AV, does not have access to the cigarette as FM has possession of it, in addition to possessing the other objects such as the picnic basket. FM is also in a better position regarding access to the picnic basket and the tea cup. She owns the basket and positions herself in a way that she has control of her possessions, which are a part of the deictic field. As Hanks states: "to perform an act of deictic reference is to take up a position in the deictic field" (2005: 193). FM takes up the position of hostess in inviting me to sit as she offers tea.

92. <AVFMnwnFEB2011.IE>
 tfādalʿala kūb šāy
 kindly(you) for cup tea
  *Have a cup of tea*
The word (tfadal) is indexical in Arabic in that it indexes a social and friendly hostess approach, and its translation does not do it justice as it is a directive as well as an offer. AV also does not respond verbally by saying 'thank you' or expressing any other form of gratitude, giving the impression that he knows it is not possible to sit up and take the tea cup, and the contextual conditions of the speech act of offering in AV's viewpoint is unfulfillable, that is, there is a limitation in the deictic field; the addressee does not have access to the object under the circumstances. The interaction between AV and FM is voiced, but it is beneficial to show how the data looks on screen in SL when the interaction is text-based. Figure 29 is a good example. The deictic field in Figure 29 is clear in that the participants of the interactions are clear as speakers and addressees, and the positions they inhabit in the social context are physically visible. This is a club setting. The white address bar at the top identifies the location in Second Life, in this case "Club Myst and Mall on the Beach", and in the top right of the screen shot one can also see the time in SLT which is the equivalent of -8 GMT.

![Figure 29: A Multimodal View of SL (screenshot) (usernames greyed-out)](image-url)
We can see a significant object of reference in the shape of a dance ball. In this particular context, this object is significant as residents would use it to animate their avatars into a dance routine as is appropriate and expected when in a club with music playing. This object is placed up high in the club's vicinity and participants have access to it easily, as it would be visible on their screens as they enter the club and all they have to do effectively is click. The participants of the public chat stream are distributed around the club, taking up different positions and so it is necessary to mention someone's name when addressing them. The club usually has a host, and it is their job to greet any newcomers, and hence their name has to be mentioned in the greeting to avoid ambiguity in addressees, as can be seen in Figure 29 as DH says "HI DF" and DF in turn replies "Hi DH :)." The position of the communicative agent is relevant here, as DH, who is acting as the host, has to be positioned in such a place that makes her visible to visitors upon entry. In SL, however, it is not exactly necessary for DH to have her avatar facing towards the entrance, as she can use her camera view to monitor who comes in and who leaves while her avatar dances on the dance floor. In fact, she is the avatar who is situated on the central platform in Figure 29 and looks as if she is surrounded by some sort of orange flame, also with a baby killer whale at her side. While the flame and whale are attention attracting objects, DH seems to be facing in the opposite direction to the entrance. This brings us to conclude that regarding Hanks' theory of positioning of the agents in the interaction, "to perform an act of deictic reference is to take up a position in the deictic field" (Hanks, 2005: 193), it is rather more complex in SL than it would seem to be in real life interaction. There are in fact two personas behind each participant in the interaction. Avatars can see other avatars as participants in their interactions and address them accordingly, as DH does when greeting people who enter the club. She would not, however, greet an avatar who is standing some distance outside the vicinity of the club venue and has moved their camera view into the club with the camera option. The other side of the coin is that DH herself does not have to be facing the entrance to see the people coming in, as the person controlling the camera allocated to each avatar's view is in fact that real person sitting at a computer or other form of internet-bearing device. So the concept of positioning has taken on a new meaning in this type of context. Perception of the whereabouts of the surrounding people and objects does not depend on eyesight, that is, in the real world it is not possible to see what is behind us, but in SL, this is possible by simply swinging the camera view around without moving the avatar.
The complexity of the deictic field is also demonstrated in the private chat stream which is visible to the right of the screenshot. This chat stream, as mentioned earlier in the work, is a conversation in text format, between two people that is not visible publically. The two participants in this interaction need not be in the same place themselves, as these conversations can take place across locations in the same way as conventional internet chat (such as Yahoo Messenger) does. In Figure 29, AV is greeted by PG, but she is not visible on the screen, and, as PG is not an acquaintance of AV's, he expects her to be in the vicinity of the club in a position where she can see him. As the interaction progresses AV mentions that he cannot see her, and so she moves into a visible position from AV's point of view. Again, this is not entirely necessary, as AV does have the option to move the camera and look for her in the building somewhere, but there is a mutual agreement of social appropriateness that as the conversation progresses it is logical for the two avatars to be visible to each other and so PG decides to come closer to AV where he can see her, and the conversational interaction would seem more realistic so to speak (Figure 30).

93. <AVPGmystJAN2012.IE>
AV: haven't seen you up close yet though
PG: be there in a sec
lol sorry didn't mean to run into you

We can read in the private chat stream (Example 93 ad Figure 30) that PG has said that she would come into visibility, and even bumps into AV's avatar on the way, and hence apologises. In this case, we are experiencing another more complex form of deictic field in that here there are multiple fields in effect. From the main player's point of view (AV in this case), the immediate deictic field is reflected in his positioning being relevant to that of a person taking part in a private conversation with someone who is also physically/digitally present. The dimensions here are clear and exemplified in one participant complimenting the other's avatar appearance, which also acts as an acknowledgement that she has become visible and she has AV's attention.
Figure 30: PG comes into visibility
There is another side to this deictic field, in that we can say there is another indirect and less immediate deictic field that can be attached to the public chat stream: AV has the option to contribute to the public chat conversation if he so wishes, as it is after all public, and hence has to take into consideration the different deictic dimensions that are in place. What is interesting here also is that PG is not excluded from any participation in the public chat either. The two fields can be demonstrated in the diagram in Figure 31.

So the participants in the private chat can also participate in the public chat stream but the same cannot be said for the persons speaking in public, as they would not be able to see the private chat stream, hence the name *private*.

![Diagram](image)

**Figure 31: Private and Public chat overlapping deictic fields**

If one goes deeper into philosophical ground here, one can say that this case also perhaps reflects one conversational interaction and communicative situation and cannot account for others that are quite similar in many ways. When Hanks (2005: 193) talks about "positions of the communicative agents relevant to the participant frameworks they occupy", my understanding does not cease at the physical allocation of speaker and addressee and other participants, but also in a complex situation, with regards to *where* the main attention of the speaker is focused, that is, on which conversation. So that in a similar case to the above, if AV was participating much more in the public chat stream, and giving some, but little, attention to the private chat stream, then it is safe to say that
the main deictic field is the one that covers the public chat stream. This would cause no alteration to the positioning of the two circles in the diagram that constitute the fields, but would cause a switch between the immediate and secondary fields.

One final case is when a text via the private chat stream is sent to a person who is physically and digitally absent, that is, offline. This player can read this text when they next come online. In such a case we can safely claim that there are two separate fields in effect (Figure 32).

![Diagram of AV's two deictic fields (x absent)](image)

There is no overlap between the two deictic fields in this case because they are simultaneous but separate, and the private chat with x is asynchronous rather than synchronous. This brings us to challenge Goffman's notion of a "social situation as an environment of mutual monitoring possibilities, anywhere within which an individual will find himself accessible to the naked senses of all others who are 'present' and similarly find them accessible to him" (Goffman, 1972: 63). All others who are 'present' have access to the public chat stream but do not have access to the conversational interactions happening in private. There are two social situations in Goffman's terms being managed simultaneously. The monitoring possibilities are not mutual. The nature of the software allows for this in the virtual environment. This brings us to Goffman's notion of frame (discussed in Chapter Five, 5.3).
4.2 Functions of Deixis in the SL Corpus

It has been hypothesised that the use of indexical and deictic expressions in SL reflects an awareness of the virtual surroundings, disambiguating the state of being in two places at once while immersed inworld, and revealing implications for identity construction. The analysis in this chapter aims to test this hypothesis by investigating indexical and deictic expressions relating to person, place and time. A quantitative observation followed by qualitative discussion of the use of personal pronouns in virtual social interaction reveals the who aspect of communication and answers questions relating to who is participating in the interaction, the 'real' person or the virtual persona. Similar analysis of place expressions shows how place is perceived in relation to the virtual, that is, answers questions relating to the where of virtual interaction. An observation of the place adverb here comparing it to the use of the collocation in SL facilitates the understanding of the differences of these two places, in that here can have two connotations: either the 'real' world surroundings of the speaker, or the virtual surroundings. The use of other place expressions such as where and there reflects an awareness of virtual surroundings. The acronym SLT refers to SL time, and the distinction between this time and real world time is essential for participation in virtual events. The investigation of person, place and time expressions collectively formulates an understanding of how these notions are perceived in SL, which in turn has implications for the construction of virtual identity.

The analysis in the following sections is subdivided according to the semantic category of deixis: person, place, and time, and is concerned with investigating the frequency and socio-pragmatic elements and indexicality of the deictic expressions in the data. Quantitative techniques using Wordsmith Tools (Scott, 2011) are adopted as personal pronouns, place and time expressions are quantified in the corpus and raw figures as well as percentages are shown. These frequencies are compared to those of the same expressions in a political corpus (another person-focused corpus) so as to show the differences, which are more prominent, and what this means with regard to language in SL and implications for identity.
4.2.1 Looking out for number one: Person deixis

This subsection is concerned with an investigation of person deixis realised in the use of personal pronouns in the SL corpus. The aim is to carry out a quantitative observation followed by qualitative investigation and discussion of subjective and objective pronouns and how they are used socio-pragmatically.

A quantitative search using Wordsmith Tools revealed the frequency of the following pronouns (Table 13) across the SL corpus:

<table>
<thead>
<tr>
<th>Person deictic expression</th>
<th>Frequency</th>
<th>/1000 words</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/me</td>
<td>4506/772</td>
<td>22/3.7</td>
</tr>
<tr>
<td>You/u</td>
<td>2901/321</td>
<td>14.5/1.6</td>
</tr>
<tr>
<td>He/she, him/her</td>
<td>200/183, 94/199</td>
<td>1.8/1.4</td>
</tr>
<tr>
<td>They/them</td>
<td>397/245</td>
<td>2.3/1.1</td>
</tr>
<tr>
<td>We/us</td>
<td>735/175</td>
<td>3.4/0.8</td>
</tr>
</tbody>
</table>

The first person singular I and the second person you are by far the most frequently used personal pronouns by residents of SL. I is more frequent than you which suggests that SLers like to frequently talk about themselves, which is expected in a first-person player perspective. The pronoun I is a deictic word and is not used non-deictically. Its referent (or referents, if we remind ourselves of the dual identity of avatar and player) can only be identified with relation to the context. Halliday's transitivity and types of processes (1994) serve us well in understanding the use of I with its various collocates. He mentions that relational processes are those that classify and identify one experience with other experiences, and that relational processes can be of three types: intensive (x is a), circumstantial (x is at a) and possessive (x has a) (Halliday, 1994). Where x is the pronoun I, an account of the relational processes of I can be formulated from its collocates. Table 14 shows the most frequent collocates of I:
Table 14: Most frequent collocates of I

<table>
<thead>
<tr>
<th></th>
<th>Im/I am/I m/I'm/I was</th>
<th>Have/had/T've/I've</th>
<th>Think/thought</th>
<th>Love</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>330/285/183/118/87 (1003 - 22.6%)</td>
<td>240/45/48/29 (362 - 8%)</td>
<td>174/42 (216 - 4.8%)</td>
<td>151 (3.4%)</td>
</tr>
</tbody>
</table>

The various forms of the I am concordance, which is the most frequent, appear in the corpus 1003 times, which is 22.6% of 4506 occurrences of I. Out of these 1003, 847 (84%) are lexical, out of which 89% are intensive in that they are either attributing something to the speaker: "I am a total introvert", or identifying the speaker in some way "I am the Director (of VWER)". The other 11% are circumstantial in that the speaker is either referring to time or place, as in "I am in NY!". Of the "I have" concordance, only 56% are possessive and 44% are either circumstantial or attributive as in the concordance line "I have been to France" and "I have been sick", rather than "I have a house in SL" for instance. The high frequency of the intensive and circumstantial relational processes suggests that residents like to celebrate their attributes and who they are in SL (I am a total introvert) and are often engaged in spatial and locational informing moves (I am in NY! I have been to France). The two most frequent lexical verbs that collocate with I also denote that the most common conversational activity is the expression of opinion and love. Some examples would serve well here:

94. <PCMystclubDEC12.CC>
[13:57] MD: I am your hostess for the next two hours

95. <PCsweetheart1AUG2011.CC>
[06:52] SL: where are you rudi?
[06:52] RY: Im on my seat
[06:52] RY: where i usualy am
[06:53] SL: I knooooooow rudi
[06:53] SL: meant country

96. <VWERampitheatresMAY-JUL2011.AD>
TA: I have an LM for a wonderful Macbeth exhibit too if anyone would like it.

97. <AVMFlars24AUG2011.IE>
[23:42] MF: it is me who is looking and i think you look great
AR: I am not complaining baby I love you no matter who you are...

MD in 94 asserts that she is the hostess of a club at a particular time. This intensive relational process helps her in positioning herself in the deictic field as a leader of communication, activities, and a main greeter of visitors. The circumstantial relational process in 95 on the surface shows the ambiguity of place, but it is rather the person who is ambiguous. RY perceives SL's (person's initials and not Second Life) question to refer to his avatar's whereabouts, that is, his virtual self, as that is taken to be the 'default' connotation of such a question, whereas SL has to clarify that he is referring to RY's real self by stating that he meant which "country" RY resides in. TA's offer in 96 is made possible through the possessive as one cannot offer what they do not possess. TA's offer and her use of the SL-specific acronym LM implies that she is familiar with the ways of SL, whilst MD's assertion in 94 places her in a position of authority and hence presupposes that she has reached an advanced identity stage in SL. 97 and 98 are examples of the most frequent lexical verbs that occur with I. MF's use of me and I think reflects the fact that when think is used, the two personas are brought together as one. I may argue that an avatar cannot think and it must be the real person, but I may also claim that when role-playing, it is MF's avatar that it looking at her addressee's avatar and thinks that it "looks great". On the other hand, AR's use of I love you denotes that the two personas belong to one person, and that she loves the person behind whichever persona whether real or avatar.

The first person focus of my player perspective SL corpus can be compared to that of a different type of first-person centred corpus, namely a corpus of political language gathered by a PhD colleague for his study. When compared to this type of corpus, which is of a similar size, the following differences can be noted in the frequency of personal pronouns (Figure 33). Immediately one notices the significant amount of we in the political corpus, versus the frequencies of I and you in the SL corpus per one thousand words.
Looking at the *I*, *you* and *we* columns in the figure suggests that *SLers* use *I* and *you* very often in contrast to politicians who use *we* more, the case being directly opposite. This is due to the dyadic nature of the one-to-one conversations of SL in contrast to political speech and political speeches. Another significance is the frequency of *she* in SL, which is not existent in the political corpus. This denotes that politics is male-dominant, whereas *he* and *she* are roughly of the same amount in the SL corpus, suggesting a more gender-balanced community. The SL corpus, thus, is much more conversational and egocentric, while the political corpus is much more one-way speech involving linguistic strategies such as inclusion to serve a certain political purpose. An observation of some data examples from the SL corpus would serve us well here:

99. <AVHcreamy12AUG2011.IE>
1  [10:04] H: But this av is an alt
2  [10:04] H: And although I am not hiding who my main is
3  [10:04] H: The reason I've been logging on as her is because I
4  associate my main with having certain relationships with people who
5  hang at this club
6  [10:04] H: Whereas even though it's still me. And all my friends
7  know it. I don't feel like I have the same um... expectations with this av
To put this example into context, so as to gain a better picture of the deictic field, a model which can be adopted to capture the multimodal dimensions of the data, we can use an image (Figure 34) that is associated with this data context.

![Figure 34: Snapshot of H at Club Creamy Kittens](image)

H is talking about herself, mentioning that she has more than one account (*this av is an alt*) and justifying why she does so. The setting of discourse here is represented in the speaker being H and the listener being AV. They are both in close proximity to each other in a night club setting in the evening. The interesting fact is that because she is revealing facts about herself that she does not want other people to know, she chooses to use the private chat option, even though AV is standing right in front of her. The deictic field is reflected in the *who* aspect of this conversation where there are three persons being referred to that are associated with the speaker alone: her real world self, her main (account/avatar) and her *alt*(-ernative account). The referent of the deictic expression *I,* though, seems to be the real-world self of H, and the proof is that when she refers to the other (virtual) self, she uses the third person pronoun *her:* "The reason *I've* been logging on as *her* is because *I* associate *my* main with having certain relationships with people who hang at this club". The question is whether *her* is considered to be being used deictically in this case or not. The relational process of the whole sentence in Hallidayan terms is circumstantial as the subject of the complex grammatical sentence is (*The
reason [that] I've ... ), with the verb being *is* and what follows is a clause of reason, but in the embedded clauses (I've been logging on as her) the relation is intensive and of an identifying nature so the pronoun does have an antecedent, but that antecedent is the deictic term *I* and it refers to only one of H's three possible identities, which is the alt. So even though the actual use of *I* by H refers to her real self, the use of the third person object pronoun, *her*, refers to one of her other selves. This shows that there is a relationship between the 'real' person behind the screen, and their virtual self or selves. When a person is represented in the virtual world by a *main* and an *alt*, this relationship changes. SL has been described as being 'an escape' from reality, and it seems that the *main* is the module of that escape. However, interestingly, according to the above example, it also seems that an *alt* is an escape from the escape (see also Example 49, page 99). The main account turns into the main second life, which is also susceptible to danger, discomfort and disappointment, and there is a need to escape from this through changing one's identity as it is just so easy to do. In order to identify the referent of *her* one needs to recourse to the context of the situation, which not only includes time, place and gesture, but also background information of the language of SL and the clipped terms *av* and *alt* that are used. There is clearly identity play with the different avatars and ways of deictically referring to them. Anonymity influences identity as McKenna and Bargh (2000) claim. An avatar (main account) anonymises its user's real identity and having alternative accounts provides anonymity for both the main user and the main avatar account. This means that the anonymity can lead to a sense of "de-individuation and disclosure" (McKenna and Bargh, 2000) and H wants to have the freedom to do what she wants and be herself without being recognised by others.

The next example shows a similar but different type of use of the first-person pronoun *I*.

100. <AVSWLVhomeDEC10.INT>
1  [18:49] SW: For instance *i am a shy person in rl*
2  [18:49] SW: And i think *i tend to be on the wild side in sl*

SW uses *I* in intensive and attributive terms (emboldened in example), rather than identifying in "i am a shy person" and "i tend to be on the wild side", but adding the circumstantial adjuncts (italicised in example) *in sl* and *in rl* to make the distinction between the referents of the pronoun. In the first instance (line 1) the referent of *I* is SW's real life identity, and in the second instance, the same personal pronoun is
referring to SW's virtual self. Clearly the virtual world has had its effect on SW, as being "shy" and "wild" are rather antonymous. There is a displacement or removal of identity, as if a person is removed from one world and placed into the other, and each world appropriates (RL) or encourages (SL) different types of identities. The personality interacting with society and social surroundings in the two separate worlds is the reason behind these characteristics being of an opposite nature. Not much information about SW's real world is available to the researcher, but what can be said is that the virtual world has its effects on her as it is characterised by a context where anything is possible and there are no constraints or limitations on what a person can do. This aspect of 'freedom' and 'escape' in SL encourages Residents to be more outgoing and even 'wild', as seems to be the norm when consequences for one's actions are in many ways absent.

Example 101 provides a different angle also:

101. <VWERampitheatresMAY-JUL2011.AD>
TA: I am a total introvert, I flourish in SL, behind an avie and/or computer screen.

It is implied in TA's claim that the fact that she is hidden behind "an avie and/or computer screen", makes her anonymous to the rest of the world and this anonymity fuels her flourishing personality by releasing her from her introvert one.

Example 102 shows that not only is the nature of the relationship different between a person and their main or alt, but also that having multiple accounts attracts other SLers in different ways:

102. <ADARstacey'sJULY2011.CC>
1  [14:36]  AD: trying to not look like jonhas totally
2  [14:37]  AR: i like it
3  [14:37]  AR: And i know i dont look like Vanessa
4  [14:37]  AD: so far no one here has commented on me, and
5  i know breeze, i even made a comment in local to get her to take notice
6  and she never said anything
7  [14:39]  AD: you definetly dont resemble Vanessa
8  [14:41]  AD: last time i had AR here, i got about 10 im's, guys drooling over her and sayin they were gonna take the towel that
9  10 was offered by one of the dancers  lol
11  [14:42]  AR: I have to say AR does get hit on more than
12  Vanessa ever did
13  [14:43]  AR: I know Vanessa was hot.
14  [14:44]  AR: But AR has something there that gets the
15  guys motor running.
The person deictic expressions are used to refer to and alternate between the different identities of each person: the *real*, and different *alts*. It is difficult to infer from this example which the mains are, and which the alts are, but it seems that the avatars Jonhas and Vanessa predate AD and AR. The person deictic I in line 2 and the first instance of it in line 3 refer to the 'real' person behind the avatar, whilst the second occurrence of I in line 3 refers to AR, the avatar that embodies the real person at the time, while Vanessa the *alt* is referred to in the third person sense. It is discussed between the two that some *alts* attract people in different ways than others, and that appearance is not always the characterising factor. The fact that AR attracts more attention from male avatars is not down to looks, as she mentions in line 13 that "Vanessa was hot". It is as though there is a different feel about the avatar, a different aura is projected. This leads us to conclude that if not wholly down to appearance, the way the avatar acts and communicates has to play a role, implying also and fortifying the claim that people act differently with different *alts*.

The case is slightly different with Arabic-speakers: 'role-playing' and having a 'Second Life' in the same sense as that of English-speakers seems not to be very characteristic of Arabic-speakers. From participant observation, blending into the Arabic-speaking SL community, and being an Arab myself, the researcher can claim from experience that Arabic-speakers take full advantage of the anonymity that SL gives them in order to be able to 'play out' their unconstrained identities. Appearance is an identifying factor and a characterising feature of avatars in SL. Society constrains them so much in real life to an extent that the freedom they show in SL, through their appearance, actions and language is clearly observable. Example 103 shows this:

103. <PCa7labanatalarabAPR2012.CC>
1. A: mīn būka ʾilli tišbah hayfa wahbi haḑik
   who Puka **that** resembles(fem) Hayfa Wehbe **that**(fem)
   *Who is this Puka *that resembles Hayfa Wehbe, *that girl over there*?*
2. B: būka hayfa wahbi seken läyf
   Poka Haifa Wehbe Second Life
   *Poka is Second Life's Haifa Wehbe*
Haifa Wehbe is an Arab Lebanese singer and actress. She is known for her beauty, sex appeal and provocative mannerisms. Haifa was "named Sexiest Woman in the Middle East by a lifestyle magazine; has appeared on 150+ magazine covers." (People Magazine, 2006) and is quoted in the same magazine issue as saying: "My image is a sensual, Arabic, exotic look, sultry sometimes." To imitate Haifa Wehbe means to be free from all the social constraints that Arabs have adopted from religion and society. However, it is not merely females who practise this; example 103 shows R, an Arabic-speaking female mocking an Arabic-speaking male:

R: inta ʿomry inta ʿomrāk mīn dāḥek ʿale:k ʿūsamāk inta ʿomry hāʾ ašān yenādūk inta ʿomry hā you(mas) life-my you (mas) life-your who laugh at-you(mas) and-named-you(mas) you life-my huh so call-them-you(mas) you life-my(mas) huh You're my life? you're you're life! who scammed you and named you You're my life huh? So people can call you You're my life huh?

R here is mocking a SLer who has chosen to call himself (/inta ʿomry/) which translates literally as "you are my life", but is used in a colloquial sense as a flirtatious expression, or even one of courtship. This male SLer chooses this name so when called upon by females it would seem as if they are flirting with or wooing him. It is not often that this happens in real life, as under normal circumstances society in the Arab world does not permit it. This name gives him the opportunity, which he often takes, to reply with a similar phrase such as (inta roohy/qalby/hoby) "You are my soul/heart/love" which have similar linguistic functions, thus beginning a sequence and flirtatious conversation. A linguistic connection that brings them closer to the opposite sex is what is desired by many Arabic-speaking users of SL. There is no evidence here, though, of acquiring a virtual identity through an avatar and leading a virtual life through that avatar in the same sense as English speakers do though, but there is identity construction through the anonymity and renaming process forming an identity of a person who is flirtatious and playful with language. As has been claimed before, SL is different for different people. One of the outstanding differences between Arabic speaking and English speaking users is that Arabic-speakers do not aim towards living an avatar life as many English-speakers do, but Arabic-speakers do construct a virtual identity in the sense that it is different from their real life one. However, this is too simplistic a distinction as Arabic speakers, who are competent English users (much like myself in the study) may have
similar aims in SL. One of the reasons for the argument that Arabic-speakers construct a
different kind of virtual identity to that of English-speakers is reflected in the fact that it
is the norm for Arabic-speakers to immediately ask which Arab country a person
originates from in first encounters. There are numerous examples of this in the corpus,
and in both languages English and Arabic. When communicating in English, as is the
norm in international communities through the public chat stream, an Arabic-speaker
will still ask where a person is from, and if that person is Arab, there is a reason for a
feeling of closeness in some way, and hence immediate justification for code-switching
into Arabic. In example 105 below, the closeness is represented by the code-switching,
including a compliment:

105. <PCaaJAN2011.cheezy3>
1 S: Where are you from? I mean RL.
2 AV: Iraq
3a S: ‘āhla nās w `inta yā šab minein fī sūriyya
3b S: sweetest people and you oh youth from where in Syria
3c S: best people, and you Shab, which part of Syria are you from?
4a Shab Souri: ‘alšām
4b Shab Souri: the levant
4c Shab Souri: Damascus

Sometimes, a SLer's name will give away their national identity, and itself be a reason
for language choice, as S turns to Shab Souri (Syrian Guy) who indexes his Arab
identity in his avatar name, and asks what part of Syria he is from in Arabic (line 3). No
matter what language is used amongst Arabic-speakers, the person deictic words always
seem to refer to the 'real' identity of that person, asking about place of origin, age,
education, and daily activities. The fact that Arabic-speakers are online means they are
inhabiting the virtual, but there is a difference between what we can call an avatar and a
non-avatar identity. There is no evidence in the corpus, though, about Arabic-speakers,
excluding myself, taking up a virtual life in the form of an avatar identity similar to that
of the western sense, such as getting virtually married, having children, being employed
or opening a business in the virtual world. The researcher, for example, never met an
Arab SLer who owns his/her own SL home. SL is regarded as more of a social
networking site with a graphical element, and importantly, voice. Arabic-speakers do,
however, show signs of taking advantage of the freedom and anonymity due to the
escapist and transient nature of SL. This is shown in how FM goes about
communication, placing herself in a position of power in the deictic field, making offers
and requests. This is also reflected in paralinguistic features of the communication such as her body language (lying down on the picnic cloth) and holding and smoking a cigarette. The person deictic and indexical aspects of communication reveal that English-speakers use personal pronouns to differentiate between which persona is being referred to, whether the virtual (avatar) identity or the 'real' identity. Arabic-speakers on the other hand refer to 'real' identity when using personal pronouns, but when engaged in conversation also show a sense of freedom from constrained real world identity through remaining anonymous. This is usually practised in mixed sex conversations.

4.2.2 Here or in SL? Place deixis

The use of deictic terms of place such as here, there and in SL reflects a Resident's conception and awareness of their virtual surroundings. It is hypothesised that expressing an awareness of virtual surroundings regarding place contributes to the process of acquiring a virtual identity, as identity can be "indexed" (Ochs, 1990) by the linguistic stances one adopts. Place indexical expressions index contextual aspects of virtual identity relating to place and distinguishing between the two places: the 'real' and the virtual. A person is considered to be in two places at once when engaged in the virtual world: the 'real' world and the virtual. If a person regards themselves placed in the real world and converses about the 'real' world as if it was the other or an outside concept, then this is a characteristic of SLidentity. Linguistically, this can be observed by investigating the use of the deictic place expression here and comparing it to the collocation in SL.

There is a distinction between here and in SL. The former occurs more frequently (530 occurrences in the corpus) but can be rather ambiguous. Quite often one does not know which here the speaker is referring to, whether it refers to the immediate surroundings in Second Life or in the 'real' world, and clarification is often needed. Hanks states that the meaning of here "depends upon its contrasts with other related terms including 'there', 'this' and so on." (Hanks, 2005: 192), and in SL can be added to those related terms. Here can refer to the immediate virtual context and surroundings or the 'real' world. When it does refer to the immediate virtual surroundings it is almost synonymous with in SL.
106. <AVPQresOCT10.BM>

1 [22:19] AV: people say that they are more "themselves" here
2 ....what do you think?
3 [22:19] PQ: yes and no
4 [22:19] AV: how so?
5 [22:19] PQ: yes, because it is hard to not be yourself
6 [22:20] AV: and no?
7 [22:20] PQ: no because some people come here to be
8 someone or something else

In an interview with PQ, when asked about identity, the identity that the researcher was referring to is the one in SL, and hence this is clear from the context, and PQ replies accordingly. The deictic word in line 1 can be replaced by in SL, and in her reply in line 7, can be replaced by to SL.

107. <PClar's3AUG2011.IE>

[06:57] RY: oooh it so cold here !!!! oh, is it, where you live ?: Greenland.
duh

In 107 however, here needs clarification. One may argue that because it refers to climate and temperature that cannot be felt in SL, it can only refer to real life, but the role-playing nature of SL permits a reference to the virtual. If it was stated in a virtual context that included snow and an avatar was not dressed for the cold, then a different referent would be perceived. RY wants to make it clear that it is her real world geographical location that she is referring to, but she seems unaware that this can be ambiguous. Based on the corpus, one can claim that when the subject is the weather, the reference is usually a 'real life' one.

108. <ADARstacey'sJULY2011.CC>

[18:36] AR: you dropped the call
[18:36] AD: sorry. all i heard was a bleep and then no call :-(
[18:36] AD: its raining kinda hard here now, might be the cause

If it was "raining kinda hard" in the virtual context, there would be no effect on the cellular network that is apparently faulty. AD and AR are talking about an attempt from one to call the other over the telephone as they have taken their relationship beyond the borders of Second Life. The deictic words here and now clearly refer to the real world context.
A distinction that can be made between *here* and *in SL* is that the former can refer to the immediate virtual surroundings, a place within a place, or in SL in general, whereas the latter refers to the virtual world in general only. In the next example, the use of *here* as referring to the immediate context would be too specific as it would refer to the context of an academic discussion meeting place.

109. <VWERampitheatresMAY-JUL2011.AD>
PF: when I bought a bathtub in SL, it provoked a huge amount of thinking – why I thought I needed it – but I digress further

PF uses *in SL* as *here* would obviously be ambiguous, imprecise in Gricean terms, and would possibly raise humourous questions. The point is that *here* is not synonymous with *in SL* in this context, as *in SL* is wider than the context for the specific setting of the discussion. Table 15 shows the frequencies of *here* and *in SL* in the corpus, also mentioning that the most frequent cluster associated with these terms is *here in SL* (Figure 35).

**Table 15: Frequencies of *here* and *in SL***

<table>
<thead>
<tr>
<th>Indexical</th>
<th>Freq</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Here</em></td>
<td>530</td>
</tr>
<tr>
<td><em>In SL</em></td>
<td>185</td>
</tr>
<tr>
<td><em>Here in SL</em></td>
<td>20</td>
</tr>
</tbody>
</table>

Figure 35: *Here in SL* Wordsmith-produced clusters
The fact that *here* in *SL* is the most frequent cluster fortifies the view that *here* sometimes needs disambiguation. *Here* is useful for referring to place in place (nested places), especially when preceded by *in*, such as a specific room in a building as in 110 or a shop in a marketplace as in 111:

110. <AVJTjed'sofficeJUL09.JINT>
[9:50] JT: we're on the 4th floor
[9:52] AV: oh ... in *here*

111. <AVSWs'shomeJUL09.SD>
[15:23] SW: freebie shop
[15:23] AV: u can even get free furniture??????
[15:23] SW: everything in *here* is free

112. <VWERampitheatresMAY-JUL2011.AD>
BLM: I am Bxxxxxx Jxxxxx, chief librarian at Johnson & Wales University.
I have two libraries *here in SL* and one on Jokaydia Grid Lifelong Learning Library

112 provides a good case of the clarification of the deictic reference. If BLM had not mentioned *in SL*, then one would come to perceive that she had two libraries at Johnson and Wales University, which would be odd taking into consideration that she is an employee and cannot claim ownership of the libraries. BLM also mentions that she has another library "on Jokaydia Grid" which is a different place in SL. Other place expressions such as *there* also provide insight into how place is perceived in SL.

Deictically *there* refers to a certain object that is of a more distal (Diessel, 1990) proximity than *here*. *Where* is the WH-word that asks about place. In 113 below, AV and a friend go into a furry avatars shop to buy a tail and ask about where it can be found:

113. <PBChereandthereOCT10.CC>
1 [17:43] AV: Hi, can you tell me *where* the tails are
2 [17:44] Dy: I don't believe we sell many of them, just entire
3 avatars... I believe I saw a couple in the rave section though
4 [17:44] AV: rave .... *wheres* that?
5 [17:44] Dy: I can show ya
6 [17:44] AV: please
7 [17:44] Dy: click rave *there*
8 [17:45] Dy: there's a couple tails *there*
9 [17:45] AV: thanks alot for your assistance
Dy leads AV and his friend to teleport devices on the ground, each leading to a different department of the shop. The occurrence of *there* in line 7 refers to the close proximity functioning as a "pointer" (Mey, 2001: 54), whilst in line 8 *there* refers to objects that are physically as well as "psychologically distant" (Verdonk, 2012). As all *SLers* have the same default view, and each avatar is facing in a different direction, it is difficult to give instructions, to go left and right for instance, to another *SLer* without being ambiguous. Therefore, it is the norm, and *SLers* are aware of this, for a person who knows the whereabouts to instruct another person to follow them. This instruction is part of the learning process of becoming virtual (discussed in Chapter Five). When the *SLers* have arrived at the desired location, and the object being asked about appears in the vicinity, then a pointer is normally used. In 113, the location is the teleport device labelled with the word *rave* that takes AV and his friend to the desired department in the shop. The instruction comes to *click* the word *rave* (line 7), operating the teleport to the department, where the psychologically distant 'tails' can be found *there* (line 8). The word *there* appears 397 times in the corpus, but about 50% of occurrences refer deictically to a distant location, which can either refer to a 'real' world location or a SL location as in 114:

114. <AVZZleedsuniNOV10.INT>
[18:03] ZZ: ok u know charltina's couture and culter center
[18:03] ZZ: i will meet u *there*

Other place expressions such as *above, below, and on X* are also important in showing an awareness of the virtual context. An Arabic example here shows the collocation *on top of a table.* In 115 H has landed on a game table when being invited to the game and teleporting in (while others are having a conversation). Having good control of movement is part of being virtual. Sometimes inappropriate movements cannot be avoided, and hence acknowledgement of this and perhaps an apology is needed.

115. <PCaaJAN2011.cheezy3>
1 H. wen ana fūg- l-tāwla
   where I on-top the-table
   *Where am I, on top of the table?*
2 S: ʾā
   Yes
   Yes
3 H: ʾāsef ... āsef jiddan
   sorry sorry sorry very
Sorry, I'm very sorry.

This example does not do justice to the inappropriateness of the situation, but a visual element can enhance our view (Figure 36). Upon being teleported in by S, H lands on top of the cheezy game table, but he takes time to realise due to the rezzing process. Once he does, he wants a confirmation from S and immediately apologises for standing in an inappropriate place, even though it was out of his control. This realisation by H reflects a good sense of whereabouts and a knowledge of what is and is not appropriate movement in SL.

Place expressions such as *here, in SL, there* and others that are indexical and deictic in nature reflect awareness of the contextual space in the virtual world. These expressions refer to place and enable distinctions to be made between the 'real' and the virtual. *Here* can refer to the immediate space as well as places within places in the virtual environment as well as referring to the 'real' world place that the user is located in. *In SL* usually refers to the wider grid of Second Life in general. These distinctions have implications for identity as they reflect an awareness of being situated in the virtual world and even inhabiting the virtual digitally as opposed to being physically located in front of a computer.

![Figure 36: Get off the table](image-url)
4.2.3 SLT or my time?

Time is also an issue in Second Life. Residents originate and are physically located all over the globe in very diverse real world locations across different time zones. SL provides one unified time zone which is Second Life Time (SLT), and that is the time zone which most residents refer to and use in the announcement of events and in their SL activities, but it is not always as simple a case. When referring to future time a resident can get rather confused if the interlocutors of that particular conversation live in different time zones in RL.

Now usually refers to the same time for both (or all) interlocutors in a conversation, referring to the immediate. This is slightly more complicated in computer-mediated communication (as is the case in long distance telephone calls), where the speakers are in different time zones, and time has its effects on the conversation. The time deictic now in line 5 relates to the other temporal lexical collocates preceding and following it in the conversation in the process of understanding 'the when' of a future time. The lexical collocates my SL clock, SL time, Iraq time, my time and quantities of time: 3:22pm SLT, 5:22am, +10 hours help to determine the temporal context of the conversation, which in turn can be used to calculate future time (2:30pm SLT is 12:30am in Iraq). The unspecific grammatical word now is disambiguated through all of these specific lexical items to refer to different times and different time zones in the SL context.
It seems that SLT is rather irrelevant in 117 as it is deemed confusing by some residents and they ignore it entirely and refer to their real world times. LV lives in the state of Georgia in the US and was referring to Eastern Standard Time (EST) when she informed me of the time of her friend's wedding. Players' real world locations can also change as I myself was +10 from LV when I was Iraq, but speaking from the UK in the extract above. The significant time deictic in this extract is bout [sic] another hour, which disambiguates the SLT, EST, and UK time confusion. The co-occurrence of time (another hour, now) and person (my, you) and place (here) deictics contribute to the clarification of the ambiguity. My time refers to person and place, as does the question in line 6.

The nature of the virtual world, where people are in two places at once and all have different RL time zones, requires the use of all types of deictics at one's disposal so as to deliver messages unambiguously, and also show an understanding and awareness of time. This also applies to person and place deixis. Adapting one's deictic use to fit the situation in SL is not only reflected by the use of these expressions, but is also disambiguated and contextualised by them. These expressions have to be used appropriately to make these distinctions in conversation and let the other participants know who is speaking, who is being spoken to, when the conversation or subject matter takes place, whether in the 'real' or in the virtual, and when an event takes place, whether in SLT, EST, GMT or whatever time zone.

4.2.4 Deictics and love

No corpus-driven investigation of language is complete without an observation of collocates of important words. As far as identity is concerned, it has become clear that personal pronouns, especially I, are significant. Interestingly, love is the one of the most frequent lexical verbs in collocation with I, second only to the verb think.
The *I love you* collocation appears 81 times which is 56% of the time that the word *love* appears in the corpus (total *love* = 150). This suggests that a great proportion of the subjects of conversation involves passion, emotion, relationships and love. In 118 the *I love you* collocation is interesting because of the lexical item that follows.

As can be observed, the names of the participants in this interaction are AD (the male participant) and AR (the female), but when AD addresses AR and expresses his feelings and emotions towards her, he uses her real world name, V. It is important here to mention that in a later interaction between the same speakers, AR says "I love you M", which obviously implies that AD's real world name is M. When true emotions are involved, these speakers feel that it is appropriate to address the true self or 'real' self of the loved one, rather than the virtual people with names. We can infer from this that these kinds of relationships have been taken a step further, beyond the mere virtual and stepped into reality. If it were the case that a person did not want the two worlds mixed, that person perhaps would not share his/her real life identity to the extent of giving that sort of information. On the other hand, if two people in a relationship in SL express their feelings towards each other using their SL names only, then it can be said that they
prefer to keep their worlds apart and this relationship has no 'real' element to it in the sense that it is to be separated from their real lives and exists only in the virtual. Frequently, the case is that two people are in a virtual relationship and they do not know each other in reality, have never physically met, and only share a limited amount of RL information such as location, ethnic origin and personality traits. This is a matter of personal choice.

What can be said about the deixis of such an interaction is that there is a shift in the deictic field regarding the identity of the speakers (the 'who' element); that is there is an identity switch. In example 108 (page 155), AD and AR were talking about a phone call that they had had, and how the call came to an end for technical reasons involving the weather and reference was to their 'real' selves. At a later stage in the same conversation however, they start talking about what they want to do in Second Life, hence, switching back to AD and AR (the SLers). But to what extent can these two identities be separated?

119. <ADARstacey'sJULY2011.CC>
1 AD: you are my dream come true Vanessa
2 AR: I never thought i would find someone as real as you
3 AD: kissing your neck, leaving a soft trail of kisses down your shoulder....... lightly caressing your arms as i enjoy the feel of your soft skin on my lips

The notion of reality is debatable here as the simple distinction that what happens outside the virtual world is real, and what happens in SL is virtual (i.e. not real) ceases to have the ability to explain what is happening in 119. From the data we can infer that AR considers herself to have real feelings for AD and vice-versa. In real world interaction, there are limitations of distance between them, and their only real means of communication are through the phone or internet. Contexts differ according to the different modes of communication, and the distinction is not only that between phone and internet, but between different types of communication programs on the internet. My claim here is that because of the limitations this relationship faces in the real world, and as in any relationship, there is a need for a medium through which emotions and feelings can be expressed. The virtual world is therefore taken as a medium and language is the vessel. Linguistically speaking, the deictic field that is associated with a phone conversation between two people who are distanced limits the type of interaction possible. Hence, these speakers create their own setting in Second Life that, to them, is
a medium for performing reality rather than being one bearing only the (unreal) virtual. The subjective personal pronouns in lines 1 and 2 of 119 refer to the real selves, but the possessive determiners in lines 3 to 5 can only refer to the parts of the body of the avatar on the screen. This means that the reality of the situation and intensity of the emotions and feelings involved can transfer one's self from the real to the virtual (or from the virtual to the real), hence creating another complex deictic field where deictic terms that refer to entities in the real world and those which refer to entities in the virtual world are actually both referring to entities in the same 'place', which is a created overlapping world that is both real and virtual simultaneously. If one thinks of it in terms of the diagrams (Figures 31, 32 on pages 141, 142) then it can be imagined that two circles exist inside one another, one of which reflects the deictic field in the real world; the other the virtual world.

![Deictic field of 'real' relationships in the virtual](image)

In my opinion, this complexity of the deictic field is one of the most important characteristics of such performances in the virtual, in that it sparks feelings and emotions in the self through the creation of an illusion, almost convincing someone that they are physically performing an action, when in fact the closest there is to physicality is pixels moving on a screen, and this real emotion is what makes Second Life so appealing. The indexicality at play here is the fact that love indexes 'real' feelings, that is, feelings that originate in the virtual as a source and come out into the 'real', hence causing a blend of identities between the avatar and the user.
4.3 Conclusion: Identity in a New Deictic Field

Hanks claims that the basic function of deixis is "to orient the subjective attention of the interactants, who are, in turn, presumed to be in their ‘natural attitude’", that is, wide awake, with a sense of their own bodies, integrating sensory data from vision, hearing and touch" (Hanks, 2005: 192). In my opinion, when applied to SL, this has to be challenged and rethought. The basic function of deixis in SL is rather to orient the objective attention of the interactants firstly, regarding which identity the speaker is portraying, which place is being referred to and what time (RL or SL). The "natural attitude" involves them being wide awake, but with a sense of their embodiment by an avatar, and an awareness of the virtual surroundings, integrating sensory data from vision through a computer screen and controlled by the camera, reading CMC on the screen as well as hearing, when voice chat is used, and using the cursor in place of the sense of touch.

What I propose here is a modification of Botha's (2001) deictic field diagram (page 134) and its replacement with a new diagram that can apply to the virtual surrounding (Figure 39). The main modification in the new diagram is that the person, place and time deixis areas are now represented by two circles embedded within each other showing the simultaneity of RL person, place, and time and SL person, place, and time. Placed within them are the various deictic expressions which are also simultaneous in that they exist in both worlds.

Figure 39 represents a development in the understanding of the notion of the deictic field (Hanks, 2005), and its application to the virtual world Second Life. This new diagram takes into consideration that any one person has at least two identities that are at play in the conversation, in addition to the fact that that person is present in two places at the same time represented in the fact that they are placed in two circles embedded within each other and are simultaneous. One's SL identity can be addressing another's RL identity, or the pronoun we can refer to the SL we or the RL we.

The place deixis section also highlights the fact that two places are included in the deictic field: the real and the virtual, as the deictic words here and there can refer to something immediate in the virtual surrounding or the real surrounding, and the word there can refer to something distant in both the real and the virtual or even to something that is located at a close point in the virtual as in example 113 (page 157). The Figure
also shows that there is more than one sense of time as SLT and real time are in simultaneous circles, and the choice of which time to use and being aware of it is what is important, although it does not affect the deictic field in the same way as person and place do.

The diagram (Figure 39) is meant to fortify my claim that SL is a virtual place, full of virtual people in virtual time. These people though, as the diagram shows, can be simultaneously in the real world in real time, and the two worlds can merge and become almost indistinguishable. The Residents of SL are normal people in the real world, embodied by an avatar inworld. People can also have more than one account, and SL is different for different people. These factors mean that there is more than one identity at play for people who engage in SL. There is the 'real' person behind the screen, which in
itself is a complex and multifaceted identity, and the one or more virtual Residents of SL who embody that 'real' person. We are different people when we are parents and when we are teachers, for example, and we add to these in the virtual as we take on different roles: education forum, SL marriage and so on. Residents are also in two places simultaneously, their real life surroundings in front of a computer, and their whereabouts and virtual surroundings inworld. To refer to place, indexical expressions are used, and especially words like here, there and the collocation in SL. Time usually has to be negotiated in SL as different Residents are physically located in different time zones that are also subject to change and SLT can be confusing sometimes.

Hanks' theory of the existence of a deictic field has provided the basis for the establishment of a newly structured deictic field that is more complex in a SL context in that it includes the entities of multiple identities and places. From analytical observation of the data, it is claimed that English-speakers take full advantage of the multiple identity characteristic provided to them by Second life, and adapt their use of the deictic expressions to refer to the different identities accordingly. The pronoun I was by far the most frequent personal pronoun, denoting an interest in self and identity and highlighting the egocentric self-centred nature of language in Second Life as opposed to the collectivity that is constructed by the recurrence of we in a political corpus where the I is performing the we. English-speakers who engage in SL as a pastime (and not for purely academic reasons like the VWER members) give an avatar-life virtual identity to their avatar, a SLidentity, and then acquire that identity themselves as they become one with their avatar. They also slide in and out of their identities as their conversations and behaviours dictate. This is reflected in the deictic expressions they use that reflect an acknowledgement and awareness of the virtual surroundings, for instance when H in example 99 admits to the use of multiple accounts and avatars, and when AR and AD are engaged in intimate activity, their feelings becoming real, and they experience in the 'real' everything that their avatars experience in the virtual. RL and SL identities are differentiated, and referred to separately. Personal pronouns, especially I, are important in doing this. Arabic-speakers, on the other hand, do not show a differentiation in their personal pronoun referents of two or more different identities. They practice identity play in a different way. Their identity acquisition is reflected in the fact that they inhabit the virtual and take up positions of authority as did FM when playing the hostess in example 92. Their linguistic practices reflect a freedom and taking advantage of the
anonymity SL provides, hence they act and dress in ways that would not be permitted by their societies in real life. But their avatars are not given SLidentities in the same sense as the English-speakers, pursuing a virtual life that includes having a home, family and job in SL. Rather they are a less socially constrained version of their 'real life' selves. Evidence from examples showed that subjects of conversation involve real life identities, such as always asking where a person is from and where they are currently located in RL example 105.

Time is a choice. Most Residents abide by SL time as it is the one used in announcements of events such as meetings, parties, poetry recitals and weddings. However, not all Residents give SLT the same importance and significance. Some prefer to use their own real world times such as GMT or EST, and to avoid confusion use phrases of temporal distance, such as "in about an hour" in example 117.

Competence in movement skills contributes to the acquisition of a virtual identity. Example 115 showed that inappropriate movements like standing on a game table, even when accidental and unavoidable are cause for being apologetic. The linguistic use of indexical and deictic expressions in Second Life reflects a person's awareness of virtual context, differentiates between the different personas being referred to in communication, and disambiguates notions of place and time, whether in 'real' or virtual locations and times. It was claimed at the beginning of this chapter that our perceptions of the world are expressed through linguistic means in our communication with others, and that the language we use reflects our perceptions of the virtual setting, including place, time and persons (whether participants involved in interaction or not). Indexicality is the property of language that covers how lexical items pick out particular referents (Grundy, 2000) or index gender, and ethnicity. Indexical expressions are "referential expressions" (Mey, 2001: 54). A knowledge of context is required for the understanding and correct interpretation of indexicality; it is "pragmatically determined" (Mey, 2001: 54) and one of the ways to express this indexical relationship is though the use of deictic expressions or deictics, the units of deixis. Acknowledging that Second Life is a virtual place, recognising its context and being able to use the specific linguistic skills to bring this to the fore is all part of constructing a virtual identity.
CHAPTER FIVE

"Doing Virtual": Pragmatic Acts and their Implications for Identity Construction in Second Life
Chapter Five
“Doing Virtual”: Pragmatic Acts and their Implications for Identity Construction in SL

5. Introduction

After analysing SL lexis, deixis and indexicality, this chapter is concerned with linguistic analysis at the level of the clause, investigating pragmatic acts (Mey, 2001) and their significance in identity construction. The first two words of the title are derived from Winder's (2008) Being Virtual: Who you really are online. The verb 'doing' implies a connection to Austin's How To Do Things With Words (Austin, 1962) in which he introduced his notion of speech acts and the idea that not all language was assertive and could be treated as 'true' or 'false', but we could perform actions by merely uttering certain words. Pragmatic acts are a further development by Mey (2001) stemming from speech act theory (SAT), taking into consideration ‘context of situation’ (Malinowski, 1923) and social empowerment, but differing from speech acts in that speech acts are regarded as pragmatic acts but pragmatic acts need not necessarily be speech acts (Mey, 2001). Some acts "cannot be reduced to, or pinpointed as, a (number of) speech act(s)" (Mey, 2001: 210), such as an advertising slogan which is performing the act of invitation, or a command that is actually meant as an instruction that is face-saving. As pragmatics is concerned with the way that language is used, and the concern of this study is how language is used to construct identity, it is assumed that the pragmatic acts in the gathered corpus, for instance instructing noobs in the ways of the virtual world to save them embarrassment, have implications for the construction of a virtual identity in Second Life.

Identity has been strongly linked to 'performativity', as it is theorised that identity is discursively produced and 'performative' (Butler, 1990). Butler claims that identity construction is a discursive practice, and also a performance. Butler’s work is prefigured by Goffman (1959) whose view is that interaction with others is a 'performance' that is under the effects and constraints of the social context or 'setting'. The virtual setting in Second Life imposes various constraints on the interaction, as we
have seen in Chapters 3 and 4, whilst at the same time, giving a certain 'freedom' through the nature of the game, and also differs from other types of interaction in virtual environments such as chat rooms and social network sites like Facebook and Twitter in that it does not entirely adhere to the notion of disembodiment. Interactants are to some extent 'embodied' (Schubert et al. 1999; Fox et al. 2013) by their avatars. The virtual community also has its effects on the interaction, and in turn on identity in interaction as Taylor (1989: 36) claims that "one cannot be a self on one's own", hence, the context is of vital importance to the virtual communication and, in the case of the SL program, acts as the vehicle for communication as well as a shaper of the interaction. Conversations that take place in SL clubs differ from those that take place in SL homes, academic surroundings and business settings.

*Residents* (or expert *SLers*) employ language in different ways with different intentions. They, for example, instruct *noobs* (or novice *SLers*) to do various activities, such as how to put on virtual clothing, or dance with the intention of saving them embarrassment. In other words, they perform different *speech acts or pragmatic acts* as we shall come to observe. It is necessary in such a case to recognise the "full communicative intention" of a speaker (Levinson, 1983: 18). Levinson claims this can be achieved by "taking into account not only the meaning of [an utterance] U, but also the precise mechanisms [such as irony etc.] which may cause a divergence between the meaning of U and what is communicated by U in a particular context" (Levinson, 1983: 18). The mechanisms under investigation here are the various pragmatic acts performed by the speakers in interaction, specifically those of an instructional and mentoring nature as these are the acts that perform the identity shaping or (co)constructing (Norris, 2011) in the sense that the instructor is helping shape or co-construct the identity of the instructed with a certain immediate intentions (to save face / avoid embarrassment) and long-term goals (to learn how to become a *Resident*). Advice-giving has been generally viewed as face-threatening (Harrison and Barlow, 2009) and Hutchby (1995: 221) even claims that "a distinctive and fundamantal feature of advice-giving: In that it involves a speaker assuming some deficit in the knowledge state of the recipient". Extract 120 from the data provides a good example of how context and intentionality are important in understanding virtual communication in SL.
SW and AV left their virtual home, as the heading of the extract suggests, and were dancing at a club, when AV revealed that he was 'hungry' and wanted to go to a restaurant. As he took leave and offered to send a teleport request to SW, she stated the above (line 1), which at first glance is a simple command, shouted. Without prior knowledge of the social context, however, it would be unclear to an outsider why SW would order AV to stand up as he was not 'sitting down' in the first place. The utterance meaning and intention cannot be understood through semantic or syntactic means. Clearly there is a directive (Searle, 1969) pragmatic act in play here. In SL, when an avatar is being animated by a particular pose or action (in this case AV and SW had been dancing together), that pose or action will continue into the destination teleported to. To 'stand up' in this case actually means to stop the animation and not the verb’s literal meaning ‘to stand’. Once rezzed at the new destination, AV's avatar will appear dancing in a place or new social context where dancing may be inappropriate (It can be argued that one would not want to suddenly appear in dance mode no matter where the destination is.). The act here is not a mere order, but rather a warning with the intention being to save AV’s potential embarrassment and prevent him being viewed as a noob. Hence, the act is not a simple speech act of ordering, as the semantic meaning implies. Rather, it can be viewed as a speech act of warning with the short term intention of saving the hearer embarrassment and the long-term aim of the hearer acquiring a virtual identity. This complexity is the reason for referring to acts such as these as pragmatic acts (Mey, 2001) and not speech acts. Another reason is that these acts are technically not communicated through speech, but rather through text, and the roles of 'speaker' and 'hearer' are actually 'typist' and 'reader', so the acts are dialogue acts, not in the sense of Mey's dialogue acts (2001: 223) associated with bodily movement in dialogue, but rather associated with the fact that they originate from a language that shares attributes with both spoken and written English. Typed exchanges are "computer-mediated 'conversations'" (Herring, 2010: 1) implying similarities with spoken language, yet produced and received by written means. Some theoretical background on speech acts, dialogue acts and pragmatic acts will serve well here.
5.1 Acts: Communicative, Speech, or Pragmatic?

No matter how one may try, one cannot not communicate
(Watzlawick et al., 1967:49, cited in Mey 2001: 69)

The foundation for all linguistic behaviour is communication. "People engage in communicative activity whenever they use language" (Mey, 2002: 68). Mey refers to this as the Communicative Principle and claims it is the hidden condition for all human pragmatic activity. However communication is a complex process. When communicating, it is not always necessary to follow certain syntactic rules. Sometimes we say something and mean another. Sometimes silence in itself is a communicative act. This is why Watzlawick et al. (1967) expressed that it is impossible to do something (or nothing) and not be communicating.

British philosopher John Austin introduced the notion of performativity and the theory of 'Speech Acts' in a series of lectures that were published after his passing in the nineteen sixties. His theory of speech acts has generated an extremely wide interest, one that cannot be covered or commented on extensively here. In How To Do Things With Words, Austin (1962) claimed that truth conditions were not central to the understanding of language. Not all utterances can be classified as 'true' or 'false' simply for the reason that not all utterances are merely making assertions. In the utterance "I promise to come", a speaker's sincerity may be in question, and whether the intention to carry out the promise is there or not can be arguably observed after the fulfilment of the promise, but nonetheless, the utterance when uttered in real time is not a mere assertion. The speaker is performing the act of 'promising'. There is a communicative intention behind the semantic meaning of the utterance that can be recognised by the hearer. Such communicative intentions are, for example, warnings, invitations, congratulations, apologies, compliments and so on. The actual production of such an utterance in its literal meaning is named the locutionary act. The speaker's purpose for producing such an utterance, or rather, the communicative intention behind the utterance, is called the illocutionary act, such as apologising, complimenting, warning, and so on. For example, an assertion such as "I've just made some coffee", can be classified as true or false in its locution, but the intention behind such an expression may be an offer to the hearer to
have some coffee. Speakers do not usually produce an utterance with a certain intention, without expecting that utterance to have a certain effect on the hearer. That effect is called the perlocutionary effect or perlocutionary force of the utterance. Such an effect could be to account for a wonderful smell in the apartment (though this would not apply to a virtual world), or to get the hearer to drink some coffee. Austin termed utterances that involve offering, inviting, warning and so on as performatives and distinguished them from assertions and statements, which he called constatives. A performative utterance for example would be "I invite you for coffee", whereas a constative one would be "the coffee is hot", although Searle (1969) informs us about explicit and implicit performatives and that constative utterances can be pragmatic acts implicitly. These utterances perform an act such as a warning or an offer when they are uttered, and if those words were not uttered, the act would not take place. An example of an implicit performative in the form of a statement would be the utterance "You're fired". If uttered by a speaker of authority (a boss) to another who is under the speaker's authority (the employee), and the other conditions are fulfilled, such as serious conversation and setting, then this utterance changes something in reality at the moment it is uttered. The employee's state changed from employed to unemployed; the act of terminating the employee’s employment was performed with the utterance of those words.

Searle defines speech acts as "the minimal units of linguistic communication" (Searle, 1969: 16). In his words, "the unit of linguistic communication is not, as has generally been supposed, the symbol, the word or sentence, ... but rather the production of the symbol or word or sentence in the performance of the speech act" (Searle, 1969: 16). Again, the word performance is used here by Searle, who, under great influence from Austin, classified speech acts into several types based on their communicative function. "This intentional character of speech acts is among their most distinctive classificatory features" (Mey, 2001: 94). Searle offers a taxonomy of speech acts and classifies them into the following types:

- **Assertives** are acts that "commit the speaker to the truth of the expressed proposition" such as asserting and concluding.
- **Directives** "are attempts by the speaker to get the addressee to do something" such as requesting, instructing, questioning, etc.
- **Commissives** "commit the speaker to some future course of action" such as promising, threatening, etc.
Expressives "express a psychological state" such as congratulating, apologising, and thanking.

Declarations "effect immediate changes in the institutional state of affairs and which tend to rely on elaborate extra-linguistic institutions" such as excommunicating, firing from employment, declaring war, and wedding.

(Searle, 1979, 12-20)

Searle's classification is not flawless. It has been extensively criticised, and alternative taxonomies have been suggested (Vendler, 1970; Ohmann, 1972; Fraser, 1974; Hancher, 1979; Leech, 1983; Levinson, 1983, among others), although Searle does provide an improved taxonomy to Austin's. It was, however, and no doubt is the most influential of the theories of the philosophy of language and for that reason, attracted many linguists thereafter, who established their own rival typologies and classifications.

The analysis in this section of the present study is concerned primarily with pragmatic acts that fit under Searle's directives category also called exercitives (Vendler, 1970), and future directors (Ohmann, 1972), mainly the acts of instructing and requesting (Fraser, 1974), an important class of acts in SL. Hence, Searle's classification will be adopted primarily, although it is not the category label that is seen to have the importance, but rather the communicative intention (or function) itself.

The term pragmatic act is preferred to that of speech act in this study. It is seen that, not only is the medium of SL not speech, for the most part, but text-based computer-mediated communication (with the exception of the Arabic data), but also for the following reason:

The language we use, and in particular the speech acts we utter, are entirely dependent on the context of the situation in which such acts are produced. All speech is situated speech; a speech act is never just an 'act of speech', but should be considered in the total situation of activity of which it is a part (cf. Levinson, 1979), and therefore ... it is always a pragmatic act rather than just a speech act.

(Mey, 2001: 94)

When a resident communicates in Second Life, she or he is situated in the social context of the virtual surrounding, which in turn empowers, as well as limits, the communication in some way or another. It has been argued (Section 1.7.7) that part of Second Life's ideology is freedom; one is free to say and do what one pleases. This
notion is extremely fragile under such constraining circumstances. One can argue that SL provides psychological freedom but not linguistic freedom because language operates under situational constraints. It is evident that a social hierarchy does exist in Second Life, where one's SL age, experience, material assets, and virtual wealth are all significant. Fairclough (1989: 141) refers to these features of identity as "background knowledge", as they are the resources that are at the disposal of the members of the community when communicating. This does not work in the same way in the virtual world as in the real world, as some of this knowledge (such as SL age) can be obtained from a user's profile. Background knowledge is involved when performing the pragmatic act. The act itself is viewed through the language that is used to perform the pragmatic act, which is also governed by context and adaptability (Verschueren 1987, 1999). "The pragmatic act can be considered as adapting oneself, linguistically and otherwise, to one's world" (Mey, 2001: 215), in this case, the virtual world. The participants in this pragmatic act "fulfill their roles" (Mey, 2001: 217) in the social scene of SL. In example (120), SW is fulfilling her role as the more experienced resident and AV the appreciative and less experienced resident. This has implications for identity in that not only must one recognise one's emerging identity, but also realise the need to learn and develop that identity.

5.1.1 Complexity of pragmatic acts

We have seen how many linguistic parameters are involved in pragmatic acts. Speakers perform an act through linguistic means with a certain communicative function in mind, but these acts are also governed by the situational context, and the speaker’s adaptation to that context. Mey claims that "pragmatic acting can be defined as contextualized adaptive behavior" (Mey, 2001: 227). This kind of adaptive behaviour has been investigated previously and includes what Jacobs and Jackson (1983) call conversational influencing. This means that "speakers try to influence each other through the use of language in order to realize their goals" (Mey, 2001: 227). This applies to virtual communication in Second Life, as can be seen in example 121.

121. <PCclub4AUG2011.PARTY>
1 [08:47] TD: •¨¨*•,This ✰ DJ ✰ ROoOoOoOoOo X ! •¨¨*•,
2 [08:48] TD: •*♥´¨`• TP UR FRIENDS • UR MAN • UR GIRL 3 UR
3 SIDE CANDY & ANY ONE IN BETWEEN!•¨¨♥*•.
Influencing is a directive act in its nature, as it implies trying to get someone to do something. The complexity of this pragmatic act can be observed in that TD, being a host at a SL party, has two ultimate goals: being a good host and making money. This is done by making the event more popular by bringing in more people, which in turn improves the chances of receiving tips. There are two people running the party, and that has to be acknowledged. TD firstly performs the expressive act of complimenting the disk jockey (This DJ rocks!, line 1), and then making a public request to all the attendees to invite their friends etc. to join the party (lines 2-3). The compliment is an attempt to convince everyone that the DJ is worthy of a tip, and of course, the more people there are increases the potential for collecting tips. The other aspect of the act is that of politeness. Complimenting is a polite and face saving act (see 5.1.2 below) that disguises the ultimate face threatening act of 'fishing for tips'. There are multiple speech acts at work here, which constitute what is arguably one pragmatic act: a directive.

5.1.2 Politeness in the pragmatic act

The notion that pragmatic acting is 'contextualised adaptive behaviour' implies that it has connections with politeness. Most people can quite easily describe a person's behaviour as 'polite' or 'impolite' in their opinion. However, the criterion that allows us to apply such a description is not as straightforward. Watts claims that there is a "surprising amount of disagreement" (Watts, 2003: 1) amongst people over what is polite and what is not and Watts (2003) also distinguishes between first order politeness and second order politeness to refer to behavioural (non-linguistic) and linguistic politeness respectively. However, there is a general consensus that being polite is to do with being socially appropriate and considerate towards others. The way we use language reflects our politeness. Depending again on the context and intentionality, through linguistic means a speaker can be polite and 'save face' or impolite and 'threaten and lose face'. Goffman’s (1967) notion of ‘face’ connects it with notions of being humiliated or embarrassed. Thus, as Brown and Levinson (1978: 61) put it, "face is something that is emotionally invested, and that can be lost, maintained, or enhanced, and must be constantly attended to in interaction". They also distinguish between two kinds of face:
negative face: the want of every 'competent adult member' that his actions be unimpeded by others.
positive face: the want of every member that his wants be desirable to at least some others.

(Brown and Levinson, 1978: 61)

Therefore, depending on language, through pragmatic acts, a speaker or hearer can 'save face' or 'lose face', and so there are face saving acts (FSAs) and face threatening acts (FTAs) (Brown and Levinson, 1978). A speaker can also affect or influence the face of others, namely the addressee. Another observation of Example 120 brings us to realise that SW's aim in giving the command to AV to 'stand up' is not to threaten her own face (as a command can be a face threatening act in context) and AV's, but rather to save AV's face by foreseeing potential embarrassment or humiliation by issuing a warning. SW's FTA is actually her way of saving AV's face, but acted by SW, thereby adding to the complexity of the pragmatic act.

5.2 Methodological Preliminaries

The focus of this chapter is on how pragmatic acts of a directive and instructional nature at the clausal level of communication affect the shaping of virtual identity. A linguistic analysis methodology therefore includes identifying a number pragmatic acts in the corpus, observing them quantitatively and qualitatively, and discussing what such observations reveal. Identifying pragmatic acts is not a straight-forward task, though, as such complex acts do not have a single specific form that can be searched for in the corpus. A starting point to be able to identify many of the speech acts in the corpus is to search for speech act verbs. Identifying performative verbs helps in recognising performativity, linked to pragmatic acts, e.g. 'promise' in "You will see me. I promise you that". It would be impossible to observe every pragmatic act in the corpus, but this technique would identify a great number of examples that would be representative and suffice to conduct meaningful analysis. As speech acts, whether direct performatives or implicit, are known structurally to consist of a verb in the present indicative form, for example "I instruct you to click on the box" or "click on the box", a first step towards quantitative observation, is to search the corpus for verbs in the first person present indicative form. These could be identified and quantified. The corpus was scanned
manually from start to finish, listing every verb in the present indicative, such as get, see, go, teleport, click, put, wear, pay, touch, to name but a few. This allowed for the investigation of these speech act verbs individually in context, and the quantification of their occurrences could be recorded through conducting word searches via Wordsmith Tools (Scott, 2011). Only verbs that occurred more than once in the corpus were considered, with a total of 235 verbs (See Table 16 for the first 96) beginning with have (1007 occurrences) and ending with travel (2 occurrences). Verbs which occurred the same amount of times were listed in alphabetical order.

The verbs were subsequently categorised semantically into eight groups, not all relating to directives but covering the whole range speech acts so that a holistic analysis can be done:

1. **CMC-specific verbs**: referring to actions which are somewhat specific to CMC in general (click, drag, drop) and SL in particular (TP, rez, wear) in the context of the virtual world.
2. **social verbs**: referring to a social activity in SL (meet, talk, introduce, tweet).
3. **action verbs**: verbs involving a certain action or activity (make, go, take, find, change).
4. a. **cognitive verbs**: mental or cognitive process (think, believe, love, choose).
   b. **expressive verbs**: Those that involve the expression of a psychological state of mind (welcome, thank, apologise).
5. a. **motion verbs**: involving acts of movement (run, walk, fly, dance)
   b. **sense verbs**: involving those to do with the senses (see, look, feel, touch)

These categories are ordered according to how they are structured in the chapter. **CMC-specific verbs** consist of those verbs that are generally associated with computer-mediated communication and some are associated with SL in particular, and hence, I thought it logical to start with these verbs. As Second Life is also considered to be a form of social media (Page et al., 2014), it seems logical to proceed with the **social verbs** section. The majority of verbs are classed as **action verbs**, and hence a section on them. **Cognitive and expressive verbs** are similar in their nature in that they are mostly
expressives (Searle, 1979), and can be grouped in one section. Sense verbs are linked with motion verbs in that they relate to the senses and motions of the avatar itself, and hence, motion verbs are placed into group that is distinct from action verbs. As the results will reveal, instructions and requests are prominent speech acts when the utterance involves motion or sense, and this proved their importance in the construction of SLidentity, hence I end on this important note. Auxiliary verbs such as primary auxiliaries (be, have, do), modal auxiliaries (can, may, should) and other auxiliaries (need) were also identified in the corpus but were not involved in the quantification of the speech acts as this would result in double-counting, since all speech acts contain lexical verbs and it is not possible to have an auxiliary on its own in a verb phrase. Of course, it is impossible to capture every pragmatic act in the corpus due to their complexity, but the method of identifying present indicative lexical verbs enables the researcher to identify a representative sum. This does mean however that indirect requests like "I need help" and in interrogative sentences where be is lexical such as "Can I be a villain" would be neglected. This is the main drawback of the method, but the aim is to capture a large number of pragmatic acts and the present method does that.

In the figures for each analysis section below there is a non-speech act (Non-SA) category. This category represents instances where the quantified verbs occur in constative sentences that are not speech acts, including cases of reported speech, such as "he said that he will click" and past tense verbs where the two forms are the same such as get in "I had to get the LM".

The semantic categorisation of verbs, that is the five categories above, was done according to their form (Quirk et al., 1973) and meaning (Eagles report, 1998), taking into consideration Levin's English verb classes (Levin, 1993) and classified in a way complying to the norms and activities in SL. Levin's classes based on a verb's syntactic behaviour and "diathesis alternations - alternations in the expressions of arguments sometimes accompanied by changes of meaning" (1993: 2) are far too numerous and impractical to categorise for a research task that involves a specialised corpus like the one at hand. However, by understanding such concepts as locative alternations and transitivity alternations (Levin, 1993: 2) and familiarising myself with Levin's categories, I was able to formulate a list of categories that are tailored to the kind of communication that is present in computer-mediated communication in general and SL in particular, based on the subject-matter of conversations. Introspectively, I noticed that
verbs were associated with actions specific to CMC and SL (such as *rezz* and *click*), social interaction (such as *meet* and *visit*), motion and sense (such as *fly* and *see*), cognitive expressions (such as *thank* and *apologise*) and actions in general (*get, put, make*). Figure 40 shows a pie chart illustrating the distribution of the present indicative verbs in the corpus according to semantic category.

![Present Indicative Verbs in SL Corpus](image)

**Figure 40: Distribution of present indicative verbs according to semantic category**

The semantic categories were tailored to comply with types of communicative functions, so that a clearer understanding of their relevance to the notion of identity is formulated. Ideally, the adoption of Searle’s speech act categories would have simplified the analysis, but different verbs can be used to express different communicative functions. 'Have' can be a directive in "Have you got a pen?", an assertive in "Yes, I have a pen" and an expressive in "Have a nice day". Second Life brings forth various new linguistic and paralinguistic phenomena, and it is fitting that a new and tailored categorisation of verbs is made. Being a virtual world that is also considered a social network, it is logical that the semantic categories are tailored around the activities that are affiliated with and significant in SL.
Table 16: First 96 present indicative verbs and their raw frequencies in the corpus.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>have</td>
<td>1007</td>
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<tr>
<td>be</td>
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<td>do</td>
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<td>get</td>
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<td>go</td>
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</table>

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Social verbs give us insight into the social aspects of the game (example 122), CMC-specific verbs lead us to acknowledge and observe the group membership aspects of the language (123), motion verbs give us an idea about the embodiment by an avatar and the difference in ‘indexicality’ (Nunberg, 1998) between the virtual and the ‘real' surroundings (124), sense verbs (125) show us how users utilise such senses when the avatar is merely a graphic representation of self, one that does not possess actual senses.

122. <VWERampitheatresMAY-JUL2011.AD> Olivia Hotshot: Hi everyone, and welcome to our weekly Virtual Worlds Education Roundtable meeting. We meet here each week at 2:30 pm SLT for an hour.

123. <AVAJhomeJUL09.FM> [5:28] AJB: Drag and drop to rez


125. <ADARstacey'sJULY2011.CC> [19:08] AD: I love to kiss you and touch your soft skin

After manually allocating the verbs to their relevant semantic classes, Wordsmith Tools was utilised to observe these verbs in context. The use of this type of technology to observe speech acts in corpora contributes a new method to the field of SAT, with the theory of speech acts predating corpus linguistics as it is known today. Individually, the frequencies of the verbs were recorded, and the different speech acts that the verbs were involved in were noted such as the verb meet, being present in the corpus 79 times, 72% of which are speech acts classified as or having the communicative functions of request, offer (directives) informative (assertive), expressive, commissive. The other 28% are not classified as speech acts because they occur as reported speech or as past-tense verbs as explained above. For example:

126. <PCsweethartsJULY2011.CC> [10:25] BH: If you haven't had the chance to ask one of these wonderful people around you for a dance yet, go right ahead and do that....you may make a great new friend or even meet the love of your life but you won't know if you don't get the ball rollin'. :-) The dance floor is right in front of me. :-}
In Example 126 the verb meet is not performative. It is part of the pragmatic act of suggesting to others to find a dance partner and describes a hypothetical situation of the possibility of meeting someone that may become a "great new friend" or "the love of your life", but it does not carry performativity in this instance and hence cannot be classified as a speech act verb. However, when non-performative verbs appear in examples they may be commented upon in the qualitative discussion if they are relevant to the identity construction process. The method is concerned with identifying speech act verbs, but it is the wider pragmatic act that is the interest for the qualitative analysis.

5.3 Identity-Constructing Pragmatic Acts

This chapter focuses on the pragmatic effects of clauses, such as complex pragmatic acts of instructing, politeness and face-saving acts, and how at this level, aspects of identity performance can be observed. At clausal level, it is hypothesised that if a pragmatic act is performed in SL, in its entirety, considering all the contextual constraints and conditions, including the effects and actions that follow the pragmatic act in the short and long terms, then the actual acknowledgment of the act, its recognition virtually rather than in the 'real' setting, and acting upon it virtually rather than in the 'real' context, is the ultimate sign of the performance of a virtual identity.

It has been established that pragmatic acts are complex (Example 120) in that there is a performance that goes beyond the direct speech act. Pragmatic acts can be comprised of a coming together of a speech act, situated in and affected by a particular context, with a certain communicative intention and function, being face-threatening but at the same time face-saving. It would be safe to hypothesise that further complexity is possible and further, perhaps long term, aims can be achieved through the utterance of a series of pragmatic acts. Identity is never detached from any of the phases of the pragmatic act, whether it be the locutionary phase, the communicative intention of the speech act, its perlocutionary effects, the effects of the situational context or even the impact of the politeness of the act. However, one can argue that the speakers and the addressees do not have one simple goal in mind for each pragmatic act. There are different goals, some short term and others long term. A short term goal of a warning could be to help an addressee avoid humiliation and save face, but the long term goal could be the intent for that addressee to learn what is appropriate in such circumstances, to acquire the
required skills for future action and interaction, and hence the instructor helps the noob in constructing an identity one step at a time, or identity is (co)constructed (Norris, 2011). This can be seen in Second Life in interactions such as those between SW and AV (example 120), with SW issuing warnings and giving instructions and even AV making requests (example 133 below), all with various short term aims, but having in common the long term goal for AV to learn how to 'play the game', act accordingly, interact accordingly, blend into the community and acquire the virtual identity of a Resident in Second Life. In other words, several identity issues are involved here involving moving from novice (noob) to experienced player (SLer), and acquiring group identity (SL brother, partner, employee, academic). An example would clarify things here.

In a virtual wedding for instance, a person with authority in SL, usually a minister, would 'say' "I now pronounce you husband and wife". This speech act occurs in SL weddings, and the fact that a couple would organise a wedding, invite a number of guests, say their vows, pronounce their I do's and go on to live a life of a married couple, committing much of their time to each other and doing what married couples do, gives them an established virtual identity in SL, which they continue to perform. Interviews with married couples were conducted where accounts of their weddings were given, in addition to an account of life after marriage in order to be able to verify the perlocutionary effects of the initial pragmatic act. Example 127 below is an extract from an interview with a virtual couple in SL who report on their virtual wedding and married life thereafter.

127. <AVSCcouplehomeJUN2011.INT> (Names have been used, but anonymised.)
1 [20:38] AV: wow .... so tell me about the wedding ceremony
2 [20:39] Cher: was in a small chappel ... with us ... and a minister ...
3 no one else around
4 [20:47] AV: and the minister said the whole .... "do you
5 Sonny .. take Cher to be your lawfully wedded wife etc etc"?
6 [20:47] Sonny: yes
7 [20:47] AV: and you both said "I do'
8 [20:47] Cher: the normal wedding stuff
9 [20:47] Cher: yes

In this example of an act of reporting on a marriage (it was not possible to observe a marriage ceremony), the original pragmatic acts can be inferred. It is perhaps a common
misconception that marriage is done by the pronunciation of the performative words mentioned above by an authoritative figure, but rather it is a complex pragmatic act comprised of a series of speech acts, like the ones reported on above. The minister cannot announce the marriage unless he has asked the questions of content (directives, lines 4-5) and the couple have individually stated their approval (assertive, line 7). Only then can the minister declare the marriage. The example above and the continued interview script provides insights into the couple's life after marriage, that is to say, the perlocutionary effects of the complex pragmatic act and the fulfilment of it, showing the couple's sincerity and willingness to see the pragmatic act through. In the extended conversation Sonny and Cher admit that "people rush into relationships ... 1 day they meet a week later marry, a week after divorced", but that they were "very happy" and "been married for 8 months tomorrow" showing that are committed to each other. They love each other, declaring: "we just let each other find our way into each other's heart", and share a virtual home in SL: "we moved in together". They spend long periods of time together and have consummated their marriage virtually (Example 128).

128. <AVSCcouplehomeJUN2011.INT>
[20:49] AV: so how does that happen exactly? if you dont mind me asking?
[20:49] Cher: in SL you have to use a pregnancy hud
[20:49] Sonny: they both put on these special huds and then go do things like normal people do, except a click here, and a click there and hope that the woman's hud is set for the right time for the virtual egg to drop
[20:49] Sonny: somehow it only took us one try for each kid

They have virtual children as mentioned in "we have 2.. a girl born in May ... and our son yesterday" and even a virtual pet rabbit in their home: "that was our first pet together". The children are "at a babysitter" when the couple want to go out. It is clear that Sonny and Cher lead a life that resembles 'real' life in virtuality. The initial pragmatic act of marriage occurred wholly in the virtual setting, under the effects and constraints of the situational virtual context, and it is 'successful', in that the couple are married and lead a traditional married life in Second Life that is characterised by its longevity "married one year in September" (which was four months later) and consummation (offspring). The acknowledgement of such a pragmatic act, its fulfilment and longevity, is a strong sign of a virtual identity. The speaker's pragmatic competence (Koike, 1989: 279) is his/her "knowledge and use of rules of appropriateness and
politeness, which dictate the way the speaker will understand and formulate speech acts”. This use is needed to gain fluency when learning a foreign language, in a similar way that 'expert' identity is acquired in SL. An expert virtual identity in this sense is the SLidentity or avatar-life identity mentioned in section 4.2.1. It is characterised by being a form of realisation of 'real' life identity in SL, including having a home, relationship, family and source of income. In one sense, it can be argued that this is not very creative, as Residents take many of the real world conventions into the game. Marriage is a real world convention and consummation is also a real world attribute of a 'successful marriage', albeit a traditional one. There are other less traditional 'marriages' in SL between animals and avatars for example, but I did not come across any in the time of data collection. This form of identity is noticed among English-speakers, but there is no evidence that such an identity is adopted by Arabic-speaking users of SL.

A quantitative observation of pragmatic acts in the SL corpus will provide the route to qualitative analysis. As mentioned in section 5.2, pragmatic acts were identified in the corpus through the location of verbs in the present indicative form that had a performative force, which were in turn classified into semantic categories. The five semantic categories (CMC-specific, social, action, cognitive and expressive, and motion and sense) are dealt with individually, each section illustrated by a Figure dedicated to that specific category. The distribution of the verbs depends on the types of speech acts they are realised as in different contexts; hence some verbs may appear more than once in a figure, depending on how many speech acts they occur as. Different outstanding features that are of a quantitative nature are discussed, such as which verbs are more prominent than others, and which speech acts dominate certain categories, followed by a qualitative discussion of examples belonging to that category; a discussion follows, which highlights the pragmatic acts in their complexity, identifying the short term communicative intentions (for example to save face) and the long term goals (such as learning to act like a Resident) that are significant in the construction of SLidentity.

The speech acts identified in the corpus can be defined as follows in the Oxford English Dictionary, with examples provided from the corpus:

*instruction*: an act of furnishing with knowledge or information; to train in knowledge or learning; to educate, such as *right click it to take*.

*request*: the act of asking (a person) especially in a polite or formal manner, to do something, such as *can you TP me*?
command: to order, enjoin, bid with authority or influence, such as stand up to stop the animation.

offer: to present or tender for acceptance or refusal; to hold out (a thing) to a person to take if he or she desires, such as I can give you some furniture if you like.

(www.oed.com)

5.3.1 Right-click, wear and TP me: CMC-specific verbs

As discussed in Chapter three, Second Life has been a source of the emergence of some innovative vocabulary. Although the verbs in this section are not specifically innovative in form, they are innovative in their use. Their semantic properties have become subject to change in that they appear in contexts and refer to meanings other than those they are traditionally known for. In other words, in CMC they have developed meanings that are in varying degrees different to their real life denotations. For instance the verb wear which normally refers to the wearing of some sort of apparel, has in SL taken on the additional meaning 'to attach' different items that are not clothing such as a cigarette, cup of coffee or glass of wine to one's avatar. Being a new use of the word, its unfamiliarity has proved confusing and has made the act of wearing items a somewhat arduous task for newcomers, even occasionally causing embarrassment. Wear involves a process of clicks and dragging and dropping of clothing in addition to inventory items, rather than the act of putting on items of clothing.

It can be observed immediately from Figure 41 (page 189) that communicative intentions of instructing are quite frequent and recurrent. Many of the verbs, namely click, drag, upload and TP have a high speech act ratio of 81.6%, 100%, 100% and 91.6% respectively, meaning that out of all the occurrences of click for example, 81.6% are involved in speech acts (instruction: "click the brown ball") and the rest (18.4%) are not speech acts (non-finite structures: "I meant to click", "there was a choice to click login or cancel"). Figure 41 shows the distribution of the verbs in the types of speech acts in each category with their frequencies being reflected in the size of the font used for each verb as illustrated in the Key, making obvious the outstanding speech acts which have a wider occurrence and frequency across the types.

As can be observed in Figure 41, instructions are clearly the most frequent speech act, followed by speech acts of an assertive nature and then requests and offers. By far the most frequent verb that appears as an instruction is click, as in 129.
This is an instance of an automated message from the software behind a virtual steam train. When interacting with the train, these messages appear and instruct the user how to ride. Although this instruction is an automated one, and not a human communicator, it is still humanly programmed communication, and hence significant. It appears in the SL chat stream, and instructs a user to do something, hence performing the communicative function of instructing. It is not complex, though. There is no politeness in terms of face-saving or face-threatening activity here, and no short term or long term goal in mind. The user has a choice. The instructions include doing something, if you want something else to happen (lines 1 and 3).

Only 3 of the occurrences of click are accounted for by automated instructions. However, there are many more instances of click that are much more complex:

129. <AV3ALVhomeAPR11.CC>
1 [18:39]KFengine2-1 14.3.0 Black: Sit on the engine to ride
3 [18:39]KFengine2-1 14.3.0 Black: Click the engine to start.

130. <AVMSbuildsiteAUG09.SD>
1 [4:30] MS: Right click on the ground and choose 'create'
2 [4:30] AV: done that
3 [4:31] MS: So you should now have the building box on your screen
4 [4:31] AV: I do
5 [4:32] MS: Click on the cylinder so it goes yellow
6 [4:32] AV: done
7 [4:32] MS: now click on the ground
8 [4:32] MS: well done
9 [4:33] AV: ok ... how do I make it long and narrow
10 [4:33] MS: Click the 'object tab
11 [4:33] AV: where is it?
12 [4:34] MS: In the box on your screen you may have to click 'more,
13 to get the tabs
14 [4:34] AV: found it
Figure 41: CMC-specific verbs speech acts ratio

Font size key:
- Biggest: 50+
- Big: 36-42
- Medium: 29-25
- Small: 14-8
- Smaller: 7-5
- Smallest: <4
In 130 MS uses *click* in almost every sentence she types. These instructions help to collaboratively build identity as AV is being taught how to build and building is part of Second Life. Having a *SLidentity* involves possessing certain skills, such as movement and interaction with objects, and building is one of these skills. AV knows this and is happy to be instructed by MS, following instructions (lines 1-8) and asking questions (lines 9 and 11).

One of the other verbs involved in pragmatic acts is *TP*, which performs some instructions, requests (Example 131) and offers.

```
131. <AVGThawaiiAUG09.CC>
1   [15:12] GT: where are you?
2   [15:12] dont know where I am, gimme a min
3   [15:12] tp me again
```

In 131 GT feels she is lost and cannot find her friend with whom she came to the location they are in. A request for her friend to TP her again reunites the two avatars. It is possible to remain in communication through the private chat stream when the two avatars are distanced from each other, but the communicative intention of this request reflects that it is logical for the two avatars to be in the same vicinity when communicating.

*Roll* is another frequent verb in the corpus occurring 55 times, and it is specific to SL for the reason that in its context it refers to the rolling of dice virtually in a popular game called Parcheesi which is very similar to the familiar board game Ludo. An instructional sentence is automatically generated by the game engine (though it is a humanised one in Example 132: *Parcheesi whispers*), when it is someone's turn to "roll the dice":

```
132. <PC2aaDEC10.GAME>
[5:49] Parcheesi whispers: Doublets! You will roll again!
```

Instructions are also given to roll the dice by established players to the newer players who do not realise it is their turn. Such an instruction has the intention of informing players of the rules of the game and to maintain the flow of engagement.

Further examples would serve well here to illustrate the different types of pragmatic acts, with different degrees of complexity. Example 133 is an extract of a conversation...
involving an instructional scenario of an experienced resident (SW) teaching a noob (AV) how to purchase and wear new clothes.

133. AVSWs'shomeJUL09.SD
1 [8:57] AV: oh ... Ive got some nice suits
2 [8:58] AV: trying to wear them
3 [8:58] SW: RIGHT CLICK AND TAKE THAT.
4 [8:58] AV: I dragged and dropped them from my
5 inventory onto myself and Im covered by a poster of them
6 [8:59] SW: OK NOW DRAG TO THE FLOOR
7 [8:59] SW: RIGHT CLICK AND OPEN
8 [8:59] SW: NOW COPY TO INVENTORY
9 [9:00] AV: now drag and drop?
10 [9:01] SW: NOPE TAKE IT BACK
11 [9:04] AV: do I look better now?
12 [9:04] SW: ;)
13 [9:05] SW: YES MUCH.
14 [9:05] AV: thanks!

AV had attempted this beforehand, a process which resulted in his avatar wearing the box that the clothing items were virtually enclosed in, which is regarded as noobish and embarrassing behaviour. AV was not aware that the box of clothes had to be opened before the clothes could be worn. Opening the box involves the process of rezzing the box on the ground (where this is permitted), right-clicking the box, selecting 'open' from a pop-up menu, and copying the enclosed items into one's inventory. Only then can the items be dragged and dropped onto the avatar to be worn. In the first attempt, AV was dragging and dropping the box onto the physique of his avatar, hence, embarrassing himself. Prior to these instructions AV was unable to accomplish the difficult act of putting on clothes. An instruction reflects the superiority of the speaker over the addressee, in that it shows the empowerment of the two participants. The person instructing has the knowledge and the power and is teaching the addressee how to do something. In Brown and Levinson's terms [1987: 13] this is a potentially face-threatening act (FTA) as it shows the superiority of the speaker over the addressee in that particular social context. What is interesting here is that this complex pragmatic act is potentially a FTA on the behalf of the speaker (S), but its intent is for the hearer/addressee (H) to save face and be spared the embarrassment of dressing inappropriately, namely with a box wrapped around his body. In most cases it is presumed that the noob would not want to appear inappropriate, so he seeks out and readily accepts instruction, thus reacting to the act as if it was one of positive politeness.
by asking how he looks (line 11) and saying "thanks" (line 14). The experienced user is helping mould the *noob*’s identity, that is identity is being (co)-constructed (Norris, 2011) and instruction is a vital part of this. This type of act, although instructional and involving the verb *click*, differs from the act in 126 where the pragmatic act is of a more general sense of instruction with no direct face-saving intention. The transformation process from *noob* to *Resident* involves more than just language; one must know how to walk, talk, act and dress but it is through such linguistic means as instructing that the transformation process materialises. It may well be the case that a *noob* discovers or learns the act of dressing oneself independently, but usually instructional verbs in extracts such as Example 133 are face-threatening acts that are used for face-saving purposes. Another type of face-saving act involving *click* can be observed in 134:

134. < PCclubNOV10.CC>
1  [15:32] QD: ⊙⊙ Looking to dance??
2  [15:32] QD: Couples dance, **click** the multi-colored
3  ball on the corners of the dance floor
4  [15:32] QD: Solo dances , **click** the Colorful ball
5  hanging from the ceiling for both guys & girls .⊙⊙

QD is a disk jockey and host at a club and part of his job is to welcome residents and encourage them to dance, which involves the act of instructing them, particularly, pointing out which pose balls to *click* on. There is a face-saving element in that residents are expected to dance at clubs, and those who are not dancing are performing a FTA by merely not doing anything, or rather, not dancing. QD's instructive act (line 2) has the intention of encouragement and positive politeness, as he wants to be recognised as the host and disk jockey of the club, which has two implications on his behalf regarding a desire to be approved of: by his employer, so he maintains his job status, and by the club-goers, so they are encouraged to tip him. It is worth mentioning here that the most common L1 collocate of *click* in the corpus is *right* (Examples 130, 133), and the most common R1 collocates are *the* and *and* as Figure 42 shows.
The most common L1 collocate reflects that right-clicking is a frequent action, and the following the and and R1 words represent instructions "click and (verb eg. wear)" or "click the (noun eg. pose ball).

The pie chart (Figure 41) shows that the largest percentage of speech acts are those that are instructional in nature (33.7%) followed by informative or declarative speech acts (22.3%), which are the mere fact of informing or declaring that something is happening or will happen. A significant and notable amount (10.75%) is taken up by requests, and the verb tip especially stands out here, as it is normal to observe dancers and disk jockeys requesting tips at SL clubs.

135. <PCclub3AUG2011.CC>
[08:37] BHK shouts: ( "*.*.("*.*." [✔] LOVIN' THESE SOUNDS ➔ DON'T FORGET TO TIP THIS AWESOME DJ ('*.*..**') ,**")

136. <PCclub4AUG2011.PARTY>
[07:52] PO: [ [ DEEJAY STEFFO IN tHe hOuse ] ]
[07:52] PO: ☆("..'..*:•:**☆☆☆**:**:.:.')☆
[07:52] PO: ..:* DONT FORGET TO TIP YOUR SEXY HOSTESS!! *:-'
[07:52] PO: ☆("..'..*:•:**☆☆☆**:**:.:.')☆

It is uncommon for a DJ or a host to request tips for themselves, but they do request them for each other. The request is usually accompanied by an act of complimenting each other’s efforts. In 135, the host is calling for the crowd to tip the DJ and in 136, the
DJ is calling for the host to be tipped. An interesting aspect of the communication in 135 and 136 is the decorative element that accompanies the text. This graphic element is a sign of politeness because it is a representation of the cheerful nature of the communicative intention.

The verb *TP* is also common among instructions and requests, as can be seen from Figure 43 below:

![Figure 43: Collocates of TP](image)

The verb *TP* is used for commands, requests, instructions and commissives. The most frequent R1 collocate is *me* followed by *ur friends* as in *TP me* or *TP ur friends* occurring as either a request (Example 137) or instruction, depending on the context.

137. `<AVSW's'shomeJUL09.SD>`

1  [10:02] AV: o - oh this is a dating service place!

2  [10:03] SW: OK FIND ANOTEHR PLA[...]

These two lines of conversation occur straight after Example 120 above, where AV is searching for a restaurant to go to while dancing with SW at a club. After being instructed to "stand up" (Example 120) before he *TPs* out, he is also instructed to *TP* SW to the new location upon arrival. Teleporting works in two directions: an avatar can teleport to a new location and also offer to teleport another avatar to their location. The second line of 137 is a request by SW to be *TPd* to AV's location, but it also functions here as an instruction. SW is letting AV explore how to do things for himself, but also
knows that her presence is wanted and needed, and further instruction may be required at any point, hence the request simultaneously functioning as an instruction within this overall instructional frame of discourse.

Another instance of teleporting another avatar to one’s place can be observed in 138, where the DJ is encouraging people to invite their friends to the party.

138. <PCclub4AUG2011.PARTY>

[08:47] TD: •¨*•.>This DJ ROoOoOoOoOo× !•¨*•.,
[08:48] TD: .•*♥¨`•TP UR FRIENDS • UR MAN • UR GIRL • UR SIDE CANDY & ANY ONE IN BETWEEN!•¨*•.

This is clearly an imperative, but, lacking authority, it can only be viewed as a promotional discourse or advertising in the form of a request or suggestion, with the intention of filling the club with people, making it more popular, and increasing the possibilities of gaining financial income through tips by having more clubbers present.

Being a Second Lifer includes possessing technical abilities such as taking snapshots, uploading and downloading photos, interacting with objects and being able to give such objects to avatars as well as take from them. The mini episode in 139 presents instructional speech acts in learning how to upload and give photos to other avatars. This is another vital skill in SL that needs to be learned.

139. <AVAJhomeJUL09.FM>

[5:24] AJB: if you looke under FILE you will see UPLOAD IMAGE
and BULK UPLOAD
[5:25] AV: there is upload .. then image
[5:25] AJB: this will allow you to search your hard drive and upload
.jpgs or .gifs, or .pngs …which will then appear in your inventory in the
PHOTO ALBUM folder … in order for me to put them into the slide
presenter, I'll need permissions … this is VERY easy to do
[5:27] AV: so I drag and drop it from my inventory to your
profile?
[5:27] AJB: yes
[5:28] AJB: best to put them in a folder and drag and [d]rop the
folder … so create a subfolder in Photo Album … and move them into
that … and drag/drop that folder to my profile
[5:28] AV: and in contacts .....I give you permission somehow
[5:28] AJB: you'll need to do that for each picture … you don't
want to give me perms to all your inventory. :-) … now - to change the
permissions on a picture … when it is in your inventory … right click
on it and select PERMISSIONS … under NEXT OWNER CAN:
This episode is from the academic discussion part of the corpus. Here AJB is co-organiser of VWER. In this conversation, AJB asked AV for some pictures of the University of Mosul, and here AJB is instructing AV on how to upload those pictures to SL and pass them on to him. The amount of instruction involved is quite clear and the instruction verbs are highlighted in bold print. As mentioned above, instructions are face-threatening acts, positioning one speaker as superior and the other as inferior, so AJB uses an indirect approach to be more polite as a starting point for his series of instructions (line 1: *if you looke under...*), and as he continues, they become more direct (line 11). AJB also anticipates certain situations where he thinks AV will need instructing. He also gives sufficient preparatory information in cases where he thinks this is needed (line 7). AJB is quite aware that this instruction is necessary, as it affects AV's future participation in the virtual academic community. AV cannot be allowed to remain inferior, and such skills are essential and need to be possessed in the process of acquiring a virtual identity in Second Life. This is another instance of collaborative and (co)-construction (Norris, 2011) of expert identity and group membership where AJB is helping shape AV's virtual identity by making him an expert in the technical aspects of SL, so he will fit in with the rest of the members of the VWER group. However, AV is not always on the receiving end of instructions. In the episode in 140, AV is instructing SH how to interact with an object, namely a duck:

140. <AVShomeLeedsuniMAR2011.CC>
1  AV: ʾiḏa mā fī taklufa 3alīkī bas ʿaṛīdik ʾitta mi-lbaṭa
   if there is no expense on you (fem) I-want-you(fem) you-feed(fem)
   the-duck
   *If you don't mind, I'd like you to feed the duck*
2  SH: ʾil-baṭa
   the-duck?
   *The duck?*
3  AV: joʿana xaṭīyya miskīna joʿana
   hungry(fem) poor(fem) poor(fem) hungry(fem)
   *The poor thing is hungry*
4  SH: I'm hungry ya ʾini ..kef ʿaṣkilha dī
   I'm hungry oh eye-my how I-feed-her that
   (reading out loud) "I'm hungry". *Oh my! How do I feed her?*
5  AV: click ʿalīḥa
As AV and SH were walking to the university, they came across a duck. A duck in SL is a robot programmed to walk around, quack and ask for food through a flashing text message situated above its head. When it is full, this message disappears (Figure 44). SH is surprised to see a duck near AV’s home, as is expressed in her response upon being asked to feed him (140: lines 1-2). SH is not familiar with how to interact with this type of virtual animal and hence asks how she can feed him (line 4). AV instructs SH to click on the duck (line 5) and then select ‘feed me’ (line 7) from the pop-up menu.
It is rather logical that Arabic-speakers use English words when reading them, to avoid translating the obvious. However, when using CMC-specific words such as *click* in this case, the English word is used also. The use of such words reflects familiarity with the CMC and Second Life terminology and does not necessarily mean that the person speaks English. It is only appropriate to use the specific terminology, which is in English, as translating such words would strip them of their field-specific nature. SH is performing a virtual identity here in that she is engaging with the virtual world in general and a duck in particular, wanting to learn how to interact with it. One important skill amongst Arabic-speakers is the ability to write Arabic text from left to right as it should correctly appear on screen (since without adaptation Arabic text appears as English: from left to right). There is a small application that can make this possible, and such applications can be transferred between avatars. In episode 141, SH is instructing SG on how to use this facility:

141. AVSSfuturecityAPR2011.CC

1 SG: ba’den šu’ a’mal wear
then what I do wear
*Then what do I do? Wear?*

2 SH: eh sawwi ‘al-wear halâ’ ’iktib five dash w ’iktib ‘arabi halâ’
yes do the-wear now write-you(masc) *five dash* and write-you(masc)
Arabic
*Yes, wear it. Now write "five" "dash" and write Arabic after*
((Inverted Arabic text appears on screen))

3 SH: lâ no no haydi ’al’awwal
no no no this(fem) first
*No, no, no! This first.*
((types '/' on the screen))

4 SH: ha’di šeftfa? w ba’den five hâdi ’al-’awwal w ba’den five w ’iktib
‘arabi yalla
this saw-you-it(fem) and then *five* this the-first and then *five* and write-
you(masc) come on
*This, can you see it? And then "five". This first and the "five" and then write Arabic. Come on.*

5 SG: hek
like this
*Like this?*

6 SH: ‘aywa šaḥ
yes correct
*Yes! That’s right.*

Part of SG’s identity construction process is to learn how to write Arabic text and have it appear in the right direction (left to right) which requires a software application and
skills to be learned regarding how to use it. After being handed over the application by SH in the form of an inventory object, SG asks whether he is to wear the object (lines 1-3). It is expected that SG knows this as he has interacted with objects in Second Life before and can infer that such an object is to be attached to one's avatar (worn) so it can operate. SH confirms this and instructs SG to type "/5" (lines 4-6) in the chat stream, followed by Arabic text. SG fails at the first attempt (line 7) because of a possible misunderstanding as SH refers to the '/' sign as "dash", and since it is voice communication, it is possible that SG used the '-' key. It becomes clear that there is a mistake and so SH uses the text chat option to show the '/' sign, and SG learns in the end. There are several points to be commented upon in this episode: firstly, SH and SG both use wear (lines 1 and 2) which is SL-specific in this context, secondly SH code-switches and uses the English versions of the number five (line 4), and thirdly SH repeats herself twice to make her instructions absolutely clear (line 4). There are multiple speech acts at work in this episode, all with the communicative intention of instructing SG how to write Arabic. The long-term goal of these instructions is that from now on, and when engaged in future conversation with different audiences and participants, SG would be viewed as an experienced Resident who has the appropriate tools to communicate in Arabic. The politeness angle is again present, where a FTA on behalf of SH is regarded as SG's FSA in the future: no noobish behaviour would be present, and he would be regarded by others as an experienced communicator. Both participants work together to achieve the collaborative identity (co)-construction. SG himself also gains confidence and experience and sees himself as a more advanced communicator, and in turn a more advanced resident.

In the CMC-specific category, instructive speech acts are the most frequent. Qualitative discussion of examples of the verbs occurring in social situations reveals that the verb click is often used when instructing someone how to wear virtual clothing, build in SL, upload images and use SL embedded software. These are necessary skills one must possess to be able to become an established SLer and not possessing these skills reflects noobish behaviour. Many instructions involving verbs in this category have a long-term or "higher level" (Norris, 2011) communicative intention of face-saving and identity construction. The instructor helps shape the identity of the instructed, or as Norris states, identity is "(co)constructed" in order to "accomplish various higher level actions simultaneously" (Norris, 2011: 30).
5.3.2 Nice to meet you, tweet it!: Social verbs

The social verbs *meet, talk, visit* and *introduce* signal all kinds of social activity in Second Life. The social activity of *tweeting* (Page, 2012; Barton and Lee, 2013) and the present indicative *tweet* appears in the corpus as part of an instructive speech act (Figure 45) to *tweet* 100% of the time ("When you blog or *tweet*, please remember to include the tag #vwer"). Out of the 72% of the time that *meet* occurred as a speech act, 30% occur are expressives, as in such sentences as "nice to meet you", whilst the other 42% are spread across the other types of speech acts, except for instructions. *Visit* is an interesting verb in that the majority of occurrences are speech acts (90%) and that 65.5% are instructions, as in such sentences directing people to visit a website for transcripts of meetings, or for more information on a certain issue. Also the verb *introduce* appears in requests more than it does in introductions, as in "please introduce yourselves to the group".

As for Figure 45 below, it can be observed that the majority (70.14%) of social verbs are involved in speech acts, the most common being instructions (17%), offers (15.6%) and requests (13.74%). The act of introducing is low in social verbs, as is expressing and even committing oneself to a certain action.

The introductory sentences of every weekly VWER academic discussion group meeting are extremely similar and repeated. AJB, IO and KP are the organisers and usually start as example 142 shows.

142. <VWERampitheatresMAY-JUL2011.AD>
AJB: We *meet* each Thursday at 2:30pm SLT for an hour. Today is our first meeting in our new home, here on the Bowling Green Virtual Campus.
KP: You can also find and post pictures to our Flickr group and follow us on Twitter @VWER. When you blog or *tweet*, please remember to include the tag #vwer
AJB: So, lets get started – the way we usually do. Please *introduce* yourself in local chat – you name, what you do, and where you do it. No need to wait, go ahead and type away.

These lines consist of four of the social verbs, the first of which is an informative (*meet*), the second a request (*visit*), the third (*tweet*) is involved in an instruction,
although not the performative verb (*remember*), and the fourth can be considered as a request or a polite command (*introduce*). In this academic context, most members of the group know what to expect at the meetings and know they are to introduce themselves. But there are often newcomers who need to be familiarised with the activity. The act of introducing themselves as their ‘real world’ selves tears down the boundaries between the virtual and the real in this case, as the virtual setting becomes merely a means to bring together a group of people in remote geographical locations. However, as has been observed in previous chapters, aspects of virtual identity through language are still evident. The speech acts above in 142, however, especially that of introduction, do not entirely serve the construction of a virtual identity specific to SL, that is *SLidentity*, nor is it specific to the ‘real’ identity of a person who happens to be in a virtual setting. It is a little of both in that the members introduce themselves using their real names, but are represented by their virtual names in context, reflecting their hybrid and complex identities.
Figure 45: SL Social verbs speech acts ratio
Example 143 however, is an instance of the verb *meet* in an expressive speech act. This refers to two people meeting specifically in SL, and this has implications for identity in that there is a recognition that avatars are similar to humans in their physical appearance and also their social behaviour. The act of meeting in the virtual world is similar to that in real life.

143. <PClar's3AUG2011.IE>
[07:29] FR: M is my oldest and best friend here
[07:30] MP: thank you for the introduction FR, It's nice to finally **meet**, M

Example 144 is an interesting mini-conversation about languages. It is recognised by MM that English is the lingua franca of SL, so she expresses her desire not to be dominated by English completely, even in SL.

144. <PCsweetheartsJULY2011.CC>
[09:53] MM: nothing against the english of course, but we dont want to be swallowed up by them either
[09:53] GC: so lets **talk** a bit latin
[09:54] GC: gutta cavat lapidem - non vi - sed saepe cadendo

Hence, GC suggests speaking Latin, and also suggests (in Latin) that it isn't by force but repetition that water-drops can drill a hole into a stone and make it hollow. This metaphorical expression is a suggestion that if enough people use a different language frequently enough, then English can be replaced by another language as a lingua franca. This extract is taken from casual conversation in a club setting where a myriad of subjects are discussed merely for conversation, so boredom and inactivity does not become a factor of any club, which would affect its reputation. Users collaborate to make the social areas of the game successful. They become supporters of Linden Labs, upholding that commercial entity. The intention behind such pragmatic acts is that SL is not solely for the English speakers, and that virtual identity is not one that is limited by one language. The verb *talk* is also used as a commissive in leave-taking situations such as that in 145, where it is clear that brevity is a characteristic of computer-mediated conversation (Herring, 1996).
In the social verbs category instructions and requests appeared with the verbs visit, talk, and introduce, and also expressives, realised through the verb meet, were important in social aspects of communication such as greetings and leave-taking. These all revealed and emphasised that Second Life is a form of social media (Page et al., 2014) and that communication that served a variety of social functions does exist. Bartle (2004), as discussed in Chapter One, tells us that one type of player of games is the 'socialiser' and these verbs used instructively and expressively reflect that aspect of a person's identity. In addition, players support the social construction of the commercial identity of Linden Labs by socialising in the game and making it successful. Paradoxically, although CMC-specific verbs were seen to involve players co-constructing identity through their use, the social verbs are more about individual communicative acts, whilst supporting the commercial situation of the game.

5.3.3 Strike a nice pose and take a pic: Action verbs

The action verbs, get, go, put, take and make, refer to some sort of action performed in, but not specific to, the virtual world. Figure 46 shows how these verbs are distributed across the different types of speech acts they are directly involved in. Get is by far the most frequent action verb, occurring 401 times in the SL corpus, followed by go which has 270 occurrences. Action verbs act as the main verb of a speech act 56.8% of the time they appear. They are not directly involved in speech acts in the other 43.2% of their appearances in cases like 146.

146. <ADARstacey'sJULY2011.CC>
[20:54] AR: I want my kiss before i go to bed.

Here the performativity lies in the verb want and go is part of the time adverbial clause that accompanies the speech act. However, this is in itself problematic, as it can be said that "before I go to bed" implies a commissive act on behalf of AR. Indirect speech acts are impossible to identify quantitatively, and add to the complexity of speech acts in
general, which fortifies the reasoning for dealing with pragmatic acts rather than speech acts. However, for quantitative purposes, the occurrence of the verb *go* here is not regarded as a direct speech act, and therefore not mentioned in the statistics. It is the speech act of asserting (informatives) that stands out in the action verbs category, being the most frequent at 13.6% (Figure 46). However, it is not the most frequent verbs *get* and *go*, but rather verbs such as *make, find, change* and *live* that have the dominant presence, having between 20-35 occurrences as an informative speech act each, followed by *keep, put, show, give* and *try* (10-20), and finally *set* and *take* at less than 10 occurrences as informatives. Some informatives are more formal than others as in 147 and 148:

147. <VWERampitheatresMAY-JUL2011.AD>
OH: This is a public meeting, so we do keep a transcript of what is said in local chat. For a copy of transcripts, please visit http://www.vwer.org

148. <PCbeachwood10AUG2011.party>
[11:31] βя: on local i allways make jokes

The virtual setting of the above examples 147 and 148 has a direct influence on the formality of the communication. OH is the moderator of the academic discussion group and is informing the group members at the meeting, who are academics from all over the world, that any and all proceedings of the meeting and all meetings that occur in the local (public) chat stream are published on the group's website. βя on the other hand is in a different virtual setting: at a party. Informality is a characteristic of the communication in such settings, which can be observed in the language used by βя (not capitalising the first word in the sentence or the 'I'), and that of others around him.

*Get* and *go* comprise 8% and 6.7% of the requests category respectively, making them the prominent verbs of that category, which is itself the second most frequent among the other speech acts at 9.6%. *Find* and *teach* also stand out in this speech act, occurring between 10-15 times, while *make, take* and *put* appear also at under 10 each. It is not surprising that requests are the second most frequent speech act amongst action verbs, which consist of a larger number of verbs than the other categories. Requests are important in communication, and especially in SL when the construction of a virtual identity is the aim of various pragmatic acts, with people wanting to learn how to act and what to do, and hence request help from others. *Noobs* who want to familiarise
themselves with the ways of Second Life will request help from the more experienced Residents, and it appears that the most frequently used action verbs are the ones mentioned above, in such cases as in 149.

149. <VWERxmasprtyDEC10.CC>
[14:37] AV: how can I get additional prims for my place?
[14:37] AG: A, ask G

AV here is requesting advice or instructions from the more experienced group of SLers on how to obtain additional prims (see Chapter 3 section 3.2.2) for building and furnishing his residence. As part of a virtual identity, AV wants a residence that reflects a sophisticated identity. Having non-basic furniture that is free of charge and does not reflect noobity is a must. The more prims AV has, the more sophisticated furniture he can have.
These are also aspirations brought over from real life. The pragmatic act in 149 involves a speech act of requesting within the more complex and long-term pragmatic act with the goal of becoming more advanced and experienced in SL, which in turn contributes to the advancement of individual virtual identity. Norris claims that identity is a "process rather than a being, as [it is] always developing rather than static" (2011: 30) and Mullany (2006: 159) tells us that "self and identity develop through practices with others", so building a virtual identity is a dynamic process and not a static one.

Another instance of an action verb as a request can be observed in 150. MD is indirectly threatening another person when DM makes a request for such an act not to materialise:

150. <PCMystclubDEC12.CC>
[14:42] MD: who said it was his teeth he had to worry about
[14:43] DM: no dont go lower moth ... think of me ... ;)

Get and go are also involved in instructive speech acts with 6% and 5% of their occurrences being instructions respectively. Understandably, go occurs as a commissive speech act even more often (9.5%) as it is involved in the common leave-taking techniques, in the preparatory stage for leave-taking, which is stating that one must leave, and committing oneself to it, as in for Example 151.

151. <VWERxmasprtyDEC10.CC>
[15:09] JO: got to go - thanks and merry Christmas everyone! :) And a happy New Year!

Try is a verb that also stands out in this category with 84 entries in the corpus, and being the verb of a speech act 92% of the time. It is most frequent (45%) as a suggestion (Example 152), and often appears as a request and a commissive (13% each).

152. <AVOGclubMAY10.CC>
[16:44] AV: takes some time for the place to rez completely
[16:44] OG: well here always does ... try a rebake now

OG here is suggesting to AV to try a rebake. This is a process that involves a reload or re-rez of one's avatar and clothing, so as to help prevent lag. AV states that the place is taking a long time to rez, and OG suggests that a rebake would help this. The process is easy and involves right-clicking on one's avatar and choosing the rebake option from
the pop-up menu. This is also linked to identity construction in that the broader pragmatic act of this speech act is intended to teach AV how to keep the flow of communication and 'playing' or virtually living going. Speeding up the loading process means other participants would not have to wait, and a fluent communicator is a good communicator. As AV is being helped in this matter, this also reflects "(co)constructing of identity" (Norris, 2011) as discussed above (5.3.1).

The concept of lag plays a big role in the lives of SLers as Internet connections around the world vary in speed, resulting in some people with faster connections having to wait for others with slower connections. The frustration is sometimes expressed in the text, as in 153.

153. <AVSWLVhomeDEC10.INT>
1 [19:24] AV: we can see you but you're grey
2 [19:24] SW: me too... right now you look naked
3 [19:24] LV: everything grey to me
4 [19:24] AV: there's no lag here either
5 [19:25] LV: no its my connection stupid [company]. ok gotta go try
6 rezz ... brb ... sorry

As can be seen from 26, lag can be quite an embarrassing and frustrating experience, due to connection problems. When the three participants in the conversation first appear at AV's home, LV appears naked to AV and SW, while she is not even visible to herself. We see her express her frustration (line 5) at the internet service providing company and commit herself to try and rezz (log out and back in - reload). Her apology (line 6) also implies that lag can be frustrating to others as well as the person experiencing it, as they have to wait for the person to be able to properly engage in the conversation and also be aware of their virtual surroundings.

Action verbs refer to what activities and actions people do in Second Life, such as going places, getting things, giving and taking, making and building, putting things down and picking things up, finding, changing, and trying (new) things and showing them, even exiting SL and re-entering. The verbs get and go were the most frequent in this category showing that people always communicate where they are going and what they want. This category has implications for reflecting awareness of virtual surroundings, in a similar way to deictic expressions did in Chapter Four, but more importantly here, involving the other participant in the conversation and making them aware of the virtual setting, and where a person is going and what they are doing. These are the virtual
actions of an *SLer* and our actions reflect who we are. These actions are also important in the process of instruction and identity (co)construction as observed in 152 above, where OG was helping AV in this process.

### 5.3.4 *I think I love you*: Expressive and cognitive verbs

Cognitive verbs such as to *love, think* or *want*, involve mental processes, whilst expressive verbs involve expressing a psychological state, such as *welcoming, thanking* or *apologising*. These two categories are brought together in this section due to their semantic similarities. Seventy eight percent of the cognitive verbs that appear in the corpus are speech acts, and by far the most frequent type of speech act is the expressive at 33.4% (Figure 47), with the verbs *welcome, love, thank* and *think* dominant in this category, as well as the appearance of the verbs *believe, wish and hate*, suggesting that acts of individual expression are important in SL conversations. The frequency of *welcome* is contributed to in ritualistic welcomes performed by club hosts, as in Example 154, which is a series of *welcomes* performed by BH in one evening, arranged in chronological order. There is a 'real' person behind BH's avatar and these examples are not automatically generated as it may seem. However, club hosts such as BH are paid to welcome people to the club and say *goodbye* when they leave, so the use of this word is therefore an essential feature of a host's identity, though the repetitive and ritualistic form of welcome, suggests BH is using copy and paste or preformed text-segments to respond quickly.

154. <PCsweetheartsJULY2011.CC>
1   [10:04] BH: Hey Young!! *waves* **Welcome** back, it's always good to
2      see you again. :-)
3   [10:09] BH: **Welcome** to Sweethearts Iolanda!!!! It's nice to meet you,
4      please let us know if you need anything. :-)
5   [10:15] BH: **Welcome** to Sweethearts Spirit. :-) 
6   [10:41] BH: **Welcome** to Sweethaerts IRON!!! :-) 
7   [10:44] BH: **Welcome** back Tiger!!!! I hope you're having a good
8      time getting to know the awesome people around you. :-) 
9   [10:54] BH: **Welcome** back Uno, it's always an honor to have you
10          here. :-) 
11   [11:08] BH: **Welcome** to Sweethearts Hyacinth. :-) it's nice to have you here. :-)

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Figure 4.7: Cognitive and Expressive verbs speech acts ratio
BH allows the attendees at the club to realise who is new and who is a regular frequenter, as he types *welcome* to newcomers (lines 3-6, 11), and *welcome back* to regulars (lines 1-2, 7-10). As can also be seen, another pattern is evident as BH always uses :-) (smiley face) at the end of his welcoming communications, implying that there is always a smile on his face, another identity feature of a good host. Hosts and DJs have a marketing identity, which enacts a club's or other social site’s corporate identity, sometimes through automatically generated texts, as in 155, where the welcome mat or landing area that a *SLer* lands on in a new cyber-geographic location is programmed to automatically welcome visitors.


Part of the corporate identity of these virtual locations are their welcoming gestures, which are usually also accompanied by the provision of a *notecard* stating the rules of the land, if any, and a *landmark pin* which can be used to return to this land on future occasions. *Gestures* are common in SL, and they are "scripts that allow users to communicate through body movement or sounds" (Diehl and Prins, 2008: 104) that appear in a pop-up list and are activated by clicking on them or by textual shortcuts. These gestures also perform actions and can be seen as shortcuts to typing those speech acts, with the additional feature that they are also often accompanied by audio effects, as in 156, or animation of the avatar.

156. <AVShomeLeedsuniMAR2011.CC>
1 AV: Welcome back - I miss you ((waving gesture accompanied by audio))
2 SH: Thank Youuuuuuuuu ((audio gesture))
3 AV: bas li: ḥad ʾal-ān mā fi šo:t ... ḥinti ḥiṣlami wala ḥe:
   but until now there no-is voice ... you are-talking or not?
   *There's no voice yet, are you talking?*
4 SH: tayeb w ʾal-lāʾ ʾākīd fi šo:t
   ok and now surely there-is voice
   *Ok, surely there is voice now*
5 AV: hala fīl šo:t ʾawwa welcome back
   hello to the voice yes welcome back
   *The sound of your voice is welcome. Yes, welcome back.*

SH is an Egyptian Arab resident of SL and communicates in voice using her microphone. When being given a tour of AV’s house and the University of Leeds
virtual SL campus, she excuses herself and goes 'away from keys' (AFK) for a few minutes. On her return, AV uses a gesture from the list to welcome her back (line 1), as her voice facility does not appear to be working. She replies with a 'thank you' gesture of her own (line 2). AV points out that her voice function is not working, and she rectifies that. When AV hears her voice this time (line 5) he utters the words "welcome back". It is customary in CMC in general and certainly in SL in particular to "welcome back" people who have been away from their personal computers for a while. This implies that there are many words and gestures that are customary with SL and communicated in English even among Arabic-speaking residents. Evidence shows that other such words are click, lag, TP, AO, and land, among others.

Other familiar expressives are found in replies to such welcomes, as in Example 157.

157. <PCsweetheart1AUG2011.CC>
[10:06] PC! nice to see you!! :))
[10:06] CH: ❤❤☆❤❤☆ Thank Youuu!!!!❤❤☆❤❤☆

The act of thanking appears 180 times in the corpus, many of which are accompanied by graphical decoration and play such as in 157, signalling affection. They are not speech acts in themselves, but are an important element of making visible the emotions of the pragmatic act. Residents who have developed an expertise in SL communication, and CMC users in general, are known to use these embellished expressives, as they realise that a simple thank you text is lacks the emotion and affection that would be evident in audible speech, such as voice pitch, intonation and lengthening and in eye contact and even hugging. These paralinguistic features of the text enhance emotion and are a sign of competence in SL communication, which in turn is a sign of a "developed" SL identity in Mullany's sense (2006: 159) that "self and identity develop through practices with others". There is more graphical play with other expressive forms such as expressing love (Examples 158 and 159).

158. <PBChereandthereOCT10.CC>
[20:49] SW: I LOVE YOU I LOVE YOU I LOVE YOU!!!!!!!!!!

159. <ADARstacey'sJULY2011.CC>
[19:10] AD: how did i get so lucky to meet you ?
[19:10] AR: I'm the lucky one
In 158 the loud voice, reflected in the capitalisation, and the repetition of I LOVE YOU, shows emphasis and determination in what is said through text. These textual features add to the meaning of the pragmatic act. However, what is interesting is that love is regarded as quite a serious issue in SL. This is reflected in the way that residents express their love for each other. Having the I love you expression accompanied by graphical decoration similar to that in 157 is perhaps regarded as playful or "carnivalesque" (Danet, 2001) and lacks seriousness. Danet states that "the nature of the computer as medium fosters playfulness" (2001: 24) and that anonymity is a "factor that promotes playfulness" (2001: 32), but this expressive is meant to come from the heart, that is, from the 'real' person behind the avatar where anonymity has no place. To some extent surprisingly, the I love you expression appears 81 times, and there are only three instances that involve capitalisation or repetition, whilst none involves any sort of graphic decoration, suggesting that appearing sincere is more important than playfulness here; a graphical embellishment would perhaps be regarded as detracting from the seriousness and sincerity. The other 78 instances are similar to that of 159 where we can see the conversational build up to the I love you expressive in AD and AR's courting of each other. In a different context such as in 157 when less serious issues are involved (thanking in a club), and in a more public venue, the playful performance is there. An important part of virtual identity is an awareness of the realness of feelings in SL; that people do love, hate and are hurt by break-ups. This is taken seriously and is reflected in the seriousness of the language that involves such emotions, language which quantitative results prove is almost empty of language-play.

Hate is also a strong emotion, and is affiliated with anger; hence we find instances of hate in the corpus that feature capitalisation to signal shouting and blazing emotions Example 160.

160. <PCbbMAY11.CC>
[16:45] XB: ❤ OHH M F'N GOD …. I HATE THIS TUNE!!!❤
XB is at a club where the DJ plays a song that he does not like. Being a 'loud and crowded' club setting, interestingly XB chooses to capitalise his text to resemble shouting which is closely linked to the strength of the emotion, and to make 'his voice' heard, despite the fact that it is text. Capitalisation makes text stand out from other non-capitalised text in the same way that shouting stands out from normal level conversational speech (Danet, 2001), and XB represents this fact in his writing. XB's line is also possibly offensive, and he uses hearts at the beginning and the end of this line to mitigate the possible offence. In 161, once more when intimacy is involved, the matter is regarded more seriously in a similar way to 158 and 159, but no capitalisation or repetition is used. It can be said that display is in public and not intimate settings (Example 161).

161. <ADARstacey'sJULY2011.CC>
[18:41] AR: I hate being away from you.

Hate appears 39 times in the corpus, and 37 times as a verb. It is the performative verb in a pragmatic act on 26 occasions, and 21 of those are expressives, with 2 requests and 3 informatives, making the expressive by far the most frequent pragmatic act.

The most frequent cognitive verb by quite a large margin in the SL corpus is think occurring 316 times. It is one of the most frequent verbs occurring as an expressive speech act (52% of its occurrences), alongside welcome, thank and love. It is also carries performativity in requests in 36% of its occurrences, and occurs as a warning 6 times. Think is often used to express an opinion about a certain entity in the virtual world, or about the virtual world. When discussing SL in an interview, ZZ (Example 162) mentioned the strong social aspect of SL and that it was extremely easy to make friends and become close.

162. <AVZFleedsuniNOV10.INT>
[17:35] ZZ: i think friendships can be forged ... strong friendships

Another example which occurred during discussions amongst academics is where BBM expresses her thought about a similar social matter (Example 163).

163. <VWERampitheatresMAY-JUL2011.AD>
BBM: i think the charm of virtual worlds is that you can dress how you please and most people accept you easily

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The *I think* phrase is an "interpersonal marker" that "generally co-occur[s] with propositions describing the world" (Fetzer, 2008: 386). Fetzer (2008: 389) claims that "cognitive verbs are one means which allow" their users "to present themselves—and the discourse identities they talk about—as public and private figures". To be a part of the virtual world, one has to have different subjective opinions about it, and the interpersonal nature of verbs such as *think* allows one to make those opinions public. Such opinions, as the one in Example 163, are expressed with *I think* in utterance-initial position, such as stating the fact that dressing how one pleases is one of the freedoms SL offers to its residents. Cognitive verbs reflect interpersonal identities, public, private and subjective views in SL, that is, our opinions and attitudes towards SL, its propositions and our communicative partners therein. Public and private emotions are textualised differently, with graphical embellishment characterising public display acts and private acts being less embellished.

5.3.5 *Feel the music, touch to dance and shake it*: Sense and motion verbs

Sense verbs are those reflecting the human senses, while motion verbs are those expressing any type of bodily movement of a resident's avatar. These two categories are connected to each other in meaning in that they show an awareness of the virtual surroundings whether by sense or movement. There are five sense verbs that appear in the corpus: *see, look, feel, hear* and *touch*. The verbs vary in their frequency. *See* is by far the most frequent (356 occurrences) and appears in a speech act almost 60% of the time. About half of these are acts of expressing, such as in the collocations "nice/great/love to see you". *See* does appear, however, as a request (14.5%) "can I see your house?", informative (9%) "I can't see anyone", instruction (4.5%) "see if it changes", and rarely as an offer or a suggestion "let's see AR". *Look* is more diverse in its speech act activity than *see*, being involved in nine different kinds of speech acts, such as requests "shall I look around?", informatives "I dont look like V", offers "look for me" (as an equivalent of "call me" as an offer), expressives "you all look gorgeous", commands "look on the bottom of your screen", commissives "I'll look" and suggestions "you'd look great in a wig and heels". *Feel* appears mainly as an expressive (40%) such as in "I feel awkward", or as a command (26.5%), frequently in the form of "feel free to" followed by an action or motion verb. *Touch* is the least frequent of the sense verbs.
Figure 48: Sense and Motion verbs speech acts ratio

The pie chart illustrates the distribution of various verbs and speech acts. The main categories shown include:

- **Look**: 21.70%
- **Feel**: 9.70%
- **Command**: 2.50%
- **Expression**: 1.85%
- **Warning**: 0.10%

Within these categories, specific verbs are categorized under each speech act, as noted in the chart: for example, under **Look**, verbs like **see** and **move** are detailed.
However, it is somewhat synonymous with click in the sense that an avatar does not realistically ‘touch’ anything, but rather it is the mouse that is hovered above a certain item and clicked when ‘touching’, hence also explaining why the majority of the occurrences of touch are in speech acts of instructing to ‘touch’ something, that is to click on it with the use of the cursor. What is interesting, yet expected, is the absence of the verbs taste and smell, reflecting the absence of these two entities in a virtual surrounding. The only actual occurrences of these two words in the corpus are their realisations as nouns such as in "you have good taste" and "I love the smell of coffee in the morning", the second relating to real-world sense and activity, rather than in SL.

The verb shake is the most frequent motion verb in the corpus and occurs mainly in one form, as a command by disk jockeys and hosts at SL clubs aimed at those present and dancing to "shake your ass!" (Figure 49). Other verbs in this category are move, run, sit, dance, follow, fall, and stand and they appear in different speech acts depending on the different situations and contexts. Follow, perhaps expectedly, is an instructional verb 72.7% of the time, usually in a “follow us” or “follow me” collocation.

Figure 49 shows the speech act ratios for these verbs in a pie chart. The most important speech act in this category is the expressive (21.7%), followed by the informative (19.86%). 11.46% of the speech acts are requests and 9.7% are commands (The command speech act is dominated by the verb shake, as in Figure 50).

![Figure 49: Concordance of shake: 20 of 40 occurrences](image)
Seeing is a very important feature that contrasts SL from other more traditional CMC platforms such as internet chat. *See* functions as a sense verb in its literal use ("I can see you now, you've rezzed") reflecting these visual aspects and also as a verb of relation ("I'm seeing someone") in its non-literal use. As *see* is the most frequent verb by far in this category, it is useful to observe some of its occurrences in context and comment on the different pragmatic acts. There were no occurrences of the verb *see* meaning 'to visit with someone', as all the occurrences were associated with visual perception. Expressing that it is 'good to see someone' (164, 165) is a common thing in real life and in SL.

164. <PCclubNOV10.CC>
[16:47] ALG: Hi C!! good to see you :)

165. <PCsweetheartsJULY2011.CC>
[11:14] INC: Mo!!!!! lovely to see you hugs tight xxx

This act usually requires two avatars to be 'physically' present in one place at the same time. People can communicate with each other through the private chat stream while distant from each other, but 'seeing' each other requires a person to be present at the scene and visible to the other avatar. In 166, AV is requesting to see his niece (LV's baby daughter) through the verb *see*.

166. <AV3ALVhomeAPR11.CC>
[19:31] AV: let me see that niece of mine ... OMG She's sooo beautiful
[19:35] LV: in a month she be 4 yrs old
[19:35] LV: ..•••°•••..né LOL! ø ..•••°•••..
[19:35] LV: and she looks just like me

This request is a role-playing act. LV is not AV's real world sibling, but the similarity in the first and identical last names triggered the idea that they could be siblings in SL (Imagine that they are called Bugs Bunny and Hugs Bunny), and therefore both chose to play those roles. When LV gave birth, AV became an uncle, and hence refers to her daughter as his niece. Pleased by the news that he has become an uncle, AV asks to *see* his new relative. The semantic meanings of *see* (to perceive with the eyes and to view or visit) complement each other in illustrating AV's desire to fulfil his role as an uncle. Other instances of *see* are sensory only, and often informative (167).
Occasionally, due to lag, an avatar finds himself being spoken to or welcomed to a place when they still cannot see who is communicating with them. Rather than waiting for everything and everyone to *rez*, DY in 167 apologises for not being able to carry out the communication until she is aware of who is talking to her, rather than making people wait. From the other people's view, the land is visible and so is DY, so not receiving a response might be considered rude or frustrating. OH makes an interesting statement in 168.

Her sighting of "a winged man on skates doing twirls" reflects the fantastic in SL (Figure 50).

OH's choice of words emphasises the limitless opportunities of SL through her foregrounding of the adverbial phrase "only in SL", shifting the focus from the actual
sight to the fact that it is only possible in SL and part of the creative nature of the virtual surrounding.

Any discussion about speech acts of the verb *see* would not be complete without observing instances of leave-taking and the common "see you (later/soon)" collocation (169).

169. <AVMSbuildsiteAUG09.SD>
[4:27] HH: Nice to meet you AV
[4:27] MS: Bye He
[4:27] AV: u 2 He ... byeeee
[4:27] HH: See you MS - enjoy the hols

As in real life, it would be improper to just disappear from a conversation without taking leave. The actual words constitute a commissive speech act as their full form without ellipsis would be "(I will) see you (later/soon)" which commits the speaker to making an effort to see the hearer at the later stage. In reality, such a speech act is more of a hopeful wish rather than a commissive. When a resident goes offline, it is expected that they will return, but not necessarily a known fact, and you cannot commit to something that you do not know.

Being the second most frequent sense verb with 153 occurrences, *look* is involved in a number of different speech acts, ranging from instructions (5%) and requests (13%) to informatives (22%) and expressives (20%). The frequency of the two verbs *see* and *look* emphasises the importance of sight in the virtual setting and perhaps how it compensates for the absence of taste and smell. *Look* appears as an instructive verb in 170, where CR is directing people's sight to where they can find a *landmark* (LM) to the whereabouts of the ice-skating rink.

170. <VWERxmasprtyDEC10.CC>
[15:37] AV: lets all go skating!!!
[15:37] ArC: Where is the skating rink again?
[15:37] CR: there are skates.or poseball animations to use at the rink Iggy
[15:38] CR: LM to rink. look at the aduitorium wall
As can be seen in Figure 51, the ice-rink referred to in 170 is a Quidditch pitch remade for skating, emphasising again that anything is possible. CR understands that as an academic group, some attendees of this Christmas party may be in SL solely for academic reasons and attendance at the group meetings and may not be familiar with the whereabouts of the ice-rink; moreover, they may be unfamiliar with the ways of SL, for example, the use of pose balls to dance and skate. Therefore CR gives the instruction to *look* at the auditorium wall, where she has placed a landmark for the group to follow.

Looks are important in SL. Appearance is one vital factor that distinguishes the *Residents* from the *noobs*. This is why residents spend much time, effort and even money editing and perfecting their appearance. The collocation (look* + appearance describing words) is shown in Table 17:

<table>
<thead>
<tr>
<th>Look*</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>18</td>
</tr>
<tr>
<td>Great</td>
<td>7</td>
</tr>
<tr>
<td>Nice</td>
<td>3</td>
</tr>
<tr>
<td>Pretty</td>
<td>2</td>
</tr>
<tr>
<td>Beautiful</td>
<td>1</td>
</tr>
</tbody>
</table>

Interestingly, there are no instances of "look bad/ugly/hideous/funny", which reflects the success people are having in trying to impress with their appearance, or that people are just courteous. This does not negate the fact that people are wary of their appearance, but rather shows a preoccupation with it. Davis et al. (2009: 94) claim that "the more realistic" an avatar's appearance, "the greater is the sense of presence". This
sense of presence is what makes SL feel and seem 'real' and more sophisticated avatars resemble humans in a closer way than noobish avatars. Other avatars that are non-human are also distinguished by their sophistication, such as angels, furries, animals and vampires. Some of these avatars are free, and these are the ones that lack sophistication, and the ones that are bought with linden dollars are characterised by having higher definition, more detail and more accessories. People are also preoccupied with appearance because of the implications it has for identity of the 'real' self, as "not only can avatars represent different ethnic cultures but they can represent different societal subcultures through dress or appearance" (Davis et al., 2009: 105). In 171 AC has a male avatar, and seems to have purchased or taken the female skates and accompanying animation movements, which even on an avatar in pixels, and in a land where you can do anything, is embarrassing and he still fears that he appears "like a sissy".

171. <VWERxmasprtyDEC10.CC>
[15:45] AC: Do I look like a sissy in these skates? ... I think I got the female skates and movements ... LOL

This tells us about identity and freedom in that avatars and the 'real' people behind them cannot merely leave behind their real-world hang-ups. This contradicts the absolute freedom that people claim to have in SL. There are still constraints imposed by individuals and society, especially those to do with personal feelings about acceptance into the community. A better-looking avatar is perceived as being more easily accepted, as in 172 and 173.

172. <PClar's27AUG2011.CC>
[22:22] VA: how is everyone this morning ... can I get a jd on the rocks please ... hey toot
[22:23] TS: hay howa it going
[22:23] VA: cool ... looking good toot
[22:24] TS: thanks baby

[19:33] SW: Thank you. I wish i could see your outfit ...your still grey here :(

172 and 173 are both instances of compliments; there are no cases of disapproval (as seen in Table 17). Upon walking into a bar or club and seeing a recognisable person, it is common practice to compliment their avatar, as is the case in 172. Upon seeing SW,
LV compliments her on her appearance, and SW expresses her wish to be able to say something similar, but she is still waiting for LV to fully rez.

The sense verb *hear* appears in the corpus 70 times, mainly as the performative element in an informative or an expressive speech act. It is frequently mentioned when voice communication is used or when music is playing at a particular setting and technical difficulties arise.

174. <VWERxmasprtyDEC10.CC>
[14:40] AC: Whoops music died for me too.
[14:41] SC: I hear it
[14:41] AC: I hear it now
[14:41] AG: i still don't hear....
[14:42] JO: i can't hear it toooo...
[14:42] AC: @AG it's usually an arrow next to your speaker icon
[14:42] SC: I hear you!!

Such technical difficulties as those obvious in 174 are part of life in Second Life. People experience them daily and are instructed to overcome them by others who have dealt with them before and this technical and learning context contributes to the frequency of these items. Often a user's game audio preferences prevent him/her from listening to music in a particular location, and these have to be changed. In order to appreciate the party setting, the residents in 174 are expected to listen to the music and dance, and hence the repetition of *hear*, acknowledge whether the music can be heard or not.

When users are struggling, they are usually instructed by others as AC uses the "@" to address AG signifying the direction of her utterance and identifying who her addressee is. AC instructs AG on how to overcome her technical difficulty, which is also helping her to (co)construct the identity of a more capable and technically skilled resident.

However, SL does provide a solution to some 'real life' difficulties. One of the reasons why SL is so popular is due to its characteristic of giving people abilities they don't possess or have difficulties with in reality. Dancing is very popular in SL, and being able to dance very well at the click of a button is easier for most than dancing in reality.

175.<AVPCsweetheartsJULY2011.IE>
[11:05] CK: i love dancing
[11:05] AV: doesnt everybody?
[11:06] CK: ya but in rl im no good ... i fall alot lol ... do u want to dance?
As can be concluded from 175, SL's knack for giving people abilities to do things they perhaps cannot in reality boosts confidence. CK loves dancing but states that she is not able to dance well in reality and she "falls a lot". Immediately after though, she proceeds to ask AV to dance, which she perhaps would lack the confidence to do in reality. The pragmatic act here is comprised of an informative preceding the request which gives the reason behind CK's confidence, and given the fact that the setting is a club, dancing is expected.

Sense and motion verbs are involved, although not dominantly (7.53%), in instructions. The verbs *follow* and *touch* are recurrent as speech act verbs or involved in pragmatic acts. *Follow* is recurrent when a resident leads another to a certain location (Example 176), and *touch* is sometimes synonymous with *click* in that it refers to interacting with a certain object in SL such as a dance ball or a pose ball (Examples 177 and 178).

176. <AVGThawaiiAUG09.CC>
[15:05] GT: another favourite place is Hawai for me ... would you like to go?
[15:06] AV: yeah sure
[15:07] GT: ok follow me

Assuming that AV does not know the whereabouts of Hawaii in SL, GT instructs him to follow her. At a later stage in the same conversation, GT instructs AV on how to obtain a *landmark* for that particular location so he will not need to follow instructions in the future and have the knowhow to get there himself. This pragmatic act is also one with a long-term goal to have AV learn how to travel to a certain location, which is part of the identity constructing process. DJs in clubs also frequently give instructions to their audiences as they are aware that a large attendance means a diversity of identities, and some may be newcomers to the club and are unfamiliar with how to dance and use the *sploder*, which is a multicoloured ball usually situated above a dance floor that users pay money into and at certain time intervals will explode and re-distribute the gathered money unevenly among the players, causing some to win (gain more money than they paid in) and some to lose.
BH, the DJ at the club, is aware that the diverse attendees may not all be familiar with the sploder that he is selling and as part of the commercial talk instructions to be given on how to play. As a DJ, it is also BH's duty to instruct club-goers how to dance (178), whether with a partner or without. These kinds of instructions are primarily to extract money from the club's attendees but also play a role in educating them, especially the newcomers, so they do not feel left out or incapable of playing their roles in the activities at the club. This is also the marketing strategy deployed by the employees of the club, the host and the DJ.

One of the most significant verbs in this category is stand, when involved in speech acts with implications for identity construction. Example 120 above highlighted the depth and complexity of the pragmatic act that SW performed to save AV's 'face'. 174 is another similar example involving a different user.

TF is the DJ at Lar's, a virtual bar and club that is very popular in that it sees a lot of traffic. Being a bar as well as a club, dancing and merely standing and talking are both acceptable and encouraged as can be seen from 174. However, doing neither, but rather walking around the crowded place and bumping into people is not popular, and hence comes the command from TF to BR. TF follows her command with an informative advising BR that what she is doing is discouraged and unpopular. This is a good example showing that noobish activity is not welcomed, and that noobs must be helped to construct a virtual identity by learning how to walk, talk and act appropriately.
through instructions, though doing this through the public chat stream is a FTA, mitigated through the informative.

5.4 Concluding Remarks

This chapter set out to investigate pragmatic acts (Mey, 2001) and their implications for the construction of a virtual identity or SLidentity. The method adopted for identifying pragmatic acts in the SL corpus included a quantitative observation of present indicative verbs, identifying what types of speech acts they were involved in, followed by a qualitative discussion of examples from the data of these pragmatic acts in situational contexts. The advantages of the corpus approach lie in the fact that important patterns were revealed, and concordances and collocates of the verbs could be observed. The concordance list especially helps in observing the verbs in context conveniently in a list, thus being able to identify the speaker and the type of speech act, in addition to the wider context by selecting a particular entry and double-clicking. The verbs were divided into five main semantic categories according to form (Quirk et al., 1973) and meaning (Eagles report, 1998) taking into consideration Levin's English verb classes (Levin, 1993) and classified in a way complying to the norms and activities in SL. The list of categories is tailored to the types of communicative functions of SL users so that a clearer understanding of their relevance to identity construction can be formulated. The categories included CMC-specific verbs, (such as click and rez), social verbs (such as meet and visit), action verbs (such as get, put and go), cognitive and expressive verbs (such as think, love, thank and apologise) and motion and sense verbs (such as fly, dance, see and hear). The Figures which were made for each verb category showed us the kinds of speech acts each class was involved in. This enabled for the observation of which speech acts were the more dominant in each category. In the CMC-specific and the social categories, instructive speech acts were the most frequent, but they are involved in all the other classes also. Expressives were important in the cognitive and expressive category, as well as among motion and sense verbs. Qualitative discussion of examples of the verbs occurring in social situations revealed that the verb click was often used when instructing someone how to wear virtual clothing, build in SL, upload images and use SL embedded software. These are necessary skills one must possess to be able to become an established SLer. Social verbs such as meet are used across all
speech acts instructively when meeting someone, and expressively "nice to meet you". *Action verbs* tell us about what people *buy, get for free, make, build, give, take, try, change* and *show* in SL. These verbs were spread across different speech acts such as informatives and requests and provided insight into what people do in SL, which is dependent on their reason for being there. VWER group members for example, do a lot of getting information, giving links, and talking about technical issues. Achievers are the ones that live an avatar-life and have a *SLidentity*, often sliding from one identity to another as reflected in their use of verbs like *love* and *TP*. All types of experienced *Residents*, whether Arabic- or English-speaking, academic or socialisers, help *noobs* in the collaborative identity construction through instructional verbs such as *click, drag* and *drop*. *Cognitive and expressive verbs* showed us how the virtual world and the 'real' world are not clearly separated and that cognitive processes such as *thinking* and *loving* originated from the 'real' person's mind. The sincerity of expressives also comes from the 'real' person behind the avatar. The complexity and multifaceted nature of identity is reflected through such pragmatic acts. Finally, *motion and sense verbs* had a similar function of blurring the boundaries between the two worlds, with the verbs *touch, feel, see, and hear*, whilst also being involved in instructive acts that helped a user use senses from behind an avatar.

What can be concluded is that speech acts in Second Life are never merely speech acts. They are complex in nature, being written or spoken, with different communicative intentions such as 'instructing' and 'greeting', but also with long term aims such as saving a *noob* 's 'face' (Brown and Levinson, 1987) and helping that *noob* to become an experienced Second Lifer and acquire a virtual identity. *Noobs* come into SL not knowing the particularities of *SLEnglish* or any other language as it is used in SL. Scollon tell us that "one's actions produce one as a person who is competent or not in some social practice, and in the second place, they produce one as someone with an identity" (2001: 142) and a lack of knowledge of how to act in SL reflects the identity of a *noob*. These inexperienced users naturally seek help from others and this is how their identity develops as Mullany says "self and identity develop through practices with others" (2006: 159) and obviously some of these practices are linguistic, in that they are "what people do with language, their regular behaviours that develop within particular communities" (Page et al., 2014: 31).
It became clear from quantitative observation of the types of speech acts in the corpus that Searle's directives, mainly instructions and requests were significant among CMC-specific, social, motion and sense verbs. Instructions and requests all require more than one participant in the act, and these acts have implications for performing identity. Instructions particularly as we saw in Examples (120, 139, 141) were part of a more complex pragmatic act, the wider communicative function of which included face-saving and identity construction: the 'instructor' shaping the identity of the 'instructed', as our communications with each "make claims about who we are relative to one another" (Holland et al., 1998: 27). So, identity construction was seen, as a dynamic and collaborative process. This (co)-constructing of identity (Norris, 2011) has been supported by Scollon:

In any communication, the primary players are those who are in such a relationship with each other that they mutually co-construct both the events in which they participate and the identities of themselves in those events

(Scollon, 1998: 267)

Not only do users mutually co-construct their identities, but they also move between this activity and other activities of mutual enjoyment and play. This was observed in my data in instances where SW was instructing AV "to stand up" before he TPd out, and also when the same person was teaching AV how to wear virtual clothing. AJB in Example 139 also taught AV how to upload image files to SL, and SH taught SG how to use a program which displayed Arabic text cursively and in the same direction. All these 'instructors' took on the role and performed the identity of the more experienced SLers, but they did this whilst also enjoying the game. Identity, though, is not fixed and is always developing as in Example 141 it was AV who was instructing SH how to feed the duck; he had moved on from being a noob. These pragmatic acts were complex, for example, in the case of SW telling AV to "stand up", in that the long term communicative function was to save AV's 'face' and avoid future embarrassment by being noobish. Mullany informs us that "the identity that is performed can be seen as a complex process of negotiation between the self and the others who engage in the same practices" (2006: 159). The 'others' in this case are the ones with more SL experience who have the role of shaping the identity of the less experienced SLer.
CHAPTER SIX

SLidentity: Conclusion
6. **SLidentity: Bringing It All Together**

The virtual world Second Life offers its millions of users a fertile environment in which to socialise and engage in digital communication, immersed in a place where it seems like anything is possible and imagination is the only limit. This thesis has investigated the linguistic construction of virtual identity in SL. It has been argued that to become an established Resident of this virtual world is to acquire a virtual identity, which in turn requires an understanding and acquisition of various phenomena such as how to dress, walk and talk. The acquisition of a SLidentity involves various linguistic acts. At a lexical level, SLers are creative, filling lexical gaps with CMC-specific and SL-specific words, such as avie, rez, prim, alt, landmark (LM), teleport. Some of these lexical items are coined in novel ways such as S Lex and S Lurl. This also works across different languages as these words are carried over into Arabic and used as roots, to which affixes are attached such as /’al-ay-ol/ (the AO), /rez-ul/ (rez it) and sometimes the root itself is transformed: /sakan/ - /sakaynah/. Users who come into SL have to familiarise themselves with this vocabulary and soon adopt the creativity themselves which is indicative of in-group identity. One must recognise the complexities of the deictic field of the virtual environment and act accordingly through appropriate use of indexical expressions. The use of personal pronouns, such as I, and her, and deictics of place (here, in SL) and time (now, SLT) reflects awareness of the virtual surroundings and indexes a person’s positioned identity in addition to different identity roles such as club host, DJ, hostess at a picnic, or an escapist identity. The final step towards becoming ‘virtual’ is acknowledging and fulfilling pragmatic acts and recognising their communicative intentions. This is shown through the use of language and speech acts such as those of instruction, where the instructor helps shape the identity of the instructed, with the wider communicative intention of becoming an expert and acquiring a virtual identity. Speech acts of a social nature, such as expressives, bring out the social aspects of the game, such as thanking, apologising, and welcoming.
The thesis addressed the central research question "how is virtual identity constructed through language use in social interaction in Second Life?". It was hypothesised that language plays an important role in the construction of a virtual identity, in the sense that if the appropriate linguistic skills are not acquired and practised, a user of SL would not be accepted into the community, but rather classed as a noob. The frequent utilisation of SL lexis, such as rez, TP and alt is one of the features that distinguishes the noobs from the settled residents, that is, those who successfully project a virtual identity and those who have yet to acquire one. There is a type of English which I would like to name SLEnglish, classified not by unique dialectal features but rather by its field-specific vocabulary, and the same applies to SLArabic. These varieties contain the SL-specific lexical words mentioned above. SLEnglish and SLArabic are closely connected, but distinctive from each other in that SLArabic takes the SLEnglish words and adds affixes to them, in order to fill lexical gaps. They both differ from other English and Arabic registers such as the language of politics, in that they contain these vocabulary items that are CMC-specific (rez, RL), and some of them are unique to SL such as TP and SLex. They are also characterised by their creativity and ability to form new words in non-conventional ways. Use of indexical and deictic expressions, such as personal pronouns (I, her) and place (in SL) and time (SLT) expressions, reflects an awareness of virtual surroundings, disambiguating the state of being in two places at once while immersed inworld. The recognition, use, and perlocutionary effects of pragmatic acts such as that of marriage in SL are the ultimate signal of the acquisition of a virtual identity in the sense that if a complex pragmatic act, such as that of marriage, is acted upon and followed through, an avatar-life virtual identity is acquired.

A corpus linguistic methodology was adopted where the researcher conducted ethnographic research by setting up an account and immersing himself in the SL virtual world. After a period of exploration, systematic participant observation was conducted where the social circles and data population of the research were identified. Ashy Viper, the researcher's avatar's name, lived a 'second life' in that he had a domestic life in a SL home with his SL partner and family members, a SL job and professional network, academic affiliation in SL with VWER academic discussion group, and a social network which was constructed while frequenting virtual locations that were dominated by users of the Arabic language, in addition to SL clubs that were very popular locations for social activity and frequented mainly by English speakers. This ethnography by
systematic participant observation led to the building of a corpus comprised of approximately two hundred thousand words of English text data and 24 hours of video data mainly in the Arab dominated *sims*. Having a corpus of data allowed for empirical observation and quantitative as well as qualitative investigation. The corpus analysis software *Wordsmith Tools* (Scott, 2011) was used to look at frequencies, concordances and collocations of lexical items in the corpus. This led to claims being made about the corpus, such as the recurrence of *I* implying that the discourse is ego-centric, and the use of the acronyms *SL* and *RL* reflecting the difference in the two deictic fields. These could then be supported by examples of the use of language in social interaction, which were discussed qualitatively. Empirical observations of the data led to the realisation that the claims of the concept of freedom in Second Life (Boellstorff, 2008; Ondrejka, 2004) and that people were free to do and act as they pleased were rather ungrounded. It seems that there is a SL social hierarchy with *noobs* at the bottom and well-established *Residents* at the top. *Noob* status is "revealed by facility with embodiment, social norms, and the interface" (Boellstorff, 2008: 124). *Noobs* are often unwelcome or avoided by *Residents* because of their inabilities, including their unfamiliarity with the language of SL. To be a *Resident*, one has to be able to communicate like one, which entails learning the SL-specific words such as *TP* and *rez*, showing an awareness of the virtual deictic field and recognising and acting upon pragmatic acts. It is for these reasons that this research addressed the issues of lexis, deixis and pragmatic acts.

6.1 The Linguistic Construction of Virtual Identity

Virtual identity is as much a complex concept as 'real' life identity, if not more complex. This is shown by the multiple ways in which 'real' people and *SLers* can overlap. One account, or one avatar, can be controlled by more than one person, and one person can have more than one avatar or *alt*. Each of these people and personas can lead a different kind of life in SL. Whilst one is a housewife, that same person is a stripper with their *alt*. Another 'real' person is a furry bunny creature that is in fear of being bitten by a vampire. A *noob* bumps into people when walking and wears boxes on his head, whilst an established *Resident* enjoys redecorating her virtual home, designing clothes and building, while making money and paying her 'real' life bills at the same time. *Noobs* are not accepted into some virtual communities due to their lack of SL knowhow, whilst
some Residents like to help noobs learn, instructing them in the ways of SL, including how to talk, what vocabulary to use, what is socially appropriate and what is not, and saving them potential embarrassment by teaching them how not to bump into people and wear boxes on their head, and noobs recognise and appreciate this. Identity therefore is (co)constructed by the learner and the teacher. The experienced help shape the identity of the less so.

Identity in SL also takes numerous forms and differs across cultures. Arabic-speakers project an identity that shows freedom from real world social constraints in their communications and interactions, as well as in other para-linguistic features, such as what they do and how they are dressed. Females show no reluctance to interact with members of the other sex, making offers to sit, talk and partake in different social rituals, like having a cup of tea, or visiting the virtual residence of a male unaccompanied. They also make requests to members of the opposite sex, showing enthusiasm and wanting to learn how to do things that are new to them, like feeding a virtual mallard. Their avatars are characterised by having long uncovered hair and wearing revealing clothing. These are not behaviours that these same 'real' people would practise in the 'real' world. Arabic-speakers also show an awareness that English is the lingua franca in Second Life and use the SL-specific vocabulary items that are English. However, to fit these items contextually, Arabic-speakers tend to add Arabic affixation to English words, such as the initial determiner /'al-/ in /'al-sakan/ (Second Life) and /'al-ri:l/ (real life), and the final Arabic sound plural /-āt/ as in /land-āt/ (lands), or even objective pronouns that are attached as a suffix as in /rez-ul/ (rez it). New words are also coined according to Arabic word-formation processes by regarding the English or SL-specific word as the root and then transforming that root according to conventional techniques, such as to express affiliation or nationality as in /sakāynahl/ (Second Lifers), which corresponds with /xalāyjahl/ (people of the Gulf) and /masārwal/ (citizens of Egypt). These are all ways in which the SL-specific vocabulary is embedded into the Arabic language and used in a social context in SL, which emphasises the importance and necessity of appropriate language use to show an experienced identity in SL and not that of a noob.

The aspect of freedom and escape, moving beyond social constraints, is a general one in SL, not limited to just Arabic-speakers, as we saw with SW claiming she was shy, but wild in SL, and SL strippers, who would not pursue that profession in RL. SL does
provide an environment where one can be who and what they want, such as a stripper, vampire, or dinosaur, but does have its own social constraints, those that are particular to group membership and acceptance into the virtual community. People also bring with them their real life social constraints, which in some cases they find hard to move beyond, for example when SW stated that she doesn't feel comfortable with the *alt* with red hair, claiming that it reminded her of her RL self, which is "shy" and lacks confidence.

In addition to taking advantage of the escapist features of SL, English-speakers (those who are not in SL solely for academic reasons, at least) differ from Arabic-speakers in that they pursue an avatar-life in the virtual world that resembles life in the 'real' world in many ways. They have virtual relationships of an intimate nature, get married, consummate the marriage virtually, and give birth to virtual children. These virtual families live in virtual homes. As rent for the home, or the land it is built on, needs to be paid, *Residents* often seek virtual employment, or open a virtual business to earn income. This means that a professional community can be joined and a different type of identity than the one performed at home becomes necessary. The process of constructing this virtual avatar-life identity, as I have called it, starts by learning SL-vocabulary and acquiring the mechanical skills needed to interact with the interface, which involves becoming acquainted with the deictic field of the virtual environment and expressing this accurately. A person is effectively in two places at once when engaged in *inworld* interaction, and without disambiguating phrases like *in SL*, as opposed to *here*, and the use of personal pronouns such as *I, him and her*, and time expressions such as *SLT*, accurate reference to place, time and person is difficult.

The next step towards (co)constructing a virtual avatar-identity comes through pragmatic acts, especially those of instruction. As mentioned above, experienced *Residents* instruct *noobs* in many ways and with different communicative intentions such as saving the 'face' of the *noob* by avoiding potential embarrassment. Some pragmatic acts are more complex in that they have long-term communicative intentions. The instructing process is not just for a *noob* to learn how not to wear a box on his head, but also so he does not do this in the future, and learns the necessary skills that help him through virtual life. It is through the acquisition of SL-lexis, the awareness of virtual surroundings and differentiating them from the 'real' surroundings by separating the deictic fields, and recognising and acting upon instructional speech acts that a *noob*
becomes a Resident and is accepted into the virtual community. This acceptance leads to the definition of the role of that person in the community, establishing oneself, acquiring a virtual home, virtual spouse or partner, and virtual children perhaps, or merely taking up the identity of a 'socialiser' and frequenting social venues such as SL clubs, engaging in activities such as talking, flirting and dancing. From a linguistic point of view, it becomes clear how pragmatic acts play an important role in the identity-construction process. Some of these pragmatic acts are complex in that they involve a series of speech acts, such as those involved in learning to build a sign, send photos, wear clothes and edit appearance, or like those of expressing consent for marriage, before the final assertion by the authoritative figure to announce the marriage. In such pragmatic acts, it is the perlocutionary effect of the act, that is, how the married couple act towards each other after the marriage, that is the ultimate sign of the acquisition of a virtual avatar-identity. This is not very different from the real world in that these activities are time-consuming, which makes them important. Traditionally, a successful marriage requires the couple to live together and spend a lot of time with each other. All the things that make a marriage successful are similar. Building requires skills, and although the skills one has to learn in SL are not of a physical nature, they are still skills, and hence the concept of learning is not dissimilar. The fact that these acts occur in virtuality is what is different, and for these to be successful in a similar way to RL, a considerable amount of time has to be spent inworld, with a virtual partner for instance. This may have repercussions on a person's real life (Section 6.3 below).

6.2 Display and Extravagance

The language of Second Life has affiliations with Netspeak (Crystal, 2001) and Textspeak (Crystal, 2004) in that it is characterised by economy because of the "rapid-response dictates of CMC" (Benwell and Stokoe, 2006: 260) and various forms of abbreviation are ever-present, such as acronyms (SL, RL, TP, LM) and clipped forms (av, alt, prim, perm). However, empirical analysis of the SL corpus revealed that extravagance and extension in language also exist, due to the affective and emotive conditions of language use (Bednarek, 2008). SLers use display language when they want to show emotion such as excitement, anger, and love. They do this through typographical and decorative means, such as replacing the word 'love' with a heart,
using punctuation marks unconventionally, such as repetition of exclamation marks and colons on either side of the text to create decorative features, and alternative capitalisation and decapitalisation of letters in words. Example 11 on page 71 showed this feature, among other examples. People are creative and take time to express emotion in their phatic communication, for various reasons, such as to invite an emotional comment from hearers, to mitigate a possibly offensive text or to practise marketing language, such as in clubs by hosts and DJs where the ultimate goal is to make money.

Where conversations are serious in the sense that real feelings are involved, such as love, these embellishing features were observed to be avoided, so as not to seem playful, and hence lack seriousness. Occurrences of the 'I love you' clause were characterised by being free of such embellishments with only full capitalisation and repetition being present to reflect the strength of the emotion.

### 6.3 Real Identity

If a person is married in real life, and has a partner in Second Life the question arises of whether the relationship is damaging to the RL marriage or is even adulterous. If so much time is spent *inworld*, this certainly will affect that person's real life, negatively or perhaps positively. It has been noted that SL's knack for giving people the ability to do things boosts confidence and some teachers reported that students who had trouble reading out loud in RL do so comfortably in SL. The owner and chief operating officer (COO) of *Charlina's*, Lady C, is a severely disabled person in RL, but in SL she is an extremely talented person and successful businesswoman with no sign of virtual disability and she certainly does not lack confidence. SW has RL hardships and uses SL as an escape from reality, creating for herself an alternative (virtual) reality, in which she can be wild and free. There are other cases however, where a person's 'real' life has been negatively affected. In the documentary *Life 2.0* (2010), there are 3 cases of virtual lives having adverse effects in real life. In the documentary, the question of reality is asked and answered by Philip Rosedale, Chief Executive Officer (CEO) of Linden Labs, "How could the virtual world be real? .... The question was more just, why not?". In the film, a woman in the first case presented states, "I'm usually on my computer 20 hours a day", referring to how much time she spends in SL. A man in a virtual relationship with
a woman (the second case) says, "Our real life partners really don't know what we're up to. As far as our concern [sic], it's just some kind of game that we play", but then goes on to talk about how "our second life is transposing into real life; we have to reconcile our second life with our real life". Their 'playful' feelings for each other have clearly become real feelings and materialised in the fact that they chose to meet in the real world. A third case is of a man who has the avatar of a fifteen-year-old girl in SL, describing how he became addicted, saying that "the first night was like taking the red pill" referring to the popular film The Matrix (1999), and that he had spent the whole night inworld. The man, who is anonymised in Life 2.0 (2010) then talks about spending "another night, then days straight" and claiming that for him, "the other things [in his real life] just weren't important any more". He describes his experience as being "a physical feeling" and "a mental feeling" that "affected everything" about him and everything about the way he acted. The documentary includes interviews with his then real world wife, who says that "he has an addictive personality, and this could very easily become a problem if it isn't already ... It becomes a problem when you ignore your first life", which he did, as his game-playing resulted in the end of his marriage. This man claims that Second Life is "the best and worst thing that has ever happened" to him. He comments on the loss of his wife in that "it is very sad to lose what has been until now the love of my life", but also says that SL has been the best experience because it made him "completely rethink and rediscover" who he is. One cannot judge whether SL was good or bad for the man in case 3, but what can be said is that it definitely did have negative effects on his marriage, but at the same time, he claims it had positive effects on himself as a person. The virtual couple mentioned in Life 2.0 (2010) end up leaving their real world marriages, and becoming a couple in the real world, only to separate again both in the real and the virtual, with the woman claiming that the man "isn't what he claimed to be, he's not real". Evidently here, there is no clear distinction between what is real and what is virtual. Throughout this study, I have distinguished between the real and the virtual with regard to location: what happens in SL is virtual and what happens outside of SL is real. There have been cases, such as in intimate relationships and actions, where a person is said to become one with his/her avatar and feel the real feelings that are aroused through intimacy. In the case of the virtual couple in Life 2.0 (2010) though, even when the woman meets the man in 'real' life, and after a period of partnership with him, she still claims that he is not 'real', "he is fake and I am real", thus blurring what is thought to be a relatively clear boundary. The
identity that he portrays in SL turns out to be somewhat different to his real life identity and the revelation caused the woman much mental harm. Philip Rosedale, CEO of Linden Labs, one of the interviewees in the documentary Life 2.0 (2010), claims that the virtual world "must contain some sort of danger and risk and possibility of pain or loss to be interesting." On the reality of the situation, Rosedale distinguishes between physical and mental harm claiming that "We do not have the ability in the virtual world to physically harm each other" and he thinks that for this reason the virtual world is "at a basic level a safer place" than its real counterpart. It seems, though, that the mental harm can lead to physical harm, as after spending 20 hours a day on her computer, the woman in the first case in Life 2.0 (2010) says that she became obese and ill. Also, mental harm can lead to illnesses such as depression and anxiety, which do physically harm, so although it is not directly possible, physical harm can result from negative experiences in or from SL.

6.4 Contribution to Knowledge

This research has filled a gap in linguistics in general and sociolinguistics more specifically in that it has examined an ethnographically gathered corpus from Second Life. To the best of my knowledge, no other academic work has done this, and the only corpus created from Second Life is the one examined and analysed in this study. Boellstorff et al. (2012:2) mention that between 2006 and 2010 they each completed a book based on their research projects (Taylor, 2006; Boellstorff, 2008; Pearce and Artemesia, 2009; Nardi, 2010), and when they were asked how they studied the virtual worlds they wrote about, their short answers were usually something like "Well, as an ethnographer I observed social groups and conducted interviews, but I also participated in ongoing virtual world activities as much as possible." (Boellstorff et al., 2012: 2). There is no evidence, however, of the adoption of a corpus linguistic methodology by any of the above writers. Aas et al. (2010: 3) attempted to fill the gap in "the influence of a virtual reality on identity perception" by asking 34 Dutch students to create avatars or use existing accounts to spend time in SL communicating with other avatars, and finally to fill in a "Big Five personality questionnaire" (2010: 3). The data collected and examined in Aas et al’s research is the content of these questionnaires, and a corpus of language in SL is not built.
Empirical observations of my SL corpus revealed new vocabulary items such as *rez*, *TP*, /sakaynahl/. Some of these words were formed according to conventional and well documented word-formation processes, while others were creatively formed in unfamiliar ways. This study has presented these creative and novel word-formation processes, such as acronym-word blending (*SLex*), cross-language affixation and cross-language root-formation.

A corpus approach to identifying and analysing speech acts and pragmatic acts was conducted in this study. Present indicative verbs that appeared in the corpus and carried a performative force were quantified and categorised according to their speech acts and distribution of use among different types of speakers such as academics and socialisers, in different conversational genres such as casual conversation, academic discussion and interviews. The complexity of pragmatic acts, such as those of an expressive nature and instructions were discussed with regard to their implications for identity formation and (co)construction.

And finally, a corpus of Arabic data in the virtual world was also collected and analysed in the light of the analysis of the English data, but using a selective process, as the data is video and not text. However, that corpus, in addition to the English SL corpus is available for expansion as well as further analysis.

Virtual identity has been associated with the "anonymising conditions of the Internet, its spatial and temporal indeterminacy, and the escapist, transient, and above all postmodern complexion of cyberspace" (Benwell and Stokoe, 2006: 245). This is in the light of Bell's expression that "we can be multiple selves, a different person ... each time we enter cyberspace, playing with our identities". These views are supported by many of the examples in this work, such as Example 4 where SW admitted to once having a job as a stripper, something she would never do in RL, and Example 99 where H claims that she uses an *alt* to escape recognition by some people. However, this is not always the case. As we observed in the VWER meetings, not all people prefer anonymity or want to be associated with escapism and transience. Members of the VWER academic group introduce themselves as their 'real' selves and real world affiliations, in addition to their virtual selves, though they are not exempt from having a virtual identity because of the fact that they are immersed *inworld*. Although their reasons for being in SL are perhaps different to those of SW and H (They are there to communicate with other real
world academics, rather than to play a game.), there are similarities in behaviour, as shown in Example 109 in which PF admitted to having a bathtub in SL. The other contrasting point to be made here is the fact that having multiple *alts* clashes with the stability of avatar-life identity, as in Example 127, where Sonny and Cher are a virtually married couple who spend much of their time together *inworld* pursuing a virtual life that is not dissimilar to that of a traditional and conventional real world married life. This frequent changing or shifting from identity to identity obstructs the SL marriage and can have negative implications for it.

We observed in Example 120 that SW instructed AV to "stand up", meaning to stop his dancing animation before *TPing* to another location so that he would not appear in the new location in a dancing animation, where it may be inappropriate and embarrassing. On another occasion (Example 133), SW was instructing AV how to *wear* virtual clothing, as a previous attempt resulted in AV's avatar wearing the box that the clothes came in. The communicative intentions of these acts is to save AV's 'face'. Brown and Levinson (1987) taught us that people usually attempt to preserve their self and others' face in interaction. However, preserving the face of others was usually reflected in members of a group or employees of an institution, who represented that group or institution, performing face-saving acts, which in turn represented that group or institution (Jameson, 2009). Protecting the face of others usually came in the form of "acts that primarily threaten the addressee's (H's) negative-face want" (Brown and Levinson, 1987: 65). Among these face-threatening acts are orders, requests and instructions. However, such acts, which indicate that the speaker "does not intend to avoid impeding H's freedom of action", are intended to save the face of the addressee, avoiding embarrassment and coming across as a *noob* as in 120 and 133.

This also added to the understanding of the (co)construction of identity. Norris wrote about *identity production* as opposed to *identity construction*, with an intention to emphasise the "ever present creative aspect within the actual performance of actions" (2011: 1). This notion, however, implies that each of the participants in the interaction is producing his or her identity individually and simultaneously, which is not inaccurate. In 120 and 133, SW and AV are both (co)producing their identities. SW produces the identity of the SL expert in this case, and AV the SL *noob*. The term '(co)production' fails to capture the fact that SW helps shape AV's identity, contributing to the process of AV's transformation from a *noob* to a *Resident*. Omoniyi and White capture this

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element in a more fitting way in their claim that identity is "non-fixed and non-rigid and always being (co)constructed by individuals of themselves (or ascribed by others)" (2006:1).

6.5 Limitations of the Research

This research does not lack limitation. The size and nature of the corpus is the one outstanding limitation. A larger corpus with wider horizons can reveal more about language, and provide different findings. This corpus was collected through participant observation where I was, justifiably, heavily involved in much of the conversation. A larger corpus could be one donated by numerous players of SL. Different aspects of Second Life can then be observed. In this study, social life and avatar-life, as well as casual conversation, academic discussions, business interviews and sociolinguistic interviews were observed and analysed. However, Second Life is not limited to these genres. There is a vast number of role-playing sims. Role-playing in these sims is defined differently to the kind of role-playing that has been observed in my corpus. It is defined by having rules, aims, and objectives. The language in these sims is very interesting to observe, as the characters one plays in these sims are predefined, and there are fixed conventions for communication. Fantasy worlds, virtual educational institutions, virtual hospitals and other health facilities, support groups, poetry groups, scientific and technological institutions where various scientific tests are run are all present in SL. Each genre has its own ways of communicating, having different features from each other. The possibilities are endless.

This corpus is also limited to two languages: English and Arabic. People do communicate in other languages in Second Life, but it is not my capacity, and would have been impractical to analyse these. There were advantagesto the ethnographic and corpus-based, in that the corpus allowed me to look at the process of moving from a noob to a Resident, but this is also a disadvantage as it is a corpus that is biased, being made up largely of researcher-centred discourse.
6.6 Implications for Future Research

A glimpse of the possibilities and implications for further research was revealed in the previous section. A number of studies concerning Second Life could be conducted in every branch of linguistics. The life of avatars, and their effects on real life can be of interest to psychologists and psycholinguistics. Virtual education concerns applied linguists. The language of scripting, building and programming in SL can be observed and analysed by computational linguists, and forensic linguistics can feast on the 'crime' in the role-playing sims in Second Life, where the object is to steal, murder, rape and enforce, by playing the roles of criminal, victim and enforcer. What is legal and what is illegal in virtuality versus reality maybe blurred and new discoveries may be found that change the law of the lands. Within sociolinguistics, different SL communities can be observed ethnographically and anthropologically, focusing on language, or other aspects of communication such as gender, national identity, dialectology and gesture to name but a few. A more profound investigation of marketing language and commercial language can be conducted by visiting the very many SL commercial establishments. The list is virtually endless.

One obvious way into future research, as implied in the previous section, is the investigation of group identity in different SL communities that are made up of speakers of different languages. For example, there is a very large Chinese community in SL. It would be interesting to see what kinds of identity-construction are salient amongst the Chinese, or even if such a term can be used to refer to these people, as China is home to a diversity of cultures in itself. Do the Chinese pursue an avatar-life identity like some English-speakers in this study, or do they take advantage of anonymity and freedom from constraints and do and say things that they would not do and say in the real world. This applies to any community or national identity, and is not restricted to the Chinese.

However, what does stand out for the researcher is the fact that SL is evolving. Linden Labs have introduced the use of the Oculus Rift (Figure 52), which gives the notion of immersion and direction a whole new definition. The Oculus Rift is a new virtual reality headset that allows players to "step inside" games and virtual worlds (www.oculusvr.com/rift).
Figure 52: Oculus Rift (source: secondlife.com)

Second Life is currently (August, 2014) running a beta test version of their viewer that enables the use of an Oculus Rift headset. Linden Labs claim that this will provide "a fully immersive, VR [virtual reality] experience" and "a new way to experience the virtual world" (www.secondlife.com, August, 2014). This provides a whole new foundation for research. Full immersion, as Linden Labs call it, has implications for new dimensions in the deictic field, and a new sense of identity. The notion that a person is in two places at once is further blurred, as one is to some extent removed from the 'real' world and fully immersed in the virtual. Place and identity take on a new meaning that invite academic exploration.
References


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APPENDIX A: Arabic Corpus Content Database

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