Hiding behind nicknames

A linguistic study of anonymity in IRC chatrooms

Alexander Lakaw

Abstract

This essay deals with the creation and usage of nicknames in synchronous CMC. Nicknames from four different IRC chat conversations related to three different topic groups have been examined. The method draws on Bechar-Israeli's (1996) categorisation of nicknames, which has been adapted to suit the type of data sampled. Three research questions have been posed, which, in view of other studies related to this field of research (e.g. Ellison et al. 2006, Scheidt 2001, Chester & Gwynne 1998, etc.) have been examined to obtain information about the degree of anonymity and the topic-relatedness of nicknames used in chatrooms. The results show that users participating in synchronous CMC indeed follow topic-related rules for self-presentation and that anonymity has varying importance in different chatrooms.

Keywords: CMC, nicknames, anonymity, identity, synchronous chat

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1. Introduction

Since the beginning of the Information Age the word *nickname* seems to be used very frequently. On the Internet this lexeme is omnipresent, since almost every official website currently offers its services under restricted access that requires registration. Using the well known Google search engine to look for the word *nickname* (with standard settings) one gets the information that there are ca. 84.400.000 sites on the web that contain this lexeme in their texts. Furthermore, nicknames play an important role in computer-mediated communication (henceforth CMC). That means that users who want to communicate in synchronous chats, asynchronous discussion groups or blogs for instance, are often asked to use nicknames. But what are their properties?

To define the term *nickname* the first thing to do is to search for this noun in various dictionaries. The following extracts reveal some definitions.

> an informal name for someone or something, especially a name which you are called by your friends or family, usually based on your proper name or your character:
> We always use the nickname Beth for our daughter Elizabeth.
> "Darwin" was the nickname he was given at high school, because of his interest in science.
> (from *Cambridge Advanced Learner's Dictionary*)

> a name given to someone, especially by their friends or family, that is not their real name and is often connected with what they look like or something they have done
> (from *Dictionary of Contemporary English*)

All those dictionaries more or less agree on the specific semantic qualities of this lexeme. None of these very up-to-date dictionaries offers information about the new meaning the word *nickname* gained recently via the process of semantic extension (for further information on semantic change see Moessner 2003: 137 ff).

In the middle of the 15th century the word *nickname* was established as a variant of the Middle English noun *eke-name*. According to the on-line version of the *Oxford English Dictionary* (henceforth *OED Online*) its first appearance has been dated to 1303. Semantically both nouns described "a (usually familiar or humorous) name which is given to a person, place, etc., as a supposedly appropriate replacement for or addition to the proper name" or "a familiar or abbreviated form of a forename" (*OED Online*). The compound-constituent *eke* is not productive anymore. It derived from the Old English lexeme *ēac* which was a common adverb at that time. The origin is somewhat uncertain, but as variants still are present in some of the existing Germanic languages (e.g. German *auch*, Dutch *ook*, Swedish *och*), it seemingly is Indo-European.

Equivalents of the English *nickname* exist in German (*Neckname,Ökelname*), Dutch (*niknaam*) and Swedish (*öknamn*), although they are not very frequent and often contain a specified meaning. The more common expressions are German *Spitzname*, Dutch *bijnaam* and Swedish *smeknamn*. Bearing this in mind, an interesting fact can be observed: none of these languages has at least an equivalent that would fit into the nowadays extended semantic field the English word *nickname* possesses, because its meaning has recently been expanded.

Due to the development of virtual reality and the possibility of communicating via the Internet the *nickname* became a tool to create anonymity. Just as traditional writers published their work under pseudonyms and pen-names for specific reasons throughout the last few centuries, on-line communicators have the ability to hide their real personality behind a *nickname*. This semantic characteristic of anonymity in on-line communication is a totally new quality of this lexeme. As the German, Dutch and Swedish equivalents did not undergo this specific semantic extension a word had to be found that fulfilled this need. This problem was easily solved by borrowing the lexeme *nickname* (also often abbreviated as *nick*) from the English language, which becomes more and more frequent in language use and could be defined as the name users give themselves when participating in CMC. In German, for instance, it is not yet included in the official vocabulary, but as there are discussions about the usage of *nickname* in the German language referring to on-line communication (e.g. on the German *News Server*) it will not take long until this lexeme will appear in the *Duden* (the collection of the official German lexis).

1.1 Aim and scope

The aim of this paper is to examine the nature of anonymity provided by nicknames which are used in computer-mediated communication. Bearing in mind the new semantic value and the importance of *nicknames* in CMC, some questions arise which this study will address:

- What underlies the creation of nicknames?
- What do the users want to tell us or conceal about themselves via their nicknames?
- How much personal information would users participating in different topic related chats add to their nicknames?

The topic dependency that underlies the creation of nicknames will also be commented on in this study. Chatrooms about sports for instance may be populated by users who identify themselves with sportsmen or sports clubs. Users who join synchronous chats to search for

the love of their lives will probably put more information into their nicknames than users who write flaming messages, which, according to Crystal (2001: 55), could be characterised as "messages [that] are always aggressive, related to a specific topic, and directed at an individual recipient".

To find answers to those questions different topic-specific chats were examined by ordering the nicknames according to their *degree of anonymity*. That means that the different characteristics Bechar-Israeli (1996: 13 ff) found in his survey of nickname-types have been adopted and related to the indication of anonymity (see Section 3).

Although this topic might be also interesting to examine from a gender difference perspective, this study will not deal with that problem in detail, as the data used are taken from public sources, where the participants' gender often cannot be ascertained. Thus, distorted results would be inevitable.

1.2 Previous studies

In his 1996 study, Haya Bechar-Israeli wrote about the nature of nicknames, their different types and relationship to the identity of the users. He found that nicknames in on-line communications "are thus a critical means of presenting ourselves" (Bechar-Israeli 1996: 2) and by giving some examples he also clarified what happens when users are forced to use other nicknames than their 'own'. "Not being able to use one's nickname, for whatever reason, causes a feeling of oppression and confusion" (1996: 25). However, the focus of his research was nicknames in general. Their construction was analysed regarding the relation the nicknames have to certain information about the users' self. Bechar-Israeli's analysis functions as the basis for the method being employed in this study (see Section 3).

In a study on avatars and nicknames that are used by adolescents in CMC, Lois Ann Scheidt (2001) searched for gender differences and highlighted the semiotic significance of these specific elements. Scheidt decided to use Bechar-Israeli's nickname categories for her analysis. Interestingly similar to him, Scheidt found out, that users communicating in CMC seemingly "advertise their true selves by using their actual name/nickname/diminutive, self character traits, and showing their originality by utilizing innovative typography in their nicknames" (Scheidt 2001: 21).

In their recent article, Ellison et al. (2006) deal with the question "[h]ow do online dating participants manage their online presentation of self in order to accomplish the goal of finding a romantic partner" (Ellison et al. 2006: 6). They interviewed a huge number of online dating participants, and they found out that the creation of an online persona, even under the

challenging circumstances the users are situated in, is a very complex and well thought-out process. When creating an online profile of themselves, the users were on the one hand 'forced' to create a "selective self-presentation" that promotes one's advantages. On the other hand, in view of a face-to-face meeting between the online dating participants, their profiles simply have to tell the truth about themselves. It turned out that different strategies had been used by the participants to solve this problem of self-presentation on the Internet.

Two further articles that provide relevant information for this study were written by Chandler (1998) and Chandler and Roberts-Young (1998), both of which deal with the construction of identities on Internet homepages. The author's on-line persona, which is expressed in the form and appearance of his or her website, is the focus of these two studies.

2. Data description

For this study 483 nicknames were collected all in all from four different IRC channels, which each dealt with different topics. The majority of these were observed passively, without engaging in the discussions. One channel however was joined for the purpose of participating actively in the communication, resulting in a nice episode of identifying users according to their nicknames (see Section 5.2).

However, 179 nicknames were collected from the open IRC channel *#looking_for_love*, which was accessed via the ICQ website. The communication that went on while storing the nicknames was saved in a text file. The method of sampling was simply the observation and storage of a two-hour topic related chat session. However, this specific chatroom was a topic related on-line meeting place, created for people who are looking for any kind of romance.

To investigate the topic-relatedness of different types of nicknames one has to investigate chat communities that more or less stick to the topic. Since many chatrooms are used by established on-line communities, whose participants by no means stick to pre-set topics, the search for suitable material proved to be very difficult. Various online chatrooms were joined and observed, but the attendance was either too limited, or the type of communication could be characterised as topic-free. As those then contradicted the sampling criteria, another method to collect data that could be investigated had to be found.

Except for the chatroom that had been accessed via the ICQ.com website, all other chatrooms were joined by using a so-called client software. MIRC is the most common IRC client software, and it was used in this study for specific reasons. First of all it is possible to search for various chatrooms, and by using a search function it is also possible to find topic

specific ones. Moreover, next to the topic information the attendance of each chatroom is given, so that one is able to sort out unsuitable numbers. The next advantage of this software is the logging function, which enables the automatic storing of the conversation in a text-file format. Hence all the data described in the following lines were collected with this method. Nevertheless controlling whether the participants stuck to the topic or not had still to be made manually.

First of all some other topics were chosen as channel sampling criteria. Since a *romance* chat has already been found, different topics have been searched for. 102 nicknames were found on the #*sports* channel on DALnet, a server that provides the space for this and other IRC chats. A general discussion on the topic of *sports* was held there. As the number of participants could not be regarded as sufficient for comparability (compare 179 nicknames from the #*looking_for_love* channel above), another chatroom was searched for that could be added to the *sports* category. Hence, additionally 46 nicknames were added from the #*soccer* channel, on the Dalnet server. Similarly to the #*sports* channel its participants more or less stuck to the pre-set topic. The communication within both chats from the *sports* group was observed for about one hour each.

Finally and in addition to the general subjects *sports* and *romance*, *politics* was chosen as another topic. 156 nicknames from users participating in the #*politics* channel on the EFnet server were recorded, and the discourse, which also adhered to the topic, was saved for about one and a half hour by using the logging function.

2.1 Medium variables

Although the characteristics of synchronous chat will not be explained in detail here some specific factors have to be mentioned, as they influence the language used in this very specific type of CMC. All IRC chatrooms are characterised by synchronicity. Every message sent to the server appears immediately on the screen and may disappear in due time. The shortage of time does not allow the participants to either plan or to correct their messages. Furthermore the messages are rather short in general, as they have to be read and answered very quickly. This is a matter of *Netiquette*, which can be defined as some sort of unwritten rules of behaviour on the Internet (Crystal 2001: 70 ff). Very specific norms cause the usage of typical elements. Those elements are emoticons, graphical symbols (smileys) and sound symbolisms, which often occur and provide a specific picture of synchronous chat (this of course does not prevent the usage of those elements in other types of CMC. On the contrary, they seem to spread over to other varieties).

On the left side of the screen all the currently on-line users are listed, but often not all take part in the interaction. This can be due to certain factors. One of them is the 'whisper-mode', in which the users can chat with one another 'in private' without being noticed by the other users. This specific feature of the synchronous variety of CMC causes some problems for linguistic analysis. Another point may be that some users switch from one chat channel to another without logging out in order to be able to quickly re-join the communication for whatever reason.

Although all the users share the same prerequisites when it comes to the technical features of this medium, there are some freely applicable features that participants can use to mark their message in a specific way (by colouring for instance).

Besides the opportunity of 'private chatting' (see above) every message that appears on the screen can be read by any logged on user. Therefore specific methods of addressing messages were introduced into this type of communication, which imply a specific dealing with nicknames. Very long or difficult addressee nicknames for instance are simply abbreviated. This furthermore implies the recognition of users and their nicknames by other participants, a phenomenon which is further explored in Section 5.1. Table 1 summarises all the above mentioned variables and gives further information on the technological characteristics of the various IRC channels.

Table 1. Medium variables of the four IRC channels

Topics	Romance	Sports		Politics
Channel	#looking_for_love	#sports	#soccer	#politics
Server	ICQ	DALnet	DALnet	EFnet
Accessed via…	website	client	client	client
Access restriction	none			
Type of CMC	synchronous			
Type of technology	pull			
Type of transm.	one way			
'Whisper' mode	yes			
Text colours	no	yes	yes	yes
Longest nickname	15 characters	23 characters	15 characters	9 characters
Nicks with blanks	yes	no	no	no

As one can see in Table 1 many qualities are shared by the chatrooms, as they are all synchronous for instance. Furthermore they all use a one-way type of transmission, which means that once a message has been sent one has no chance to add or change anything in the message. All chatrooms are public without restricted access; everyone who wants to can join those channels. The central server, the 'heart' of the chatroom, is important to mention. In this study four different channels from three different servers have been chosen, namely ICQ, EFnet and DALnet. Each message is sent to the appropriate server and to be able to

participate in the chat one has to connect to those servers first. According to Herring (2004) this technology is called 'pull'.

The number of characters that the longest nicknames consist of differs in each channel. Since not even the official websites of the *DALnet IRC Network* and the *EFnet Chat Network* could give information about the maximum number of characters, one could assume that there is no general restriction. However, on the EFnet channels no nickname was longer than 10 characters, a number which is exceeded by both DALnet chatgroups. Hence one could easily deduce that there has to be a server restriction. Various websites were searched (via Google.com) for some information about it, and some sources report that the maximum length of nicknames on the DALnet Server is 30 characters (*IRC101.org*), whereas on the EFnet server it is 9 characters (*IRChelp.com*), although in the material there were nicknames that were 10 characters long. The latter finding is supported by a note written on an article on *DoM Wikipedia* (a website about the computer game *Dawn of Myth*) which mentions a "max nickname-length of 10 characters on EFnet". But as there is no official information about such restrictions and the contradicting information found on the Internet, no general statement about this problem can be made here.

Another factor is the possibility of using blank spaces in nicknames. This differs between the two modes of accessing chats: the chatroom that has been accessed via the website *ICQ.com* allowed such nicknames, whereas the other channels, which were accessed via client software, did not allow the use of blank spaces within nicknames.

2.2 Situational variables

Besides the similarities the IRC channels share there are some differences between them and it is very important to notice and explain some of them in detail here. The number of participants in the chatrooms ranges for instance from 46 to 179. However, to gain a comparable total number of participants in each group an extra search for additional material had to be made on one topic (see above). Hence, two different chatrooms have been observed. The data was then added to the same category called *sports*. This makes the distribution of the number of participants equal to some extent, so that comparable statistics are possible. The number of participants in the topic groups *romance*, *sports* and *politics* are presented in Table 2, along with other variables.

Table 2. Situational variables of the four IRC channels

Topic	Romance	Sports		Politics
Channel	#looking_for_love	#sports	#soccer	#politics
Participants	179	102	46	156
Active participants	49 (27.4%)	31 (30.4%)	14 (30.4%)	38 (24.4%)
Type of communication	one-to-one	one-to-many		
Purpose of comm.	develop relationsh.	exchange of views		
Moderator	no		yes	
Adherence to topic	more or less		strict	
Tone	friendly	serious	friendly	serious
Type of obs.	passive	passive	active	passive
Storage time (in minutes)	120	60	60	90
Text amount (in words)	3106	3096	468	7339

As one can see in Table 2 there are two different types of communication. Of course both variants are possible; in all the channels there are examples of group-addressing and addressing of a message to one specific user. However some of the users in the specific channels seem to prefer a certain kind. For instance the *romance* group makes use of *one-to-one* messaging. This is due to the fact that the purpose of communication differs from that of the other two groups *sports* and *politics*, as there is a tendency to address one's message to only one person. Of course this is necessary to develop a relationship or to become familiar with each other. The participants of the two groups characterised by *one-to-many* communication have a different kind of purpose. They do not ask one specific user for information but express their views and opinions about something publicly, by addressing their messages to the whole group.

Two of the channels are moderated. Users who do not stick to the pre-set topics, use insulting language or violate the group specific rules in any other form can be 'kicked' out of the chatroom, or even banned, so that they are not able to re-enter the channel again. This is an important factor even from a linguistic point of view. This prescriptive norm of conduct leaves marks on the language used in IRC communication. Both moderated chatrooms have a very large number of participants, which hence might be a decisive factor for chatroom moderation. They are both moderated by human users. This is important to note, since there are also chatrooms moderated by software programs, and even this difference has an impact on language use. Whereas users can trick the program by using altered forms of unpleasant words or utterances (like the writing of *fekk* for *fuck*) without being 'kicked out' this opportunity could not be applied in chatgroups moderated by humans. Hence the language in general is serious and friendly in tone, which applies for all the chatrooms which were observed for this study.

As already mentioned, one of the sampling criteria was that the participants in the chatrooms stick to the topic to some extent. Table 2 shows that the two latter groups adhere to

the topic very strictly. As to the *romance* group and the *#sports* channel, one could say that they more or less stick to the topic, because their topic in general is wider in range. Hence at some point the *#sports* participants start to talk about food and its disadvantages, and the conversation on the *#looking_for_love* channel could be characterised in various ways, as there are episodes of chit-chatting, flirtations, exchange of information etc, all of which in a broader sense have something to do with developing relationships.

Some other interesting observations can be made comparing the topic groups with each other. First of all the aim of sampling was to obtain data which were as similar as possible in terms of their amount. Therefore the number of nicknames is approximately the same in all channels (and therefore the second channel in the *sports* group was investigated).

Another factor is the amount of text stored, and a suitable sampling criterion had to be found. Hence the topic groups were observed for two hours each (the *sports* group for two one-hour periods). The *politics* group revealed some problems, because the amount of words outnumbered that of the other groups already after one and a half hour of observation. Hence the data from this channel were cut short to retain manageable data-sizes. The basic reason for the huge amount of text in the *#politics* channel is that the users tended to write long messages, which often filled more than three lines on the screen. Hence the number of words quickly exceeded that of the other chatrooms.

The chatrooms are quite similar in terms of their percentage of active participants. Roughly speaking all of them reach nearly 30%. This similarity however seems to be a matter of chance as there are no obvious explanations for it, either in the medium or in the situational variables.

This little survey shows that, besides some differences in the situational variables, the comparability of the different samples is given. Hence a suitable method has to be found for a comparative analysis of all the nicknames that were collected and to search for some hints on their topic dependency and anonymity.

3. Method

Bechar-Israeli (1996: 24) pointed out "that although it is very easy to change one's nick constantly, in fact people rarely do so. Most people prefer the option of making friends via a stable nick…". This theory about the static nature of nicknames is absolutely valid for ingrained chat communities, as he explains in some examples. However, as IRC is not only used by fixed groups of 'chat-addicted' people, and there have to be examples of users who do not really stick to a single nickname. Investigating this in an non doubtful way is of course

very difficult, as the only sure method would be to observe the users during their daily surfings on the Internet, chatting on various websites, using either several or only one nickname. Since this is luckily still an impossible way of investigating the users' behaviours another approach has to be adopted, which assumes that the IRC medium is not used only by a fixed group of chatters but also by users who want to communicate with various people from all over the world, and talk about specific topics. The latter point is crucial for this type of investigation, as the choice of one's nickname seemingly is dependent on the topic of the chatroom. For example user <Doggie Style>, participating in an erotic chat will hopefully not enter a chatroom about the Harry Potter series, using this nickname.

3.1 Topic-relatedness and anonymity

Another factor is that very specific topic-related online discourse varieties seem to be adopted by users who named themselves after something that has to do with that topic. If one enters the website of a football magazine for example and randomly looks for a thread in the forum (which nowadays seems to be present on any official website on the Internet), one can easily see that a large number of messages were written by users whose nicks are related to the general topic *football*. "Of course" one would think. There is such a huge number of participants who have topic-related nicknames that one could ask whether those users keep their very topic-specific nicknames when participating in fora related to erotic or technological things. Some of them undoubtedly will, but the majority will invent new nicknames that stick to the topic they are communicating about at that very moment.

Anonymity is one of the interesting issues, as it seems to be related to the topics. Often discussion topics turn into a hot debate, which sometimes are characterised by flames and insults. Anonymity then functions as a shield to hide behind, so that one can freely 'shout' out one's thoughts. To examine the degree of anonymity of nicknames in topic related synchronous chats Bechar-Israeli's types of nicknames function as a starting point. They are presented in Table 3 below.

All of the categories in Table 3 include a degree of anonymity, which can be deduced from the information the users give about themselves via their nicknames. To establish such a ranking simple observations have to be made: the less personal information a participant includes in his or her nickname, the more anonymous it is. The concept *personal information* however has to be considered carefully. For instance Wallace (1999: 28 f) refers the behaviour and the self-presentation of online participants back to Goffman's outstanding study on impression management:

Erwin Goffman, the father of impression management theory, believed that everyone uses tactics to present themselves in whatever light they think appropriate for the context. Your motives are key. You might want to be liked by your audience, to dominate them, to throw yourself on their mercy, or to have them fear or respect you, and you will choose tactics for your self-presentation that you hope will accomplish your goal…[I]f you explore Internet niches in which nicknames are commonly used, the one you choose for yourself becomes part of how you manage your impression…[P]articipants choose their nicknames…with great care and come to think they "own" that name...so it becomes an attribute linked to every utterance you make.

Table 3. Types of nicknames according to Bechar-Israeli (1996: 13 f)

Group	Nicknames related to	Examples
1	Literature; fairy tales; characters from films, plays, television	<Hagolem>,<Godot>
2	Flora and fauna; names of animals, trees, flowers, vegetables	<froggy>,<tulip>
3	Famous people; identification with another person	<Elvis>,<Yosi>
4	Inanimate objects; weapons, cars, food, etc	<BMW>,<Mig>
5	Persons' characters; physical appearances; hobbies	<shydude>,<director>,<mares>
6	Places	<Dutchguy>,<El_ingles>
7	Age groups	<cloudkid>,<oldguy>
8	Relationships	<bfiancee>,<lovely_husband>
9	Medium; technology; computer; software; IRC commands etc	<irc>,<kickme>
10	Anonymity of the medium; hidden identity	<justI>,<me>
11	Language play	<gorf>,<whathell>
12	Onomatopoeia; imitation of sounds	<tamtam>,<tototoo>
13	Sex	<sexygirl>,<bigtoy>
14	Provocation	<fuckjesus>

On the one hand it is important to search for overt personal information, which can be defined as hints that allow conclusions about the participant's on-line identity. As the checking of the person's offline identity is somewhat difficult to carry out, nicknames have to be investigated from the user's point of view. That means that this study interprets overt personal information not with regard to the person who is situated behind the screen but with regard to the person who entered the virtual space. This method is supported by Chandler (1998: 3), who wrote that the creation of web pages offers:

…an unrivalled opportunity for self-presentation in relation to any dimension of social and personal identity to which one chooses to allude. Such a virtual environment offers a unique context in which one may experiment with shaping one's own identity.

Although this study does not deal with homepages, Chandler's findings on websites and identity can be transferred to the usage of nicknames as well, as they too seemingly function as a way of expressing an identity that may be related to the user's real life persona, which on the other hand might differ from it in certain ways. However, it is interesting that the way nicknames are constructed seems to be considered very carefully. In one of his various examples of e-mail correspondence, Chandler quotes a user who suitably says "…the important thing is you can only show the bits of you want and hide the bad bits you would get rid of if you could" (1998: 12). Wallace (1999: 29) joins in by writing that in the IRC chat

environment "at least half of the people were creating self-presentations that were not too far afield from their true identities, or at least their idealized selves…They establish an online persona and work on the self-presentation of that identity…". This is an important fact regarding the usage of nicknames. In one's nickname mostly positive descriptions of one's character, which are considered appropriate for the topic, will be mentioned.

On the other hand covert personal information given in nicknames has to be investigated too. This category consists of any information that refers to the participant's interests, desires and surrounding factors. As Chandler puts it: "Deciding what to include is 'a bit like deciding what clothes to wear'" (1998: 12). Furthermore, to decide what clothes one wears in real life is for many people a way of accommodating to certain groups (or even separating from them). The way we choose our clothes is influenced by personal preferences and interests. In on-line communication the factors that mostly contribute to the general assumption that there is a relation between nicknames and the topic of the chat-room, are whether one shows interest in a specific topic or not, whether one can identify oneself with a specific statement or not; all this can be expressed by choosing certain elements in one's nickname.

The majority of Bechar-Israeli's nickname-types could be assigned to the 'interest' group, but by making some generalisations and limitations both groups of overt and covert personal information appear to be rather balanced in Table 4 below. Then a third category was added, which includes nicknames that give no hints or any information about the person. This is of course the most anonymous one.

3.2 Degree of anonymity

Adapting Bechar-Israeli's general types of nicknames and researching for hints on personal information given through them, a table was created to illustrate the method used in this study. The column *characteristics* gives some information about the properties of each type of nickname, but in addition every single category is explained in detail.

First of all three groups have been established that describe the general degree of anonymity of nicknames from *very high* down to *low*. A *very high degree of anonymity* means that the nickname used by a participant does not reveal any information about the user's on-line identity. The second group given in the table is that of a *high degree of anonymity*, which is characterised by indirect information about the users' interests expressed by their nicks. The last group is that of a *low degree of anonymity*. Each nickname that contains information about the user's on-line personality has been grouped into this category.

Table 4. Degree of anonymity of Bechar-Israeli's types of nicknames

Anonymity	Relation to …	Characteristics	Examples
very high	1 Unknown	No conclusions about the user's identity are possible. No information about gender etc. given.	\<rwx\> \<beh\> \<h61\>
	2 Identity	The user is aware of the anonymity of nicknames and hides his/her personal information deliberately.	\<me\> \<justI\> \<Guest944\>
	3 Language play	No personal information given, only the awareness and the ability to play with language give a hint on identity.	\<whathell\> \<myTboy\> \<C{}{}L\>
	4 Onomatopoeia	May reveal some information about the mother tongue of a user. No personal information given.	\<tamtam\> \<tototoo\> \<mmm\>
high	5 Personal interest	No information about the user's identity given. Only his/her interests can be detected.	\<froggy\> \<tulip\> \<pentium\>
	6 Famous names	Age and sex can be guessed by the person the nickname refers to. Other personal information is not given.	\<elvis\> \<Kerry04\> \<JoseMourinho\>
	7 Provocations	Personal interest as well as the social and cultural origin can be detected by the reference to the provocations being made.	\<hitler\> \<fuckjesus\> \<hamas\>
	8 Place names	Personal relation or interest can be recognised by regarding the place names the user refers to.	\<dutchguy\> \<irish\> \<BrisbaneBabe\>
low	9 Personal character	The description of mental or physical characteristics provides certain hints on the person's identity.	\<shydude\> \<baddady\> \<handsom\>
	10 Age	Age is the most strictly kept secret of a person. Delivered in nicknames it provides some important hints on identity.	\<oldbear\> \<cloudkid\> \<ann12\>
	11 Profession	The profession of a user provides some hints on the gender, interest and the social status of that person.	\<FooTBallPlayER\> \<IT Maestro\> \<MadScribe\>
	12 Personal name	Mentioning one's name in CMC is the lowest degree of anonymity.	\<JanetB\> \<joey1\> \<Victor`\>

Each of these groups consists of four nickname categories which, according to Bechar-Israeli, have a specific relation to something. By analysing each type of relation a hierarchical order has been established within each group as well as amongst each category (hence they are numbered continuously).

3.2.1 Very high degree of anonymity

The most anonymous nicknames are those which give no information about the users' identities. First of all, there are nicks which seem to be made up by chance, an accidentally typed combination of letters and numbers for example. Although the readers of those nicks have no real possibility to gather information or make sense out of the cluster; the users themselves often have their explanations and implications. Other examples of nicknames that are beyond any analysis are those which were made up of elements of a foreign language (e.g.

<Der Helm>, which is German for "the helmet"). Those elements make it very difficult to investigate the meaning a user put into his nickname. It then becomes even more difficult if there is some sort of language play involved (e.g. <ashley^chen>, the element "chen" seems to represent a German way of making something sounding cute), that allows no comparison of the element in the nickname and its usual appearance in the foreign language's lexicon. Nicknames regarded as *unidentifiable* (corresponding to Bechar-Israeli's *unknown* nicknames in Table 4 above) do not always lack all sense and meaning; sometimes we just have no chance to find out about it. Since they do have a function, *unidentifiable* nicknames are included in this study as a way of expressing anonymity.

The second category is somewhat similar to the first one, although there is one enormous difference: users who refer back to their on-line *identity* are aware of the possibility of hiding behind their nicknames and they therefore play with the anonymity of the Internet. In this study examples of generated nicknames were also added to this group, as there often are opportunities to take over a preset nickname before entering a chatroom. That means that some nicknames in the data appeared in a standardised form. For instance the users <guest52> or <Guest025> seemingly did not invent those nicks themselves but accepted the suggestion of the software or the website, which appears when one wishes to enter a chatroom. Those preset or generated nicknames often consist of a variant of the word *guest* which is followed by a combination of numbers. As there are different ways of entering a chatroom (e.g. via a website or a client software) those nickname suggestions can appear in different variations (e.g. the word *guest* with or without an initial letter) but they are all very similar to each other. Taking over such suggested nicknames could be motivated by simplicity or other purposes that contribute to the users' awareness of the anonymity of this kind of nicknames.

The third category within the group of *very high degree of anonymity* contains nicknames that are related to *language play*. No overt personal information is given, and the conclusion that one person must seemingly be able to speak the language very well to play with it is being made rather cautiously in this study, because even if one is not able to speak a language at a level that allows language play, ideas and concepts that help in creating such nicknames could be learned or adopted.

The fourth and last category of nicknames within the highest level of anonymity is that of nicks which are related to *onomatopoetic words*. Similar to the former group, the nicknames provide no real clues about the user's identity, but often reliable assumptions can be made. This is due to the quality of onomatopoetic words which can be deduced from the users' cultural backgrounds. The barking of a dog in German would be written as *wau wau*,

whereas in English it would rather look like *bow wow*. Similarly nicknames that are related to onomatopoetic words would provide some hints about the cultural backgrounds of the users. As this phenomenon is related to auditory phonetics, which tries to explain how sounds are perceived by the ear and the way the brain of the listener segments those sound-inputs, the application of this very special feature in a study of written discourse is based on vague assumptions and cannot be regarded as completely conclusive. However, since it seems to be a way of classifying nicknames, already used by Bechar-Israeli (1996: 14), it is included in this study as well.

3.2.2 High degree of anonymity

The next degree of anonymity is classified as *high*. The first category connected to it consists of nicknames that are made up of terms related to technology, flora and fauna, objects and status symbols, as well as literature and entertainment. Compared to Bechar-Israeli's categories this is a summary of different types of nicknames which on the one hand reveal information about the users' *interests*, their possessions and preferences. On the other hand they provide only few clues about the users' on-line identity.

The following category is that of nicknames that are made up of *famous names*. With regard to the celebrity to whom the users pay tribute (or even dishonour in a certain way) one could speculate about the age of the users (at least about the generation they belong to), their interests and maybe their gender, which is likely to be female when a nick referring to famous boy groups or actors is used.

Next is the category of nicknames that contain *provocations*. Similarly to the usage of famous names the usage of provocative names of persons or political groups for instance may reveal some clues about the personal interest, the political opinion and about the location or origin of the user. The usage of this kind of *provocations* only makes sense if one owns background knowledge about the confrontations one triggers. Another type of *provocations* occurring in the data is that of sexual confrontation. Users that 'invite' others to join a communication with a sexual purpose often use as nicknames very clear statements about their sexual preferences, which can be interpreted as provoking.

The last category of nicknames within the group of *high degree of anonymity* can be classified as being related to *places*. Nicknames that refer to countries, cities or other locations around the world reveal at least the information that the users have a certain relation or even affinity to those places. For instance the location, the origin or the favourite holiday destination of the participants can be signalled. Two different ways are possible to achieve

this: either to mention the name of a location within a nickname, or, what occurs more often, to mention one's citizenship or other affiliations.

3.2.3 Low degree of anonymity

The last group mentioned is that of *low anonymity nicknames*. Its first sub-category contains nicknames that are related to the *character* which the user chooses to present online. This can be identified via psychological or physical characteristics mentioned within the nickname. Nicks that indicate the user's wish to have some special characteristics are also included in this category (for example exaggerated descriptions of such qualities prompt to the observer the conclusion that they are not present but wanted).

The next category is that of nicknames which are related to the *age* of the user (at least to the age which he or she wants us to assume). The important point is that generally at some age people start trying to hide information about it. Women and men of a specific age do not like to talk about it, and communicating via the Internet is very safe in this respect, because no conclusions can be drawn if the user does not reveal any information. Of course one could argue about the assumption whether *age* is a characteristic that reveals much information about a user's personality or not. However, there are people who provide some hints about their age and by doing so they give away some very private information on the Internet. Irrespective whether one can be sure about the correctness of the revealed age or not, the linguistic behaviour will be influenced by this information. Wallace (1999: 21) describes an explanatory scenario: "If I say that you are about to meet a 64-year-old woman, you already have some impression of her personality, even though I never said a single word about what she thinks or how she acts" (see also Section 5.2). The assumption that we all seemingly have some stereotypical images of people of various age groups leads to the conclusion that age is regarded a very personal and hence non-anonymous characteristic of human beings.

Nicknames that are related to the *professions* of the users are the next sub-category within the group of nicknames with a *low degree of anonymity*, since they reveal information about the users' personal interests; things a participant claims to do professionally seem to be of personal interest, especially when the user is not ashamed of mentioning them. Furthermore information on their social status is given, because even nowadays, although we might have overcome class-consciousness in most societies, the social rank of a person seems still to be established by his or her job, or at least by the money one earns.

The last category within this group consists of nicknames that refer to the *name* of the person. Mentioning one's real name (or at least a name one identifies oneself with, whether real or not) seems to destroy all anonymity.

4. Analysis

The description and ordering of each type of nickname in a hierarchical ranking now enables us to put the collected nicknames into the category they fit into. It is possible to interpret nicknames in various ways. Therefore, some of them occur sometimes twice or even more often in the analysis. That means that the total number of nicknames exceeds 100%. In fact 84 of 483 nicknames had to be coded more than once, and since they represent 17.4% of all nicknames, this topic will be addressed in a separate section (4.4). Below, each topic group is presented according to the classifications of nicknames.

4.1 Romance

Table 5 below presents the distribution of nicknames in the *#looking_for_love* chat-session.

Table 5. Distribution of nicknames in the *#looking   for   love* chat

Anonymity	Nickname type	Number	%	Examples
very high	1 Unidentifiable	24	13.4	<h-guy>;<jcb99>
	2 Identity	14	7.8	<bcc>;<justaguyinny>
	3 Language play	8	4.5	<cutEb0y>;<MsBehaving>
	4 Onomatopoeia	2	1.1	<titoo>;<mmm>
high	5 Interest	13	7.3	<Daew00>;<freedom>
	6 Famous names	6	3.4	<LurkNessMonster>;<Rambo>
	7 Provocations	21	11.7	<BoredWifeWANTED>;<go deep>
	8 Place names	23	12.8	<Greek M>; <westsider>
low	9 Character	44	24.6	<The Gentleman>;<cutie719>
	10 Age	25	14	<m43>;<older-m usa>
	11 Profession	4	2.2	<FooTBallPlayER>;<IT Maestro>
	12 Personal names	38	21.2	<Andreas 919>;<Falk>
TOTAL		*179 + 43*	*100 + 24*	

Nicks reflecting the users' *character* and *personal names* are the most frequent types of nicknames, with a percentage of respectively 24.6% and 21.2%. The high percentage of nicknames with a *low degree of anonymity* supports the assumption that anonymity is topic-related. Both categories consist of nicknames that reveal overt personal information, and the fact that both categories are present in nearly 50% of the users' nicknames seems to be a sign of the non-anonymous nature of this very special topic *romance*, compared to other topics of synchronous CMC. It seems quite logical that if one wants to take part in communication about love or even sex, one has to present as much information about oneself, to enable the other user to create a picture of oneself in their minds.

Further support for this assumption is that the category of nicknames related to *personal interest* is comparably less frequented. Only 7.3% of the nicknames fell into this group, and it is therefore as infrequent as the *identity* category, which indicates the users' play

with the anonymous nature of the chat. Disclosing a personal interest in fields such as technology, flora and fauna, entertainment etc., does not assist or facilitate the information-exchange between the users who communicate for the purpose of finding their love or (virtual) sex-partners. To anticipate, in the other topic-related chatrooms, the percentage of *interest* related nicknames is higher.

Interesting is also the distribution of the three degrees of anonymity. 21.6% of the nicknames were grouped in the four categories of nicks with a *very high degree of anonymity*. 28.4% were highly anonymous, and the remaining 50% were nicknames that provided a *low degree of anonymity*. Bearing in mind the very personal nature of this type of topic-related chat, these findings could be considered normal.

However, it is important to note that *unidentifiable* nicks are highly represented with 13.4%. 24 of the nicknames that occurred could not be interpreted, although many sources have been consulted, amongst them the on-line search engine Google and various dictionaries, but the meaning of nicknames like <h61> and <zoZV7mg> could not be deduced.

The following two categories are somewhat different from this very anonymous type of nicknames. The categories *place names* and *age* resulted in nearly equal numbers (12.8% and 14% respectively), the latter belonging to the group of nicks with a *low degree of anonymity*. At a rate of 11.7% the category *provocations* follows. The majority of the nicknames belonging to this group could be characterised as sexual teasing, e.g. <Open To Anything> or <BoredWifeWANTED>, whereas some others, like <da pope>, simply contradict the specific nature of the topic *romance* and *sex*. It is obvious that there is a humorous aspect within this nickname, and it also has a purpose, as Baym (1995: 2) explains: "humorous performance can be used to create group solidarity, group identity, and individual identity in CMC". It is important to notice, although we cannot assume to deal with a fixed online community, the purpose of humour is to establish a certain group identity. Users communicating in the *#looking_for_love* chat have a specific aim, mainly to make acquaintances through CMC, and with regard to humour, they therefore have a shared knowledge, "shared emotional significances which provide its meanings and determine its appropriateness" (Baym 1995: 3).

Having mentioned the most frequent categories, the rarest one should not be ignored. 1.1% is the result for the category of *onomatopoeia*, as only two nicknames could be assigned to it.

4.2 Sports

The next topic group that is examined is that of *sports*. It is the only group in this study that is represented in two different samples, collected from the chatrooms #*soccer* and #*sports* from the DALnet server (see Section 2). Table 6 presents the distribution of the nicknames taken from the sport chat-sessions.

Table 6. Distribution of nicknames in the #*soccer* and #*sports* chat

Anonymity	Nickname type	Number	%	Examples
very high	1 Unidentifiable	26	17.6	<vohuh>;<U_ErIolI_II>
	2 Identity	5	3.3	<Guest01762>;<Guest71594>
	3 Language play	10	6.8	**<C{}{}L>**; <Altern8>
	4 Onomatopoeia	0	0	/
high	5 Interest	54	36.5	<JuveLady>;<GUNN3R>
	6 Famous names	23	15.5	<reyes>;<Rooney9>
	7 Provocations	4	2.7	<LoRdDeVil>;<convict>
	8 Place names	4	2.7	<BrisbaneBabe>;<Raraavis>
low	9 Character	30	20.3	<scoffer>;<happy>
	10 Age	2	1.3	<old[age]>;<warkid>
	11 Profession	1	0.7	<coffeman>
	12 Personal names	13	8.8	<alicia>;<Jack>
TOTAL		*148 + 24*	*100 + 16.2*	

As one can see in the table above most of the nicknames that occurred in the chatrooms that belong to the topic group *sports* were put into the category of *interest*, which is represented by 36.5%. Most of those nicks really refer to football, like <Barca_Fan> or <il_bianconero>; the former is a common abbreviation of the word *Barcelona fan*, the latter is an Italian expression for Juventus fans. The next group that follows in line is that of nicknames indicating *character*, with a percentage of 20.3%, followed by *unidentifiable* nicks, resulting in 17.6%. Interestingly, all of them provide different *degrees of anonymity*.

Taking other categories into account the *high degree of anonymity* nicks finally is the most frequent, being represented by a total of 49.4% of all nicknames. The main reason for that is the percentage of 15.5% which represents the number of nicknames that were put into the category of *famous names*, which often refer to football players (e.g. <Hennry>), but also to basketball players (<brYaNT>) and tennis players (<Jenny_C>). Compared to the findings in the *romance* group, where 50% of the nicknames were assigned to the *low degree of anonymity* category, the majority of nicknames found in two *sports* chat-sessions also resulted in 50%, which are however characterised by a *high degree of anonymity*. This is quite natural given the topic of these chatrooms which seemingly require the use of rather anonymous nicknames, because hot debates are possible. Making a statement about a favourite team for

instance can spur some other users to write insulting messages, and the less information one gives about oneself, the better one can hide behind the shield of anonymity.

The other 50.6% of the nicknames are nearly equally distributed between the remaining categories of nicks *very high degree* and *low degree of anonymity*. The latter is represented by 26.8 % and 23.8% of all of the nicknames were put into the nickname-type 1 to 4. The rarest category again is the *onomatopoetic* type of nicknames; no examples could be put into this category. The *profession* and *age* category follow, which is remarkable with regard to the latter of these, as this category was very important in the #*looking_for_love* chat for instance. One could assume that overt personal information is unnecessary in such types of chatroom.

4.3 Politics

The next topic group investigated was that of *politics*. 156 nicknames were put into different categories; 10.5% of them occurred more than once. Table 7 presents the distribution of nicknames according to the type they belong to.

Table 7. Distribution of nicknames in the #*politics* chat

Anonymity	Nickname type	Number	%	Examples
very high	1 Unidentifiable	33	21.1	<Axsuul>;<lgcbmb>
	2 Identity	9	5.8	<e- Hernick>;<IamKing>
	3 Language play	9	5.8	<zwiti>;<deadgrrl>
	4 Onomatopoeia	1	0.6	<puu>
high	5 Interest	57	36.5	<FreeMrkts>;<Abydos313>
	6 Famous names	7	4.4	<Kerry04>;<ChuckZito>
	7 Provocations	4	2.5	<assbag>;<godfist>
	8 Place names	6	3.8	<MissLaVey>;<US-Male>
low	9 Character	27	17.3	<Fretless>;<Oldsh001>
	10 Age	1	0.6	<JPC1976>
	11 Profession	4	2.5	<TheTailor>;<MadScribe>
	12 Personal names	15	9.6	<JanetB>;<aaronx>
TOTAL		*156 + 17*	*100 + 10.5*	

The outcome of the investigation of this chat-session is very similar to the results of the *sports* group. Again the category of *interest* turned out to be most frequent, being represented by the same percentage, since 36.5% of all nicknames had to be put into this category. Many nicknames of this type referred to the topic of *politics* directly, like the examples <FreeMrkts> and <moderatum> show. On the other hand there were also nicknames that did not really belong to the specific field of *interest* in *politics*. However due to their specific function, nicks like <RustyFord>, <Glock21> and <guinness^> were also interpreted as expressions of *personal interest*, and thus included in this category.

Second-most frequent are the *unidentifiable* nicknames, which are represented by 21.1%. Again many nicks consist only of some consonants for instance, or of letters that seem to be put together without any sense. On the other hand there are nicknames that obviously have a meaning, which simply cannot be interpreted without asking the user. Hence <Braxari>, <ebbtepid> and <cjsarette> had to be classified as *unidentifiable* nicknames, although other people would recognise their meaning and therefore put them into other categories. As those cases are very rare, no fundamental problems or distorted results are expected. Furthermore, nicknames related to *character* occurred in third place, represented by 17.3%. This again is very similar to the *sports* group.

One of the main differences between the two topic groups however is the distribution of the different *degrees of anonymity*. Similarly to the *sports* group, the *high degree of anonymity* nicks were most frequent with 42.8%. The order of the other two categories however is reversed, resulting in 30.1% for the *very high degree of anonymity* in second place, followed by the *low degree of anonymity*, represented by 27.1%. This can also be explained by the nature of discussions which may be triggered by the topic *politics*. As Maricic (2005) already observed, debates on politics tend to be more aggressive than discussions on other topics such as for instance *sports*. This may be due to the omnipresence of *politics* in the everyday life of nearly every person in the whole wide world, whereas the presence and importance of specific sports may vary. Hence most of the users participating in political debates would usually put less personal information into their nicknames, in order to be less contestable. Another support for this assumption is the fact that nicknames that refer to *age* barely occurred in the two topic groups *sports* and *politics*. Young users would usually give no information about their age, because, especially in political debates, it can be a clue for older users to attack opinions or label the users according to their lack of experience.

4.4 Multiple codings

This section deals with the problematic issue of multiply coded nicknames. Each topic group is examined briefly according to the numbers and basic types of multiple-coded nicknames. Table 8 below presents the distribution of double, triple and quadruple codings (as far as they occurred) within each topic group, and in each subsection explanations are given to help us understand them correctly. Nicks that could be grouped into more than one category were marked depending on whether they were counted two, three or even four times.

Table 8. Multiple codings in the three topic groups

Topic group	Multiple codings	Counted 2x	Counted 3x	Counted 4x	Total counts	Total %
Romance	Double codings	28	0	0	28	65.1
	Triple codings	6	6	0	12	27.9
	Quadruple codings	1	1	1	3	7
	Total number	35	7	1	**43**	**100**
Sports	Double codings	20	0	0	20	83.3
	Triple codings	2	2	0	4	16.7
	Quadruple codings	0	0	0	0	0
	Total number	22	2	0	**24**	**100**
Politics	Double codings	13	0	0	13	76.5
	Triple codings	2	2	0	4	23.5
	Quadruple codings	0	0	0	0	0
	Total number	15	2	0	**17**	**100**

Table 8 describes every multiple coded nickname that occurred within each topic group. At first glance, its shape seems to be very confusing, but this format enables us to pick out the total counts of multiple codings as well as several single occurrences, double coded nicknames for instance. If one is interested in how many nicknames have been counted twice in the *romance* chat, one has to look for the *total number* line and the *counted 2x* column, and one can see that there were 35 nicks that have been counted (at least) twice. If one then is interested in how many nicknames had been counted three times, one has to concentrate on the next column, and one can see that 6 triple codings and one quadruple coding had been counted three times. The column *total counts* summarises all multiple counts that occurred in the specific topic group. For the *sports* chat for instance, it means that 24 of all nicknames had been counted more than once.

4.4.1 Romance

43 of the total number of 179 nicknames could be related to two or more groups. That means that 24% of all nicknames occurred at least twice. Doublings occurred very frequently within the groups *personal names* and *age*. 14 of 25 nicks that occurred in the latter group also contained names. Thus they were grouped into the former category as well. The usual form of those nicknames could be defined as <name+AGE>, resulting in examples like <mark23> or <Michael37>. Furthermore 5 nicknames related to *age* also contained elements that were put into the category of presumed *character* (e.g. <BaDBoy26>), and additionally 4 examples appeared also within *place names* (e.g. <Berlinman53>). As 23 of 25 nicknames related to *age* also consisted of other elements, one could conclude that giving information about age is basically an additional factor in the creation of nicknames.

A few nicknames contained so much information, that they could be grouped into three categories. User <Tim46nwOhio> for instance put very much information into his nickname. Therefore it can be grouped into the categories *personal names*, *age* and *place names*. The only nickname that could was put into four categories was <BenDover69>. Although it only contains three recognisable elements that can be put into the categories *personal name*, *place* and *age* (rather year of birth), the whole nick can be also interpreted as *provocation* in form of sexual teasing (especially with regard to the topic of the chat).

4.4.2 Sports

24 nicknames in the *sports* chatrooms had to be counted more than once, because they also contained information that could be grouped into different categories. Hence 16.2% of the total number of 148 nicks are multiple-codings. The majority of double coded nicks appeared in the categories *personal interest* and *character*. Nine nicknames occur in both groups, and most of them were put into those groups because no clear differentiation between a *character* trait and a *personal interest* could be made. For instance the nicknames of the users <Vamp> and <vampibella> could refer to both categories, either meaning that they are for instance Goths or simply interested in vampires. Another interesting case is user <MoBad>, who chose a nickname which is not very easy to analyse. It is one of the two examples that was coded three times, regarding the categories *character*, *personal interest* and *language play*. First of all the use of 'Bad' in the nick is conspicuous, maybe expressing a character trait. But holistically this nickname also has a meaning, since Mobad is a title within the Iranian Zoroastrian religion. Bearing *personal interest* in mind and focussing on the spelling of the nickname one could easily suspect the user to link Mobad to the word bad by using a capital letter. Hence this nick is also an example of *language play*.

4.4.3 Politics

Interestingly only a few nicknames belonging to this topic group needed to be coded more than once. The total number of multiple codings in this group is 17, and five of them appeared in the categories *interest* and *character*. As this is the most frequent combination it is very similar to the *sports* group, a fact that lets one assume that *personal interest* and *character* are not easily distinguishable. A user who calls himself <gnostic> either wants to express that he or she is interested in the mystic element of religion, or he or she wishes to be perceived as an inspired person.

The other multiple codings vary within many groups. One example has to be highlighted, i.e. user <puu>, whose nick is one of the two triple codings in this group. Either

the nickname <puu> refers to an *onomatopoetic* expression, a sound that is made when one gets off fairly lightly, or it is an example of *language play,* and the nickname represents the word *poo,* which then could also be interpreted as an informal word, used in a *provocative* manner, especially with regard to the topic *politics*.

4.5 Comparison

In this section the distribution of all nicknames is compared among the three IRC channels. Table 9 presents a summary of all the findings shown above in Tables 5-7.

Table 9. Comparison of the number, types and anonymity of nicknames in the three topic groups

Anonymity	Nickname type	Romance	Sports	Politics	TOTAL	%
very high	1 Unidentifiable	25	26	33	**84**	**17.4**
	2 Identity	14	5	9	**28**	**5.8**
	3 Language play	8	10	9	**27**	**5.6**
	4 Onomatopoeia	1	0	1	**2**	**0.4**
high	5 Interest	13	54	57	**124**	**25.7**
	6 Famous names	6	23	7	**36**	**7.5**
	7 Provocations	21	4	4	**29**	**6**
	8 Place names	23	4	6	**33**	**6.8**
low	9 Character	44	30	27	**101**	**20.9**
	10 Age	25	2	1	**28**	**5.8**
	11 Profession	4	1	4	**9**	**1.9**
	12 Personal names	38	13	15	**66**	**13.7**
TOTAL		**179 + 43**	**148 + 24**	**156 + 17**	**483 + 84**	**100 + 17.4**

It is very conspicuous that all of the topic groups that were examined are represented by roughly the same number of *unidentifiable* nicknames. Once again the problem with those nicks has to be mentioned, as one should not pay too much attention to them, since identifying a sense in a nickname is a tricky thing to do, given that every researcher is only able to interpret them according to his or her cultural background knowledge, which is different from researcher to researcher. Hence things that are obvious for some people will not be recognised, and the category of *unidentifiable* nicknames may be the only category in which errors of interpretation have to be taken into account. On the other hand it is totally clear that there are nicknames which do not make any sense for any other person, except for that particular user. As those nicknames then are used for the purpose of anonymity, they have to be put into the category of nicks with a *very high degree of anonymity*. Therefore, they justify the existence of this category, and since Bechar-Israeli for instance decided to eliminate "unclassifiable nicks" (1996: 15), it is important to explain why this study used them as a category of their own.

Playing with one's *identity* seemed to be most popular with users in the *romance* chat. The usage of a cheeky or teasing element may be motivated by the purpose of making the

users attractive for others by distinguishing them from other users via pun and humour. An interesting observation is that humorous nicknames almost exclusively occurred in the *romance* chat. Once again a reference to Baym's study (1995: 21) is made, as she quotes John Morreal, who argues, that "sharing humor with others, then, is a friendly social gesture. It shows our acceptance of them and our desire to please them…[humor] set[s] up the mood of acceptance and make[s] the other person relax". Many participants using funny nicknames play with the specific character of the chat they are communicating in. Examples like <go deep> and <BoredWifeWANTED> show that it is often on the verge of provocation and teasing. Other users comment on the specific character of the medium and the perhaps the users' online habits, like user <LurkNessMonster>. Another type of humorous nicks could be described as "a means of creating individuality when the cues to define ourselves in face-to-face groups are unavailable. One simple way this happens is through self-references…" (Baym 1995: 21).

The users <da_pope> and <MsBehaving> present characteristics of their online personality to some extent; the former nick has to be understood as a funny remark on the sexually teasing character of the chat whereas the latter is a simple result of language play. The nicknames used by chatters give some hints on their attitude to the chat and the communication going on there, as well as their communicative behaviours. It is likely to assume that <da_pope> is not going to take part in 'serious' conversations on sex and relations, as his attitude towards it is already made clear in a funny way. <MsBehaving> however triggers the assumption, that trying to communicate with her about immoral topics for instance could be crowned with success.

Baym (1995: 21) refers back to Baumann, when she writes that "humor has particular power in CMC to define individuality because it is performative". Furthermore, she explains that the performance of humour then "has special potential to increase the status of the performer" (ibid.). Hence, "[h]umour creates and transforms the social structure of the community. It is in part through humorous performance that particular posters overcome the seeming anonymity of the computer medium to develop their own voices" (Baym 1995: 22). The latter quote from Baym has specific significance for the *romance* chat investigated in this study, as anonymity is not helpful for the development of relationships. Therefore it has to be decreased, and humour seems to be one of the methods used to do this. This would also explain the lack of humorous nicknames in the other chatrooms that were investigated. Anonymity seems to be appreciated there, because of the hot debates that can develop about the topics *sports* and *politics*. Furthermore, the major purpose of communication is by no

means to make acquaintances or establish relationships, therefore anonymity does not have to be decreased.

The categories *language play* and *onomatopoeia* are both equally distributed amongst the three topic groups, the former being used relatively frequently. The latter however was used very sparsely. This is not very surprising, because nicknames that describe sound-imitations do not seem to have any relation to the topic of any of the researched IRC channels. Hence the users would not be motivated to invent a nickname containing such elements.

The category *interest* reveals some important facts. The *romance* chat was not really categorised by nicks that refer to a specific *personal interest* (but by the categories *personal names* and *character*, see Section 4.1), whereas the other two topic groups *sports* and *politics* have a very high number of nicks that were assigned to this category. This is due to the specificity of the topics which were discussed in the three chatrooms that belong to these two topic groups. The fact that those nicknames have generally been highly valued can be seen in the total percentage column in Table 9, which shows that over a quarter of all nicknames consisted of elements that expressed *personal interest*. Hence one could conclude that this type of nicknames in general is the most popular one with online-communicators, but as there are (to the best of my knowledge) no studies on this one should regard this as an assumption rather than a fact.

Now the *famous names* category comes into consideration, because it is the reason why the *high degree of anonymity* in this topic group reaches the highest percentage of all (see Table 10 below). The probable reason for the frequent usage of *famous names* when creating a nickname for participating in debates on *sports* than *politics* for instance could be the identification factor. That means that users rather identify themselves with famous sportsmen than politicians. This can be due to the seriousness of the topic *politics*, or to the low number of politicians one would readily identify oneself with.

Provocations are not used very frequently. Only the *romance* group revealed some examples, most of which were actually related to sexuality (e.g. <Doggie Style>). The category *place names* turned out to be a characteristic of the *romance* group as well, since a high number of occurrences were found only in this topic group. It seems as if the information on a user's origin is very important for some people. However, taking a closer look at the other two groups one could ask why a user should pay attention to where other users come from. It is not the user who is in focus, but his or her opinion about political things or sports. In other words, the topic of the chatroom seems to have once again an effect on the choice of nicknames here.

Although nicknames from the category *character* are very frequent in all the topic groups, it is important to mention that they were the most frequently used nicks in the *romance* group, whereas in the other two topic groups other categories were preferred. This is seemingly due to the specific topic of the group again, as there is a need to give information about one's *character*, in order to enable other users to create a mental picture of oneself in mind. In Table 10 below it is also important to note that the *low degree of anonymity* is most frequent only in the *romance* group.

Table 10. Distribution of the three degrees of anonymity in the IRC channels

Degree of anonymity	Romance	Sports	Politics	Overall
Very high	21.6 %	23.8 %	30.1 %	**24.9 %**
High	28.4 %	49.4 %	42.8 %	**39.2 %**
Low	50 %	26.8 %	27.1 %	**35.9 %**

The distribution of different degrees of anonymity in the *romance* group displayed in the first column of Table 10 shows that 50% of all nicknames had to be counted into the categories that provide a *low degree of anonymity*. This fact has to be regarded once again as typical for this topic, as more personal information has to be given in a *romance* chat than in debates about *sports* or *politics*. It is the same with the *age* category, which is seemingly important only in the *#looking_for_love* channel. Even the usage of *personal names* when creating one's nick seems to be important in this chat, but not in the others, as one can see in Table 9 above.

5. Discussion

To be able to investigate anonymity in CMC one has to refer to the creation of online identities, which function as a method to anonymise one's real life identity. Since the investigation of the participants' real life identities was not possible to carry out in this study, comparisons with and comments on findings of other studies are made when appropriate.

At the beginning of this study some questions arose, which are re-visited and discussed in this section according to the findings made in the analysis. The discussion of these research questions is divided into two parts. Remarks on *nicknames and identity* are made in Section 5.1; the *topic-relatedness of nicknames* is discussed in Section 5.2.

First of all we have to deal with the specific nature of the Internet medium, which is briefly described by Scheidt (2001: 1) as follows: "There are no changes in voice, no facial expressions, no body language, no (or very little) visual spatial environment as a context of meaning". Of course in some years, this statement will be outdated, since the development of auditory and visual elements on the Internet proceeds very fast. Online audio and video

conferences are already possible today. However, CMC has still to be considered a very special type of communication, as Wallace (1999: 16) points to the textual nature of most CMC varieties, which makes nearly all participants act in a cooler and less inhibited way.

But why do we think of the Internet as an anonymous medium of communication? In their work on online teaching and learning, Chester and Gwynne (1998: 2) point out that CMC happens under the so-called filtered-cues perspective. They argue that the cues which define the situational surroundings and the social ranking of the present communicators are largely filtered out in CMC, and therefore this medium can be regarded as relatively anonymous. This fact of course has an effect on the users' behaviour. "Without the usual non-verbal clues…", the authors explain, "users are less likely to feel constrained by convention…[Therefore] CMC has been associated not only with higher levels of self-disclosure, but also antisocial behaviour, including flaming…" (Chester & Gwynne 1998: 3). It seems as if online-communication is insensitive because of its anonymous nature. And "[o]ut of this vacuum came the creation of emoticons – those playful combinations of punctuation marks designed to show some facial expression – to add warmth to online communication" (Wallace 1999: 18). The insensitive anonymity on the Internet did not survive long, and users – especially in synchronous CMC varieties – started to invent methods that made CMC far more similar to real life interaction, like face to face conversation. This indicates that human beings have a need for close social interaction - and that in this sense, anonymity is counterproductive. This however explains the observation that the majority of nicks from the *romance* chat provide a *low degree of anonymity* (as Table 10 shows, see Section 4.5). By using nicknames that contain *personal names*, information on *age*, *personal character* or even *profession*, the participants in this chat reduce the anonymous character of the medium, because they want to get to know each other on a personal level. This leads to the conclusion that there is another characteristic of communication on the Internet, as Chester and Gwynne (1998: 3) admit: "According to Walther (1992) CMC can be as deeply relational as face-to-face interactions; all that is required is sufficient time and message exchange". Furthermore the authors explain that the relational element is a product of our strong desire for affiliation. Antisocial behaviour does not fit into that relational element and it is then also unlikely to be found in small chatgroups, especially in those which seem to be well established, used by a relatively fixed set of participants like Bechar-Israeli (1996) examined. The boundaries of anonymity are lowered there, and the users who know each other may be anonymous in terms of their real persona, the online persona however is by no means anonymous.

However, chatrooms that are not "owned" by a specific group of users are more likely to fall victim to tricks, flaming or other antisocial behaviour. Most of the users there do not establish a 'virtual relationship' to other users, and those who do, most likely did not spend enough time with each other to appreciate those relationships. Hence there is a difference between users who meet in chatrooms several times a week, each time because they want to communicate with each other and those users who enter chatrooms for the purpose of finding information about certain topics or let the world know their opinion about them.

The lack of many features of face-to-face communication at first sight gives a very anonymous impression of CMC. The usage of nicknames is an element that counters this assumption, because it "creates a context of 'managed ambiguity'" (Chester & Gwynne 1998: 4). Or as Danet (1996, quoted in Lev & Lewinsky 2004: 7) puts it: "On the Internet, choosing a nickname usually involves trying to achieve two different goals: 1. hiding the real identity 2. drawing attention to the virtual one". The functions of nicks in CMC are ambiguous. Being a method to establish anonymity, they are also meant to avoid it. This means that establishing a relationship is still possible in this rather anonymous medium, since the creation of nicknames offers the user "an opportunity to actively conceal or reveal elements of real-life identity" (Chester & Gwynne 1998: 4). Following Walther (1996), Chester and Gwynne refer to this phenomenon as 'self-selection', a term that is interchangeable with Scheidt's 'self-promotion' (2001: 4) and which symbolises at least a part of the complicated process that Goffman (1959) calls 'self-presentation'.

5.1 Nicknames and identity

"On the Internet, one of the first things people see is your e-mail address, and the information it conveys can also contribute to your impression" (Wallace 1999: 20). This statement accounts also for nicknames. Hence one should search for conditions that determine the creation of nicknames, which then are responsible for the first impression on other users.

When entering a chatroom, the first message that appears to the other communicators is "user joined #*channel*", which introduces the user the others as his or her nickname appears on their screens. If they pay attention to it or not simply depends on the users' willingness to communicate with recent newcomers. But if they notice such messages, the first impressions they have about the user that recently entered the chatroom are triggered by his or her nickname. Next in line probably is the way they introduce themselves to the other users, maybe by greeting around or giving some extra information about what they are looking for in the chatroom. All those circumstances lead to a specific mental picture of the newcomer

that the other users develop in their minds. This picture does not only depend on how the information about the newcomer is given, but how it is perceived by the other users. Goffman (1959: 14) explains this phenomenon by the differences between 'given' and 'given off' information, in other words the information about oneself one wants to present ('given') and the information that others read out of that presentation ('given off'). That means that the stereotypical picture the users in a chatroom have about others is a crucial point here, and whenever parts or elements of one's nickname serve any of those stereotypes, the judgement will be made quickly.

While sampling material for this study, a very interesting episode of actions was noticed in the *romance* chat, which is presented in Example 1 below. In this example (irrelevant messages in between have been deleted) <MsBear> and <vagabund> are the 'actors' and they play some sort of intimate role-play in the *#looking_for_love* channel. As far as the observations of this chat allow, one can say that they did not chat with each other for a long time, but soon they arrived at a stage, when they got involved into an intimate exchange of emotional gestures. This describes how nicknames create an impression about users, how they provoke a mental image in the opponent's mind:

Example 1
        *vagabund snuggles hugs mama bear
        *MsBear strokes vagabunds beard
        <MsBear>   mama bear? lol
        <vagabund>   yeah
        <vagabund>   why not?
        <vagabund>   :P
        <MsBear>   lol not yet

Here we can make two observations: first of all it is interesting, that <MsBear> assumes that her conversation partner has a beard that she can stroke, even without knowing about the outer appearance of user <vagabund>. Seemingly the nickname caused this assumption, as the mental picture of a vagabond was triggered in her mind, which describes this person as a slightly shaggy, maybe untidy person. The impression has been triggered by the nickname, probably unintentionally. But as he did not complain about it, he seems to be able to identify himself with this attribute.

Secondly, in the first line one can see that user <vagabund> refers to user <MsBear> as "mama bear". She then complains about it by indirectly questioning why he called her like that. He seemingly is surprised about this question and asks "why not?". It seems as if he is very surprised that she does not have the same picture of herself as he has of her. He seemingly interprets that the abbreviation 'Ms' stands for married woman (which it actually

can, amongst other things). Furthermore he assumes, that married women often have children, therefore he calls her "mama bear". She on the other hand does not share this interpretation of 'Ms'. Her message "lol not yet" clarifies that she does not yet have children, and maybe additionally that she is not married.

These findings are not very surprising, regarding Lev and Lewinsky's characterisation of names: "People's names carry major significance for their own identities and as identifiers in social interactions" (2004: 4). They explain that names are of an immense symbolic and psychological importance. Scheidt agrees on this point. She defines the nickname as an identifier for the participant "when talking to others or when others talk to them. Nicknames can be very fluid, and are easily and quickly changed to meet the participant's needs or desires" (Scheidt 2001: 1). She comments on the easiness of changing one's nick, which already Bechar-Israeli (1996) pointed out. He however could not find any reason that would promote switching one's nickname. Scheidt however speaks about the users' needs and desires which trigger such behaviour, a statement that undermines the assumption of this study (see Section 3), nicknames are only stable in established chatrooms which are used by a fixed set of participants. By questioning the established character of IRC chats in general, and assuming that many users also participate in various other chatrooms around the Internet, we can detect the motivation for users changing their nick, as Chester and Gwynne's (1998: 2) put it in a reference to Sherry Turckle's book *Life on the Screen* (1996):

> [In Cyberspace] we can experiment with how it feels to be the opposite sex or sexless, we can change our ethnicity or the colour of our skin, we can develop relationships with people we would never meet face-to-face, all of which enable us to experience a different perspective from which to (re)view the self and real life constructs.

The possibility to play those identity role-plays is only given if one adopts one's nick in view of the type of chat one wants to participate in. For the successful creation of an online persona, namely to hide one's real life persona behind the mask of an virtual identity, in synchronous CMC, the nickname is a very important element, since it is the first and only hint to the identity of your communication partners. This study for instance examined three different topics of synchronous chatrooms, all of which were characterised by users who in majority chose nicks that triggered an appropriate first impression on the other participants. Appropriate in this context means that those nicknames often could easily be connected to the topic of the chatroom (see also Section 5.2) and to the position of the user him-/herself towards this topic. User <KerryRulz> who participated in the *politics* chat for instance reveals the information that he identifies him-/herself with the politics of the US American candidate

for president in 2004. By giving this information the other users have a specific picture and opinion about this user and his views. In their PowerPoint presentation, prepared for a conference, Lew and Lewinsky describe, that "[t]he chosen nickname was found to have a powerful impact on the responder's reaction. The degree of importance attributed to the name proved positively related to the inclination to hold a long 'chat' conversation" (2004: 10). Hence "the higher the importance attributed to the name, the stronger the inclination to hold a long conversation" (ibid.). This means that users who either feel challenged by the attitude of participant <KellyRulz> or those who have the same opinion will feel free to chat with him about their views, rather than users who feel not attracted by his nickname revealing his opinion about politics.

Besides anonymising the users real life persona (see Section 5), creating an online persona that represents the interests of chat participants and attracts communication partners seems to be another function of nicknames at least in synchronous CMC. The information that is been put into nicknames is of crucial significance to fulfil this function. As Lev and Lewinsky (2004: 13) found out, the majority of participants do not choose unconventional names, although the opportunity to do so is tempting. It seems as if 'unconventional nicknames' do not serve to attract other chat participants. Hence, many users stay closer to their real life identity when creating an online persona, as Chester and Gwynne found. They describe a very interesting case that occurred during their study. One student did not seem to be interested in the online tasks the tutors gave them, and "from his first post [he] was aggressive. He swore, wrote in capitals, and flamed other students…[He] was distinguished not only by his online aggression but the persistence of his virtual personae" (1998: 8). Thus, Chester and Gwynne argue, that this specific user did not move out of his online character (when participating in CMC), whereas others, who also appeared to have well developed identities, sometimes did. Interestingly, in the meeting after the study, where most of the participants met face-to-face for the first time, the above mentioned disinterested user demonstrated nearly the same traits in his real life character. "He communicated an attitude of disinterest without being particular disruptive" (ibid.). Hence, one cannot reproach him for not coming out of his online persona when participating in CMC, but for not creating an online persona that was different to his real life persona.

Maybe one should regard this as a very special case, as it seems to be very unusual for participants to make no differentiation at all between their behaviour online and in real life. However, it supports the claim of Wallace (1999: 48 f), who says "that many people stay close to their home self and just tinker with a few traits they wish they could improve". Even

more interesting is that the user mentioned above did not even want to hide his disinterest, which could be (and certainly has been) regarded as unsuitable and impolite behaviour by the other participants. At least in online communication he could have displayed some interest in the work he was asked to do, because the anonymous character of this medium would hide the disinterest in real life. However, as he seemingly did not use the anonymous characteristic to his own advantage, one could say that this participant is the best example for users that present their online persona very close to the person they are in real life. Assuming that this is a common feature of nicknames, we could easily believe user <nicejoe> to be nice and named joe, or that <Mickey23> is exactly 23 years old.

However, it would be far too easy to believe everything that users claim via their nicks, and it could have fatal consequences to do so. That the information nicknames contain is not always true has been observed by many researchers. Chester and Gwynne (1998: 8) described that the anonymous character of CMC provides a choice for the users about when and how they would reveal information about themselves. This choice is very important. The selection of what users want to include in their nicknames leads to an important question: "[W]here is the boundary between legitimate and illegitimate identity experimentation?" (Chester &Gwynne 1998: 7). We have to consider the possibility that creating an online persona that does not fit to the real person behind the screen is some sort of lying. Wallace (1999: 39) tries to explain this phenomenon as she quotes Antole France: "Without lies humanity would perish of despair and boredom". Reversing this quote, she explains, would mean that lies would offer some excitement and joy, at least in CMC. The covering of users behind an online persona is some sort of role-play. Mentioning 'wrong' information about oneself within one's nickname then has to be regarded as creation of a character for the purpose of role-playing. The reason for this behaviour in her view lies in the specific nature of the Internet, which is characterised by physical distance and low social presence.

However, to call every on-line communication participant a liar would go too far. One possibility to avoid this is to distinguish between the playful decoration of situations like in role-plays or chatrooms and the real lie, which means that not telling the truth about someone or something can cause harm to another person. Of course this can also happen in CMC, regarding the luring of innocent children by paedophiles. However, we have to consider participating in CMC as some sort of role-play, in which one masquerades oneself deliberately and everyone knows it is a mask the users hide behind. Hence it is not lying in its real sense.

The role-play approach is especially valid for the *sports* and *politics* chatrooms that were investigated for this study. Many nicknames were found that could trigger playful conversations in synchronous CMC. Those nicknames can mainly be found in the categories *famous names* and *interest*. Example 2 below was taken from the channel *#politics*. It contains two nicks that were put into the category of *interest*.

Example 2

<Glock21>	Right to bear arms applies to assault rifles as much as it does to muskets.
<RustyFord>	a Glocky a Glocky a beautiful wonderful toy, a Glocky a Glocky its good for a girl or boy!

In the material sampled from the *#politics* channel, user <Glock21> (a type of a hand-gun) argues for the right of every person to carry weapons. Some messages (and arguments with other participants) later, user <RustyFord> joins him by sending this playful post, that functions in two ways. The context made clear the (s)he has the same opinion about weapons as <Glock21>. Hence, these messages have to be understood as tribute to the statement of <Glock21>. Secondly, <RustyFord> puts emphasis on his own opinion about the issue.

Nicknames that refer to *famous names* may have even more potential for playful conversations. Although in this study, no example could be detected to prove this assumption one could easily imagine how the users <JoseMourinho> and <Henry> (the former nick refers to the recent manager of Chelsea Football Club, the latter represents a player of their city rivals Arsenal) participating in a *sports* chat would engage in a playful communication with each other, on condition that both of them identified themselves and each other with those famous names. Taking a look at Table 9 (Section 4.5) one can see that both the categories *famous names* and *interest* are more or less representative for the two topic groups *sports* and *politics*, but not for the *romance* chat (except for the similarities between the latter two groups in the *famous names* category).

The fact that the creation of an online-persona is not always influenced by the phenomenon of online role-play is shown by Ellison et al. (2006), who wrote an article about self-presentation strategies amongst members of an online dating service. The authors focus on the way the users created their online profiles, which means the way they describe themselves in detail, mainly to attract other users for the purpose of arranging a face-to-face meeting. Because of this different purpose of communication, it is interesting to have a view into a branch of CMC in which the role-play phenomenon, which is described above, does not apply. The authors' main findings are presented in the quote below:

One way in which participants reconciled their conflicting needs for positive self presentation and accuracy was to create profiles that described a potential, future version of self. In some cases, participants described how they or others created profiles that reflected an ideal as opposed to actual self: "Many people describe themselves the way they want [to be]…their ideal themselves".

(Elliot et al. 2006: 10)

Generally, they explain that the participants did not regard themselves as liars or value their idealised self-presentations as deceptive communication. The term 'foggy mirror' is used to relate to this "gap between self-perceptions and the assessments made by others" (Elliot et al. 2006: 12). Hence one could say that users who create nicknames that are thought to reflect their own personality, especially in this specific online dating circumstance, are a description of an idealised self. Therefore, the foggy mirror approach seems to be valid basically for the *romance* chat.

Users who make a description of themselves by looking in the 'foggy mirror' use elements in their nicks that represent the way they see themselves in reality, even though other people would not use the same characteristics to describe this person. Two examples from the *romance* chat are used to illustrate this: A user who calls herself <hot Latina> by some persons would neither be characterised as *hot*, nor as *Latina*. It all depends on the point of view, on what different people regard as *hot*, or how they believe a typical Latino person looks like. The same is valid for user <The Gentleman>, who maybe believes his behaviour is gentleman-like. Other persons maybe would not compare him to a gentleman though. The view people have of themselves often is not shared by others, and that is why we may accuse them of lying or deceiving. But instead of doing so, we should simply believe the things presented by them, since "…the future face-to-face interaction they anticipated meant that individuals had to balance their desire for self-promotion with their need for accurate self-presentation" (Elliot et al. 2006: 14). The authors go even a step further and claim, that online self-presentation in their examples turned out to be more honest than self-presentation in face-to-face conversation (Elliot et al. 2006: 3). The pressure to highlight one's positive characteristics goes necessarily hand in hand with the compulsion to present the truth about oneself. To highlight one's positive attributes on the one hand is necessary for the user to be able to attract other participants' attention. Hence exaggerations or lies about one's character would be beneficial. On the other hand, the fact that most of the online acquaintances lead to a face-to-face meeting proves to be a hindrance. Presenting oneself the way one really sees one's own personal characteristics proves to be the acceptable way.

5.2 Topic relatedness of nicknames

The fact that the topic has an impact on self-presentation and therefore also influences the choice of nicknames has already been pointed out in the discussion above. In two of the chatrooms investigated for this study the role-play phenomenon in many cases leads to the creation of an online persona that could be characterised as estranged from the real-life persona. The tempting possibility of identity switches given in the Internet medium is one of the main reasons here. However, in very specific CMC environments, like the one investigated by Ellison et al. (2006), the creation of an online identity is influenced by other factors. Here, the idealised self was used to create an online persona that is by all means related to the real life persona.

This section deals with the other two research questions. It is discussed what users want to tell us or conceal about themselves via their nicknames, and how much personal information users who participate in different topic related chats would add to their nicknames. As one can see, these questions have to be analysed from different perspectives, as the different topic groups which were investigated in this study offered various findings. To discuss the topic dependency of nicknames, a quick glance at Scheidt's (2001) study will be given.

For her study, Scheidt investigated nicknames and avatars similarly to this study. On the one hand, Scheidt tagged the nicknames according to male, female and unknown gender. Furthermore all nicks were coded according to Bechar-Israeli's categorisation, which did not turn out to be suitable, because "the adolescents were selecting nicknames from different realms or with different motivations then [sic] the mostly adult IRC participants from whom the coding scheme [of Bechar-Israeli] was developed" (Scheidt 2001: 20). However, Table 11 below briefly summarises her findings. In fact the table below was created to summarise Scheidt's findings that are presented in her Tables 8-11 (2001: 11-14).

When comparing Scheidt's findings with the results of this study, the distribution of nicknames within the *romance* chat appears to be very similar. Regarding the frequent types of nicknames, one could conclude that in both chatrooms the majority of nicknames are of a *low degree of anonymity*. 43.18% in Scheidt's chat session relate the nick to an *actual name*, a category which can be compared to that of *personal names*, which has been used in this study. Interestingly, this category was also characterised by a high percentage in the *romance* chat (21.2%).

Table 11. Summary of Scheidt's (2001: 11ff) investigation of nicknames

Category	Counts	%
Actual name	171	43.18
Typography	139	35.10
Self character traits	118	29.79
Age related	33	8.33
Sex related	50	12.62
Provocative	40	10.10
Interest	31	7.82
Social status	22	5.55
Flora & fauna	18	4.54
Relationships	12	3.03
Inanimate obj.	14	3.53
Famous people	20	5.05
Ethereal	10	2.52
Multiple chatters	4	1.01
Onomatopoeia	6	1.51
Popular sayings	3	0.75
Technology	6	1.51
Anonymity	7	1.76
Place names	7	1.76
Gang or group	16	4.04
Total	*396*	*100 + 83.5*

Although there is more than 20% difference between them, they are not that far from each other regarding their ranking place within both samples. The *actual name* category is the most frequent in Scheidt's example, and *personal names* is the second most frequent category in the *#looking_for_love* channel investigated in this study. Of course the two samples cannot be compared completely, as they derive from different studies and have been made under different circumstances and for different purposes. Hence some categories are not comparable, like Scheidt's category *typography*, which seems to include every misspelled name as well as examples of language play. Another example is the *unidentifiable* category which is used in this study, since it does not even exist in Scheidt's analysis. However, some other categories can be compared to some extent. The category *self character traits* for instance, which lies in third place with 29.79% in the ranking of Scheidt's nickname analysis, is comparable to the category personal *character* in the *romance* chat analysis, which is in first place with 24.6 %.

The indication of overt information via one's nickname seems to be triggered by the same forces in both chats, since they show similarities, although their participants are of different age groups. The topic has to be this trigger. Scheidt (2001: 1) describes the chat she investigated as follows: "Adolescents meet and talk about their lives, their personal problems, their activities, or nothing in particular." No real topic is mentioned here, and some pages later she writes that the "adolescent chat space used for this study is part of a chat site consisting of 181 chatrooms…One General Chat room was selected for this study based on

the consistent use of avatars, and the regularity of 10 or more participants around the clock" (2001: 4). Since this chatroom seems to be topic free, we can assume that it is used by people who definitely communicate for making friends, who talk to someone for the purpose of communicating rather than the exchange of information on specific topics (like it is the case in the *sports* and *politics* topic group). Hence, the *romance* chat and Scheidt's example are not very different in their purpose, but in the participants who communicate of course they are. Both chats seem to have the purpose of making acquaintances, chit chatting or pouring one's heart out. Hence some more similarities between them can be found. The *provocative* category in Scheidt's analysis in combination with her *sex related* category could be compared to the *provocations* category of this study, as it includes both provocative names and sexual teasing. Both categories are quite well represented, with 22.72% in Scheidt's analysis (resulting in 12.62% for *sex related* nicknames and 10.10% for *provocative nicks*) and 11.7% for the *provocations* category in this study, the latter being situated in fifth place, whereas the combination of Scheidt's categories is situated in the fourth place.

One striking difference between both analyses is that the category *age* is not very representative in Scheidt's article, whereas in the *romance* chat of this study it is. That may be explained by the different participation structure. Scheidt's chat is basically visited by adolescents, and the users might be aware of that. Therefore, mentioning one's age may not be necessary, because all of them know that they belong to the same age group. In the *romance* chat, it is not clear which age group is dominating among the participants. Since age is a crucial factor that is considered when making romantic acquaintances, it has to be presented at some point, often already in the nick.

Bearing this in mind, users, when entering a chatroom, have to choose their nicknames carefully. It has to fit the topic (to avoid misunderstandings). It furthermore often contains much information about the users (things they want to announce), which are appropriate for the specific type of chatroom they participate in. Hence, *name* and *age* are frequently used elements of nicks in the *romance* chat, to establish a common ground, and a warm and familiar milieu. In Wallace's view *age* and *gender* are the most important information one needs to judge another person by (1999: 21). Information about *age* is easy to include into nicknames. It can be presented as definite numbers, included in the nicks, e.g. <m43>, <mark23> and <Kathia18>. Another method which is used very often is to include elements in one's nick that allow to draw conclusions about the age of the user, e.g. user <JPC1976> who seemingly was born in 1976 and hence 30 years old. The gender issue, as already mentioned, is not discussed here in detail. However, it has to be mentioned that it is also very

important information the other users need to be able to judge you. In synchronous CMC, gender can be mentioned directly by using the elements *m* (male) or *f* (female), or by giving one's name, which also reveals some information about the gender of a user. Gender is important, since knowing whether one talks to a man or a woman triggers different communicational behaviours. If those two simple facts about the users are missing while communicating in a serious way, the whole discourse seems to be disturbed. Wallace (1999: 22) even speaks about a paralysis:

> In a professional discussion group participants rarely inquire about age, but in the social niches, the pressure to divulge age, and also gender if it isn't obvious, is relentless. We seem almost paralysed in a social interaction until we know these two simple facts. Such interrogation would be rude in other settings, and mostly unnecessary anyway, but on the Internet it is not unusual.

As one can see in this quote, the topic has an impact on whether information about age or gender is regarded as important. Within "professional" discussions, the information about age and gender is not very important – this was also the observation within the topic groups *politics* and *sports*, the two chatrooms which were characterised by relatively detailed and long debates on the topic. The above mentioned "social niches" then represent those chatrooms that are either topic free (compare Scheidt's example) or those whose topics have the purpose to help people establish relationships. Before entering those chatrooms (e.g. the *romance* chat), many people insert information about age and gender (more likely a name) into their nicks, either as wordplay (e.g. <MsBehaving> and <cutEb0y>), as abbreviated elements (for example <kindm>) or written out in full (i.e. <male29>).

As the analysis has shown, many nicknames also consisted of elements that could be put into the three categories *age*, *gender* (or *name*, as gender often can be deduced) and *nationality* (or *place names*, as it is referred to in the analysis). The users do this either for the purpose of avoiding irritating questions like 'Where are you from?' and 'How old are you?', or even "morf?" which stands for "(Are you) male or female?". Another possibility is that the users include such personal elements in their nicks because they want the others to have a specific picture of them in their minds, to trigger a positive first impression, as Wallace (1999: 24) concludes:

> In the social neighbourhoods of the Internet the pressure to reveal age and gender is high because these two features are so fundamental to the initial impression. Nationality and race are also salient characteristics. Questions about location, from which you can infer national origin, are quite common.

The more self-disclosing information is included in the nickname, the faster a judgement can be made. Hence, conversation moves on quickly to interesting things. This behaviour is very appropriate for the *romance* chat for instance, where 50% of the nicks consisted of elements that provide a *low degree of anonymity*. The mass of nicknames that were put into the categories *age* and *name* are the main reasons for that, as mainly these are involved in a first judgement. Another possible explanation is that the presentation of self in the *romance* chat in general is different from that in the *sports* and *politics* chat. More personal information is given, since the users are situated in a 'meeting place' to make acquaintances and not only to exchange views.

Users in the *sports* chat have another purpose of communication. They do not want to be seen as lone-hearts that search for some acquaintances on the net. They want to talk about sports, and for that they need to tell everybody, in which sport they are particularly interested in. Therefore they often create nicknames that reveal such information. Football fans would use names of teams or players they identify themselves with, rather than create nicks with their real name or age. For this topic, it is more important to know what sport and team they support rather than to know their real name or age. Otherwise a fluent communication would not be possible. The fact that the identification of users in those types of topic related chats is of a different kind is explained by Example 3 below, which presents an episode that has been elicited intentionally for this study by entering the *#soccer* channel under the nickname <Fowler> for the purpose of actively taking part in the ongoing discourse.

An extract of the conversation is presented here, in which the user <Fowler> entered the room with the purpose of observing the reaction of the other users on his nickname.

Example 3:

<il_bianconero>	hard week for juventus!!
<Fowler>	why?
<il_bianconero>	CL Bremen, next sunday milan
<Fowler>	that sounds bad!
<HAMBRG>	fowler
<HAMBRG>	lousy
<Aspiration>	fowler => no loosy at all
<Fowler>	whats wrong with fowler?
<[w4|_h0nG]>	nothgin's wrong, he's juz getting old
<Fowler>	we all!!! init?
<[w4|_h0nG]>	i noe
<[w4|_h0nG]>	i dint say he's useless
<Fowler>	soon he'll be the old GOD
<[w4|_h0nG]>	lol hope so
<[w4|_h0nG]>	next match liverpool vs who?
<Fowler>	charlton!
<[w4|_h0nG]>	good food
<Fowler>	na, scoring no goals at the mo!

Some extra information has to be given here: the nickname <Fowler> was thought to represent the famous football player Robbie Fowler from England, who at that time was popular in the international media because he moved back from Manchester City to his former employers at Liverpool Football Club. After a short communication with user <il_bianconero>, who seemingly did not seem to feel challenged to comment on the nick, user <HAMBRG> who just entered the chatroom, admitted that he thinks that Fowler is lousy. <Aspiration> quickly joined the conversation and admitted that he has another opinion about that. To obtain more information about how the users identify the nick <Fowler> the question "whats wrong with fowler?" was asked. Prompt another user, called <[w4|_h0nG]> felt forced to inform the others about his view on the topic. The communication partners in this chat quickly recognised, that the nick <Fowler> represents the football player, and that the user identifies himself with that player (otherwise user <HAMBRG> would not have mentioned his aversion for Fowler in that obvious manner). This episode also proves that the participants in this chat all had common background knowledge. In fact they knew about the change in clubs Robbie Fowler made recently. At least user <[w4|_h0nG]> knew about it, since he asked about the next game Liverpool were going to play at that time. He recognised user <Fowler> as a Liverpool fan, although this had not been mentioned directly. The question how he could be sure about it can easily be answered. Some lines above the question about Liverpool's next game, user <[w4|_h0nG]> admitted "i dint say he's useless", and the following message of <Fowler> then contained an insider information: "soon he'll be the old GOD". Because of his outstanding goal-scoring skills Robbie Fowler is called "God" by the fans of Liverpool. This unique information was the hint user <[w4|_h0nG]> needed to connect user <Fowler> to the Liverpool FC. It seems as if the other users did not recognise this, as they did not comment on that. Hence <[w4|_h0nG]> had more background knowledge to interpret and identify the characteristics (in fact his interest) of user <Fowler> correctly. This example shows that it is important to have a nickname that fits the topic of a chatroom, as it eases the process of communication. In this channel, the majority of the users had an interest in football, and using a nickname related to this particular sport helped to identify the users and their online personas they were communicating with. In contrast to chatrooms that serve the purpose of making acquaintances, giving personal information through one's nickname was not necessary to participate in a topic related discussion within the topic group *sports* as well as in the channel *#politics*.

6. Conclusion

The aim of this paper was to examine the nature of anonymity provided by nicknames which are used in computer-mediated communication. The topic dependency that underlies the creation of nicknames was also in the focus of this study. 483 nicknames were collected all in all from the four different channels *#looking_for_love*, *#soccer*, *#sports* and *#politics*. Although the method of examination draws on Bechar-Israeli's (1996) categorisation of nicknames.

It turned out that, besides anonymising the user's real life persona, creating an online persona that represents the interests of chat participants and attracts communication partners seems to be another function of nicknames at least in synchronous CMC. Therefore, nicks have to be characterised as ambiguous, since they function as a method of creating anonymity as well as supporting the creation of online identities, which by no means can be regarded as anonymous. The information that has been put into nicknames is of crucial significance to fulfil this additional function. Whether this includes also information about the real life persona depends on certain circumstances, such as topic, purpose of communication and the individual's preferences of course. However, it seems as if users mainly stay close to their real life persona when they create their nicks. This means that the things they want to tell us about themselves via their nicks can, with more or less certainty, be referred to their offline persona as well, although there is also a number of people who are aware of the anonymous character of the Internet medium and make use of its potential for deception. Considering the question 'what do users want to tell us about themselves and what do they want to conceal', varying answers were found. However, one general statement can be made: "…the important thing is you can only show the bits of you want and hide the bad bits you would get rid of if you could" (Chandler 1998: 12). Those bits are valued differently in the various topic groups discussed in this study. Hence, information that is regarded as important for nicknames in the *romance* chat turned out to be regarded as irrelevant by participants in the other two topic groups (i.e. *sports* and *politics*). One remarkable example is the *age* category, which almost exclusively occurred in nicknames taken from the channel *#looking_for_love*. Furthermore, the information about age turned out to be an additional factor, as nearly all examples occurred within multiple codings.

This study proved that the topic has a huge impact on the creation of nicknames. When users enter a chatroom, they have to choose their nicknames carefully, since it has to fit the topic, simply to ease the course of communication. Furthermore nicknames have to contain information about the users which is appropriate for the specific type of chatroom they

participate in. As the analysis of the *romance* chat has shown, many nicknames consisted of elements that could be put into the three categories *age*, *personal names, character* and *place names*. The participants added this personal information to their nicknames either for the purpose of avoiding irritating questions or because they wanted the others to have a specific picture of them in their minds, to trigger a positive first impression. Bearing this in mind one can see that the presentation of self in the *romance* chat differs from that in the *sports* and *politics* chat. Less personal information is presented by the users participating in those two chats, as communication for them has another purpose. They do not want to be seen as lone-hearts who search for some acquaintances on the net. They want to talk about sports or politics, and for that they need to tell everybody, what they are particularly interested in. Hence, they often create nicknames that reveal information about *interest* or *famous names*.

This study has shown that nicknames are created for different purposes. Nicks serve some of the needs and desires of the users. Those needs and desires differ according to the individual behind the screen as well as to the topic. The process of online self-description, which is apparently connected to the creation of nicknames, could be explained by (at least) two different approaches, which seem to depend on the type of chatrooms the users participate in, i.e. on the topic and purpose of communication. One of the two approaches can be called a role-play phenomenon (Wallace 1999), which describes the recognition of chat communication as some sort of role-play. Nicknames that are used in those channels (i.e. *#soccer*, *#sports* and *#politics*) are basically created for role-play purposes; basically they can be characterised as estranged from the real-life persona. The other approach used to explain the influences on the creation of nicknames is called the foggy mirror phenomenon (Elliot et al. 2006). In very specific CMC environments, like the *romance* chat for instance, the creation of an online identity is influenced by an idealised self, which is used to create an online persona that is by all means related to the real life persona.

As one can see, nearly all findings of this study can be traced back to the basic differences of the chatrooms, namely the purpose of communication and topic. Most of the differences could be found between the *romance* chat and the topic groups *sports* and *politics*. The same counts for the *degree of anonymity*. Most nicks of the *#looking_for_love* channel provided a *low degree of anonymity*. It seems to be a sign of the non-anonymous nature of this very special topic *romance*. Another support for this assumption is that nicknames related to personal *interest* are much less frequented. Disclosing a personal *interest* in fields such as technology, flora and fauna, entertainment etc., does not assist or facilitate the information-exchange between the users who communicate for the purpose of making personal

acquaintances. The personal character of communication that predominates in the *romance* chat leads to the usage of nicknames that contain more personal information about the users, and hence provide a *low degree of anonymity* in general. The frequent usage of nicknames that refer to *names*, *age* and *character* traits for instance lowers the boundaries of anonymity, which is important for communicating on a personal level.

Contrary to that, both the *sports* and the *politics* group were mainly characterised by nicks that provided a *high degree of anonymity*. It seems obvious that users participating in the topic groups *sports* and *politics*, who basically regard synchronous CMC as role-play, do not care about providing personal information in their nicknames. Nicknames of a *high* (and *very high*) *degree of anonymity* are the result. This seems quite natural given the topics of these chatrooms which seemingly require the use of rather anonymous nicknames since hot debates about those topics are possible. Making a statement about sports or politics can spur some other users to write insulting messages, and the less information one gives about oneself, the better one can hide behind the shield of anonymity. Hence most of the users participating in such chats would usually put less personal information into their nicknames, in order to be less contestable.

For this study, it was only possible to concentrate on three different topic groups of synchronous CMC. To either confirm or refute the findings of this study, further research has to be made. It would be helpful to know whether the creation of nicknames in chatrooms about other topics (i.e. *entertainment*) is determined by similar conditions or if this process underlies deviating influences. Furthermore it would be necessary to investigate more deeply the user's motivation for creating nicknames related to different topic orientated chatrooms they participate in.

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