

CYPRUS UNIVERSITY OF TECHNOLOGY
SCHOOL OF APPLIED ARTS AND COMMUNICATION



THESIS

**RESEARCH ON SELF PRESENTATION THROUGH
SOCIAL NETWORKS (FACEBOOK)**

Myria Nikolaidou

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CYPRUS UNIVERSITY OF TECHNOLOGY
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THESIS

RESEARCH ON SELF PRESENTATION AND
GENDER DIFFERENCES THROUGH FACEBOOK
PROFILE PICTURES

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ABSTRACT

This dissertation examines self presentation through the means of photography.

A gender based analysis is carried out on a sample of 500 profile pictures which belong to both male and female Cypriot residents between 18 and 25 years old. The key objective of this paper concerns the way men and women, in Cyprus see and present themselves online focusing on profile pictures in the context of Facebook.

Stereotypes and gender differences do persist among facebook profile pictures as in physical reality of Cypriot community.

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1 Introduction

Humans have been social creatures by nature. As relationships between people evolved, the way and form of communication was shaped as needed. The urge of social life pushed people to adjust and adopt new strategies and tactics of self presentation and promotion to improve and expand their 'social circle'. Depending on the cultural background, self presentation and communication models seem to vary. That is why the research is based on data samples within common ground – young Cypriots or people who grew up in Cyprus between the age of 18 and 25.

Direct dialogue was considered as the most important and effective form of communication.

Part of communication is expression and promotion of a message.

During the communicative act, there is information explicitly provided and implicitly information (Goffman, 1959). It is amazing how symbols are exchanged but at the same time each person maintains different associations to those symbols in all kinds of attempts to communicate.

Communication took different forms, was succeeded through different means, such as painting, sculpture, theatre, music, photography and art in general, through verbal and non-verbal communication etc.

That is because of the constant urge of humans to associate and connect clues to form a bigger picture of what they 'see', the need of the receiver and sender to place the message in a certain context. In the case of interpersonal communication, the majority of information exchange seems to be done in terms of non verbal communication (all the information that is derived by others). In terms of communication at which physical presence is absent, the concept of non

verbal communication is excluded. However there is something similar to non verbal communication, it is also something one can't really control and it is called 'tagging'.

Photography has been a form of self promotion through the ages, depending to its context. Technology has defined the quality and speed of this evolution. When social networks and the development of 'domestic photography' appeared, there was a new challenge in building one's self presentation.

Moreover, in the case of the online social networking era, pictures are of great importance; since one's picture can be seen as a passport or vessel for self representation and promotion on the 'online social market'. A certain amount of thought is usually spent on choosing a profile picture, since it will presenting one's self image 'out there' (the sea of endless possibilities and 'friends' waiting).

Social Networking Sites (SNS) have revolutionized the way we connect with other people. They allow their users to become 'friends' with each other, and the propagate all sorts of information and updates throughout a 'friend' network. Thus they enable people to stay up to date with the activities of their friends, and communicate with them.

It seems that self representative profile pictures -that have been made through a specific social networking site (SNS)- Facebook - reflect a great amount of information, carried from physical social life. More over there are distinct differences between everyone's self presentation when in 'social' and 'private' environment as in online and offline identity.

1.1 Why Profile Pictures?

I focus on profile pictures in particular for the reason that a profile picture alone is of crucial importance. An amount of time is usually spent on choosing a profile picture, since it will presenting one's self image 'out there and reflect the owner of the profile's "identity".

For instance if one is not a 'friend' with a person, one usually only has access to the profile picture - of all the rest of pictures that could reveal more information about the person.

1.2 Social Networking Sites (SNS)

We find ourselves at any given time in different kinds of social networks. Social networking is not served only through the Internet and contains any small groups that are interconnected. Archetypical groups for social networking are the small traditional village societies or old fashion neighborhoods- where everyone talked with and about everyone and there was barely any privacy. The need and value of social networking (mainly online) is a result of the modern way of life and isolation.

SNS is defined as a web-based service that allows its users to construct a semi- public profile with a circle of users; they have a certain relationship and "can see and list connections with other users." Terms that determine those connections vary depending on the SNS, "popular terms include "Friends," "Contacts," and "Fans."" (Boyd & Ellison, 2007)

"This is differentiated from the term "networking," which is usually characterized by the initiation of a relationship, often between strangers" (Kelley et al., 2010) that is because now networks are in between "friends".

What is more, in real life networks are hidden but online everything leaves traces and the tracks are well documented. With the invention and evolution of the means of communication- such as social networks- the boundaries and distances are eliminated! The world seems like a small traditional village again, with all its pros and cons. Our society is outside of us, surrounds us, we find ourselves in society, serving specific areas of the social system. The society lies within man as well.

Each person carries out a role in society, which is accompanied by a specific identity. G. H. *Mead's* notes through social behaviorism - that the genesis of the self is interpreted as the fact identical with the discovery of society. (Mead, 1934) That is well noticed among my research samples (profile pictures).

Online SNS societies function under certain rules, codes, semiotics and more, as in physical reality. Many aspects reflect on the image and identities of the 'self', that we project when in 'social' grounds. Traces of the information that are communicated can be studied on data such as images or written text belonging to the online identity we are referring to. A Social Networking Site could be revealing in that sense – since it is a simulation of society and functions under similar rules- and give an image of how a social group with similar cultural background, such as Cypriots between 18 and 25 years old, promote themselves online.

2 Facebook

The Facebook phenomenon attracted millions of users and became a daily habit for many. It has also intrigued and is been discussed by scholars from disparate fields. Some of the issues, which are still under investigation, include why it is so appealing, and what the impact in various areas is. (Boyd & Ellison, 2007)

Facebook is an online SNS which first launched in 2004 and had estimated '21 million members in 2007'. (Ellison, Steinfield, & Lampe, 2007) Facebook not only broke the record in visitors increase (185% in a single year) but is also the dominant SNS. It is based on a simple idea (ΔOA, 2010) and it is extremely addictive as people stated.

While it is widely known for connecting people and keeping up with friends, on the contrary it has also caused many people to lose jobs and torn apart relationships and marriages. That seems to be caused by too much exposure. For instance, an employee takes a day off due to sickness – on the other hand facebook states (status) either wise - that the 'sick' employee had a magical day on the mountains with friends. Another hypothetical case would be the employee being tagged on a friend does photo album without the person know - and the boss finds out first.

Why is there still so much need for exposure and what are the chances of a single picture determining a person's social activity?

2.1 Why is Facebook preferred?

Facebook answered to some basic needs: public space in which one declares presence, can connect one's presence with others there are equal rules, it is based on simple but profound ideas and does not demand special technical knowledge.

It has shattered and rebuilt the perception of people on online privacy and safety issues, even though none of the risks have actually been eliminated.

The secret of success is familiarity and equality. Everyone has the same plain template, and there is a key phrase that breaks the ice, a convention in order to become familiar is the 'add Friend/Accept Friendship' button. When the personal audience is controlled familiar, it is more convenient to expose any personal data and information. (Wallace, 2001)

2.2 SNSs users led by gregarious instinct?

A young Cypriot woman notes that there are two main 'threats' among young Cypriots and Cypriot residents, Facebook and fascism, in an already small and closed community such as Cyprus. (Maria & Stavrou, 2011) Both are like 'farmers', they control and put together peoples' lives and beliefs as if in herds. Gustav Le Bon explains that 'crowd psychology' plays people easily and trigger the gregarious. (Le Bon, 1995 (original 1895) SNS now play the role of Mass Media, the power of a 'farmer'.

In sociology gregarious refers to a person 'enjoying the company of others', in Life Sciences where as in Botany it means 'growing close together but not in dense clusters'. The term is usually used to characterize crowds or communities. (,gregarious)

When there is similar behavior, mannerisms and beliefs as well as responses with similar emotions between fellow humans it is satisfactory and the gregarious impulse is triggered. (McDougall, 1926) It is noticed at events such as demonstrations, religious groups and other specific contexts such as SNS. It is also believed that gregarious phenomenon is responsible of boosting mass criminality or even lifestyle trends.

In addition in the case of entire exposure of one's self and the person is still left out, could have a destructive impact on one's social life. (McDougall, 1926) "The saddest day of your

life isn't when you decide to sell out. The saddest day of your life is when you decide to sell out and *nobody wants to buy.*" (Spinrad, 1969) It is more likely that a successful formula and tactics of self representation is preferable used and adapted to create an improved liked identity, than a sincere raw one- in physical reality as well as on Facebook. The instinct seizes a herd in order to serve a greater goal. To be "liked".

2.3 Individuality on the stake for the sake of the perfect profile

In the process of building an online likeable identity, people tend to adopt models of behavior and expression which do not necessarily apply to them. Everyone wants to belong somewhere, which leads to a certain environment.

It seems as if the only thing that counts is how you look like to others and not how things really are. Youngsters upload documentation and visual history of their nights out, habits trips and more, sometimes with the intention to 'show off'. According Hindu ideology no man is an island, because underneath every island is connected is the case- in a society with similar cultural background meet in an online society.

2.4 Deception or improved Identity version

'Facebook's association with physical entities, i.e. universities, helps vouch for the Authenticity of its members.' (Dwyer et.al. 2007) Moreover, studies have found that as the chances of physical contact increase so does the urge to give an accurate self presentation, while still presenting a slightly improved version of one's' self. (Toma, Hancock, & Ellison, 2008)

However, it seems that no one is to blame if people present an improved online version of themselves; it is similarly done every day in physical reality. Who would walk out of their private space into a social space entirely 'naked' and unprepared?

3 (Personal) Identity and Self

In a typical post modern society the concept of identity and self image is easily manufactured and transformed.

3.1 Identity

The two theories of -personal- Identity (Stryker, 1980) and social identity were developed by Tajfel and Turner (1986) - both link the individual to the social world through the term self which is composed of various social identities. Personal identity is experienced by individuals as "core" or "unique" to themselves in ways that group and role identities are not. Identity is the perception we have of ourselves in relation with our contact with others. At this point the internal perception meets the exterior, the “social outside”. The sense of personal identity is based on social and communicational codes; the perception of “identity” evolves overtime, which reflects substantially the human perception for its very existence.

In post-modern societies, every sign of security and concrete identity is shattered, insecurity prevails and identity is a manufactured product. Everything is compressed - time and space, pointing to a globalized world image, and the chances of social relations and networks are infinite. (Hitlin, 2003) Sometimes identity is consistent with the behavior of a person and adjusts depending on the social situation. Sometimes identities are adopted because of what they represent not because they reflect the individual who adopts them. Nevertheless one cannot examine the identity and self when detached from their social context.

(Wynn & Katz, 1997)

3.2 Self

The term 'self', acquired an associative meaning during post-modernism. One cannot be defined exclusive of a reference point and that is a result of the mosaic personality phenomenon. There is the concept of private and social self- one presents a different self when in a private space than when there is a chance the person might be seen. It is more of an existential concept, it basically concerns the way we comprehend with our existence. It is characterized by the sense of physicality, of continuity in time, positioning in relation to the objective environment (material and immaterial). The "Self" is primarily an "inner experience" and has little relation to our attitude towards others or the social environment. (Goffman, 1959)

3.3 Looking-Glass Self and identification

This is a transitional epoch. At the first stages, imitation and association is necessary as a reference point to redefine the shuttered identity and self. There are no borders between internal and external. Through the "significant others" (the people closest to each person), one perceives one's own existence and it is critical to one's socialization. "Looking-glass self" (Cooley, 1902) has similar effect as a mirror. This term refers to people that tend to see, present and shape themselves based on what is reflected through fellow men (other people's perception). Another's perception is one of the only images we perceive and a way to see ourselves. This relationship is reciprocal, since confirmation is also needed.

This relationship can be easily provided -with increase chances of maintenance than in physical reality- from Facebook, and more specifically from a user's "friends".

3.3.1 Looking glass self in contemporary society and social behaviorism

'Using computer technology, people can create an [avatar](#), a customized symbol which represents the computer user. For example, in the virtual world [Second Life](#) the computer-

user can create a humanlike avatar that reflects the user in regard to race, age, physical makeup, status and the like. By selecting certain physical characteristics or symbols, the avatar reflects how the creator seeks to be perceived in the virtual world and how the symbols used in the creation of the avatar influence others' actions toward the computer-user.' (Various, 12 May 2011)

Alternatively, the term personality consists from a mixture of pieces from elsewhere- "mosaic personality".

3.4 Mosaic Personality, Self image and promotion

Kenneth J. Gergen noted that in a sense, as the social saturation continues, we become a potpourri, a total of imitations of others. In memory of our life we carry life models of other people.

These days a personality is not solid it consists of many tiny parts, "mosaic personality". There is of course an "authentic" side but each self consists of "identity pieces" that have been taken from every offered source. (Διονύσης Πάνοϋ, 2007)

Things are similarly done online as well but with the luxury of time of picking more carefully what will be projected to the 'outside'. Everyone wants to 'put one's best self-presentation on' before one exits a private space into public space.

People sometimes try a persona -they would like to 'wear' in physical reality- online in an experimenting mood.

3.5 Building and presenting an online Self image

Erving Goffman (1992-1982) explains social interaction in terms of a theatrical play in a sterile tone. Focusing on everyday little elements of human life - such as fashion, social

interaction, the dynamics of individual created in a space when interacting with others. (Goffman, 1959) The terms of a theatrical play are only used to explain how each person being assigned a 'role' and 'identity' in different environments, within society.

According to Goffman everyone undertakes a specific part (role) to perform specific behaviors in the 'play' of social interaction. These roles are performed in two levels, the foreground and background. The foreground is mainly the social self -or persona- which acts in a communicative environment, 'a public space' and background the personal self in a private place, the place where the person can withdraw, isolate and prepare until the next exposure to a public space. Impressions have an important role in communication. An impression is much more than a plane picture but everything resulting from the situation of the moment, but also all that is a person is consisted of. One of the most crucial elements of communication is the control of the flow of impressions. (Goffman, 1959).

During the exchange of 'communication messages' and data - there are information that the person is providing and other that is derived by others. The information given is everything controlled from the individual and broadcasts one's intentions. On the other hand the data that the person gives away cannot be controlled. This kind of information is those that most likely anyone would want to keep to themselves.

The tactics and strategies of our physical social life similarly apply on our online self presentation. There is a great gap in between what we choose to show that we are and what we are. However studies have shown that one can be more convincing with photographic evidence, since we live in an optical culture, than with plain text description of one's self, even if the possibility of deceiving and misrepresent is nearly the same. (Walther & Parks, 2002)

3.5.1 Online vs. Offline Self presentation

The observation that offline everyone plays a role and has to wear specific personas in certain occasions, applies just as well when online- avatars in virtual worlds or profiles in SNS for example. Depending on the SNS, there usually is an ideal model of how people should look like for better and successful self promotion. Sometimes the person one appears to be online is the improved version of the person one would like to be. If it was in terms of dress code, no one would go online entirely nude, especially when there is the luxury of preparing and alternating one's 'image' carefully with no time pressure.

3.5.2 Improvement of Self presentation through SNS

Identity and self image is easily manufactured and transformed. Environments like SNS or virtual worlds provide a fertile ground which enables users to transform their self and identity, within that context.

This issue is severally discussed with conclusion that 'people infer their expected behaviors and attitudes from observing their avatar's appearance, a phenomenon known as the Proteus Effect.' (Yee, Bailenson, & Ducheneaut, 2007)

Additionally SNSs help people avoid inconvenient situations in person (such as being looked down on, judged and gossiped), one is given the chance to take the time observe and experiment on one's online identity.

One exists within Facebook based on any written information, activity and pictures as further evidence. Photography is used as means of self representation for pure identification like a passport photograph or as a Facebook profile picture.

4 Photography up to recent times

Photography used to be time consuming and was practiced by few people; some of the reasons were the technical and economical requirements. It still is a form of social bonding and making the moment as special and memorable.

The construction of identity became easier with the contribution and development of 'domestic photography'. Previously photography was time consuming and was practiced by few people. One of the reasons was the technical requirements. The device was more complicated to use heavier and the product could not be seen immediately.

Domestic/digital photography is a fast and almost inexpensive way to create a visual history of a person, nowadays.

(Sarvas & Frohlich, 2011)

4.1 Emergence of Domestic Photography and the impact of SNS

Social networking sites have impact on the evolution of domestic photography. A new challenge in way of building one's image was set by SNS.

A SNS user not only receives immediate respond from others -comments, 'likes', posts and friend requests, to reflect and understand one's self by the perception of others- but one is 'compelled to step back and almost literally look at ourselves'.

Edwards (2002), notes that photographs are experienced and located in space and time.

'The display of the albums becomes an embodied performance of meaning, which is understood as such by the audience.' (Mitchell, Weber, & Pithou, 2009)

Significant changes took place regarding 'domestic photography in the past two decades.

4.1.1 What has changed

Changes that have occurred in domestic photography ‘in the past two decades: the sheer number of pictures and cameras, the possibilities for editing photographs, the new ways of sharing, archiving, and storing digital photographs’.

The medium that the photograph was made on has changed, digital replaced analogue (film).

The distances though are eliminated when it comes to sharing.

4.1.2 What has not changed

Analogue and digital photography both serve ‘social bonding and communication, demonstration of cultural and group membership and identity, and preservation and retention of memories.’ People still take pictures and share pictures.

The number of images displayed now is not so different from 7 years. ‘The Kodak Annual Report in 1998 reported that in 1997 there were roughly for both professional and non-professional purposes.’ In 2010 the estimated number of photographs managed by Facebook is 52 billion, almost reaching the amount in 1997. (Sarvas & Frohlich, 2011)

4.2 Facebook and Photography

The audience in its majority remains young- this urged the emphasis ‘on social bonding, interaction, and identity-building’. (Sarvas & Frohlich, 2011)

Photography is also used as a means of self-study. I believe that it is one of the main factors that SNS are so appealing. The opportunity of simulations of fictive situations and identities is given without instant and major drawbacks –similarly some avatar users do things they wouldn’t do outside of a virtual world.

Photography is a tool that contributes in that matters as well as documentation of users' life pace. In the case of Facebook, news feeds provide you the latest updates and content created by your facebook 'friends'. Moreover by following the profile pictures in combination with the personal statuses one can have an idea of someone's life pace and activity at most times, only by keeping up with your news feed page.

Online tools provide the ability of promoting personal work and pictures that they consider interesting. One of the most popular tools is 'tagging'. Namely, written annotations on the backs of paper prints or text in a photo album. (Sarvas & Frohlich, 2011)

4.2.1 Tagging

There are things that define "us" digitally. By tagging, others can derive bits of information about a person and that is out of one's control -other people add information on the self-image by linking random pictures one might not want to be seen publicly, an equivalent situation in terms physical reality would be non verbal communication.

Tagging is automatically done within the context of the most popular SNS, 'improving photo annotation.' by face recognition- Google's Picasa. It labels faces from pictures within Facebook, which is the top photo-sharing site so far online.

(Stone, Zickler, & Darrell, 2008)

5 Methodology and Implementation Plan

500 profile pictures were collected, for research purposes- belonging to Cypriot residents (247 female and 251 male) between 18 and 25 years old - to study how men and women present themselves.

The choice of the images was done using the snowballing method, starting from one person moving on to the person's friends and more over, to promote diversity in the samples.

This paper combines different kinds of methodologies. Data are collected and processed as well as an investigation and evaluation of existing information- for the interpretation of complex phenomena to develop conclusions on specific problems. Analytical and theoretical methodologies are used in this paper.

Furthermore a variety of theories is applied, to a different context in order to interpret the use of photography as a means of self representation online, as well as how a certain cultural and age group- within Cyprus- present themselves and what values and information their profile pictures reflect.

The combination of cyberspace and social psychology as well as content analysis seemed appropriate- since SNS have blended physical reality with Virtual Reality- as it may be online but still Social Networking Sites are expanded models and simulations of society. SNS bring the world together so that it appears like a small village.

Online SNS function under certain rules, codes, semiotics and more, as in physical reality. Many aspects reflect on the image and identities of the 'self', that we project when in 'social' grounds.

Social psychology studies how a person behaves in social settings. A person is a member of the society and the obligations created and the things expected of a person remain the same but in a different form.

Content analysis on the other hand, is useful for the identification of intentions by focusing on communication tendencies of a group of individuals and to describe “behavioral responses to communications”. (Uses of content analysis, 1993)

This dissertation aims to investigate the relationship between different (gender based) variables. The fact that a certain amount of information and data is needed to have as a reference to be based on requires quantitative research methods.

6 Analysis

The purpose of data analysis in this dissertation is twofold: first, to identify any emergent independent groups of profile owners in the data and secondly to investigate the characteristics of such groups, focusing on observations that give rise to statistically significant differences between the various groups and the entire sample.

An automatic approach to identifying emergent groups in the data called Self Organizing Maps (SOM) has been applied in order to eliminate any researcher bias that is typically present when categorization of data is carried out by humans. The following section introduces the method, and describes its application to the dataset of profile pictures.

Finally, the last section in this chapter provides a discussion on the statistically significant differences between the groups identified and the entire dataset, in an attempt to provide insight on the intrinsic properties of the groups and the mental and social process that result in their creation.

6.1 Self Organizing Maps (SOM)

6.1.1 Methodology

The Self Organizing Maps algorithm by Tuevo Kohonen (Kohonen, 1982) is a particular type of artificial neural network, partly inspired by the way different types of sensory information are handled in separate parts of the cerebral cortex in the human brain. A Self Organizing Map is represented as a rectangular lattice of hexagonal neurons like the one shown in Figure 2. Each hexagon represents a neuron, and shared edges represent connections between neurons. This referred to as the **map**. The objective of the algorithm is to train different regions of the map to respond to different types of stimuli.

To do so, each neuron is initially associated with a **weight vector** of size equal to the number

of variables recorded during an experiment. These weight vectors are initialized using small randomly selected values. It is useful to visualize our experimental results as points in a multidimensional space, with each recorded variable representing a dimension. Now, the value assigned to a variable for a particular subject gives the coordinate along the dimension of our space represented by the variable. In this sense, each neuron is initialized as a random point in this multidimensional space. The algorithm's objective is to iteratively move these points to the center of each emergent cluster of data.

Therefore, each available data point is presented to the map, which evolves in response in the following way. When a given data point (arising from experimental observations) is presented to the map, the neuron whose weight vector is the closest (in the multi-dimensional space) is first identified. This neuron is called the **Best Matching Unit (BMU)** with respect to that particular subject, and subsequently adapts its weight vector so that it moves even closer to the data point. Moreover, the adaptation is then propagated to other neurons on the map. The degree to which each neuron adapts depends on its distance from the BMU on the lattice which forms the map. This process of adaptation is called the **training phase** for a SOM.

In our case, each data point is presented in random order to a 6 x 6 map, over 2000 iterations. The evolution of the map is governed by two functions: the **neighbourhood function** which dictates how many neurons the **BMU** is able to influence, and the **learning rate** which defines how much the **BMU** is allowed to modify its **weight vector** in response to the input subject. The outcome of this process is a map divided into different areas, each trained to respond to subjects of a different type. Borders between the various areas are represented by neighboring neurons with significantly different weight vectors. By presenting the data to the map one last time without altering the structure of the map, we can record which area of the

map responds to each data point and in this way split the dataset into groups. This is called the **mapping phase** of the SOM.

6.1.2 So why use SOMs ?

This process of identifying groups is beneficial in that it eliminates any *a priori* assumptions on the nature of the groups, and the characteristics that define them. As such the groups are entirely emergent from the collected data, and independent of any classification bias typically associated with data processing carried out by humans. Once the process has been completed, one can then investigate the different groups to discover the specific ways in which they significantly differ.

6.1.3 Application

Initially the SOM was intended to be used to split the entire dataset into groups. However, this has proven to be problematic, as the map fails to capture any structure when using data from all the profile pictures collected. In turn, this failure has shed light on a very interesting observation: The data describing female profile pictures is homogenous to a large extent, in contrast to the more diverse male sample. Thus, when the data is presented to the map as a whole the algorithm does not detect disjoint groups as the majority of neurons adapt to the homogenous female data. Therefore the data was then split based on gender and analysed separately.

Figures 1 and 2 present the SOM that was trained using male profile pictures. We will refer to individual neurons by their number, starting at the bottom left corner at 1 through to 6 at the bottom right, the row above that consists of neurons 7 to 12, and carrying on in this fashion to reach neuron 36 at the top right corner.

As shown in Figure 1, the map has been segmented into 5 separate areas, each corresponding to a separate group inherent in the data. The most obvious group consists of a single neuron,

number 21 in the middle, which is surrounded by very dark borders. In the following analysis we will refer to this group as MALE GROUP 4, and it appears to be the most well defined, as it is very distant from all its neighbors. The remaining four groups are found in the four corners of the map. MALE GROUP 1 at the bottom left is contained by the dark borders along neurons 7, 14, 15, 9 and 4. On the right side of this border we find MALE GROUP 2 separated from the top right segment of the map (MALE GROUP 5) by borders along neurons 16, 17 and 18. Finally MALE GROUP 3 resides at the top left are of the map, separated from MALE GROUP 5 by the black border between neurons 33 and 28. A detailed statistical analysis of the differences between these groups is provided in the next section. It is however interesting at this point to note the sizes and locations of these groups – they are given in Figure 2.

It can thus be seen that MALE GROUP 1 corresponds to the 36 subjects mapped to neurons 1, 2 and 8, MALE GROUP 2 consists of neurons 6, 11 and 12 containing 44 male subjects, MALE GROUP 3 on the top left is the largest with 62 subjects (neurons 13, 19, 25, 26, 31), MALE GROUP 4 is neuron 21 with 14 subjects and finally MALE GROUP 5 consists of neurons 23, 24, 29, 35 and 36 containing 55 subjects. The rest of subjects are mapped to 'border' neurons and represent cases where an individual subject lies in between two or more groups without really belonging to any one of them. For the purposes of clarity, such borderline cases are excluded from the statistical analysis.

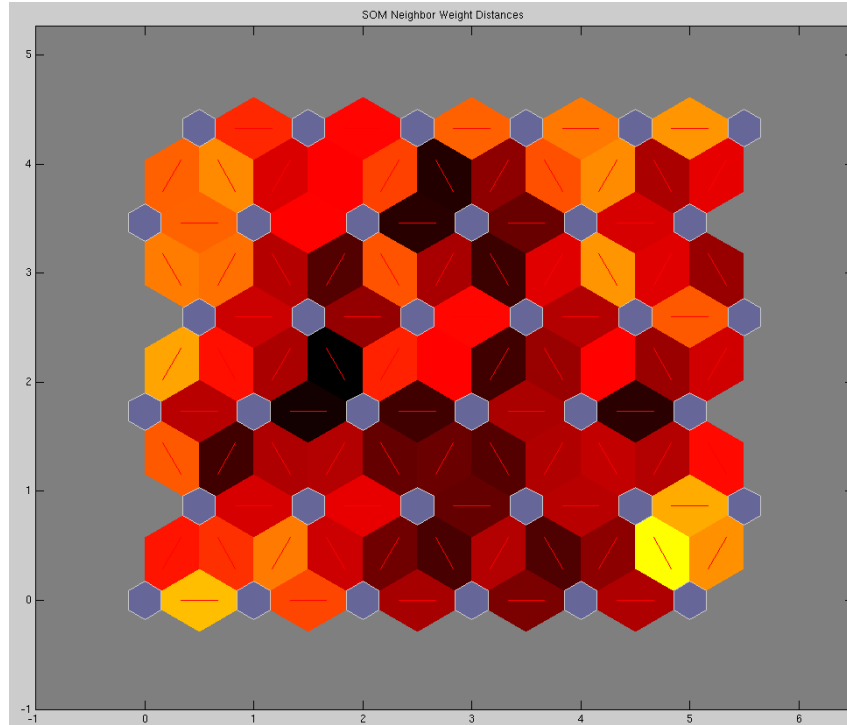


Figure 1: The structure of the SOM after training using data describing male profile pictures. The neurons are represented by the small blue hexagons, while the color of the connections between adjacent neurons represent their distance (and their degree of difference). Darker colors represent larger distances and can be perceived as 'borders' on the map.

In terms of female profile pictures the structure of the SOM is much more vague as presented in Figure 3, due to the aforementioned homogeneity of the data. While it may appear that four well defined single neuron groups exist (neurons 1, 6, 20, 25), Figure 4 shows that each of these neurons corresponds to a single subject. As a group cannot be defined with a single member, and these cases do not seem to be extraordinary in any sense, they will be excluded from the analysis along with the remaining 'borderline' cases.

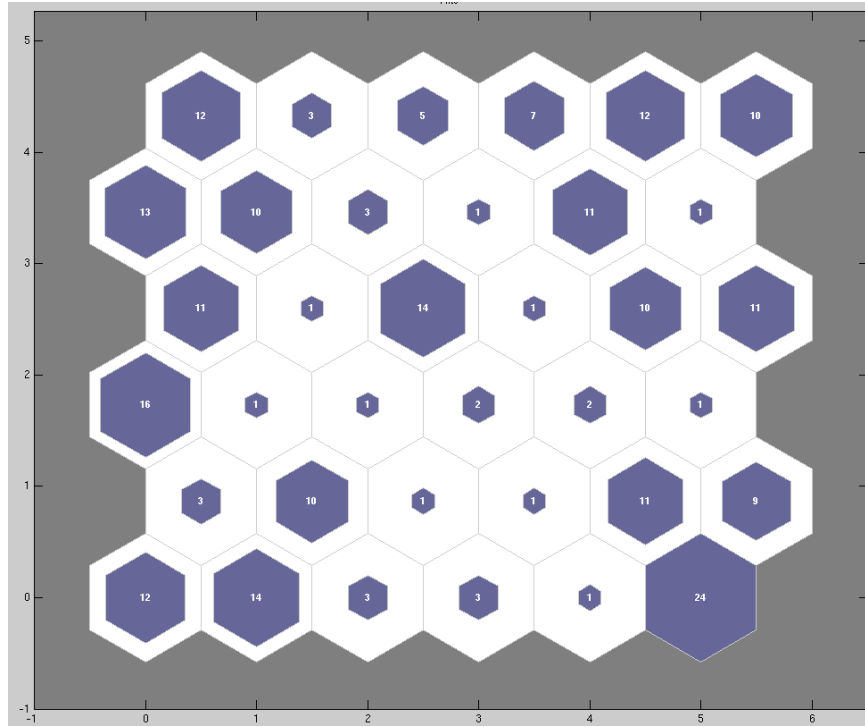


Figure 2: Results from the mapping phase of the SOM for male profile pictures. The number of subjects each neuron responds to are displayed within the hexagon representing the neuron.

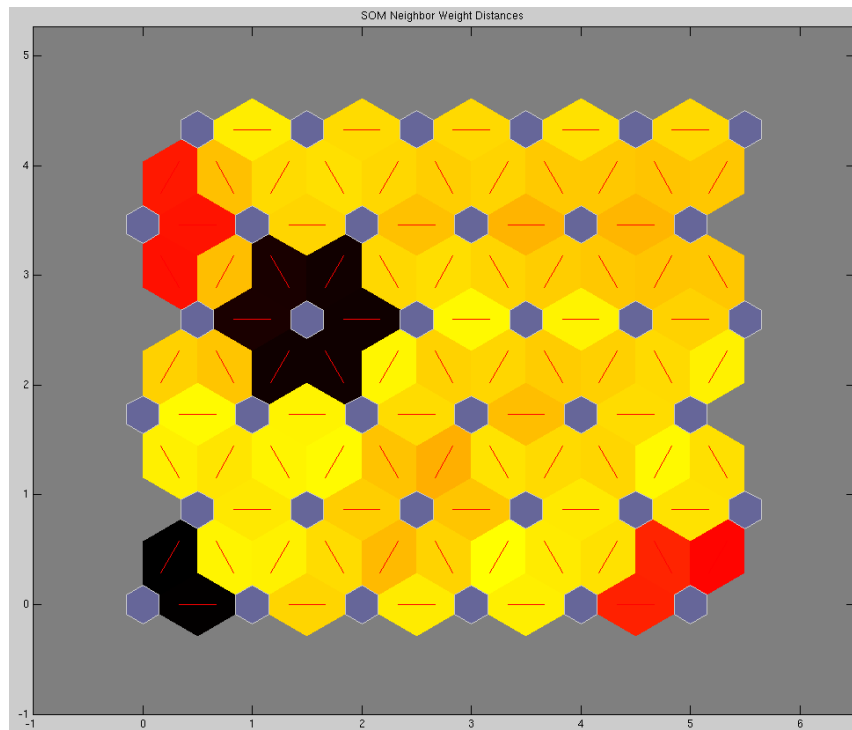


Figure 3: The structure of the SOM after training using data describing female profile pictures.

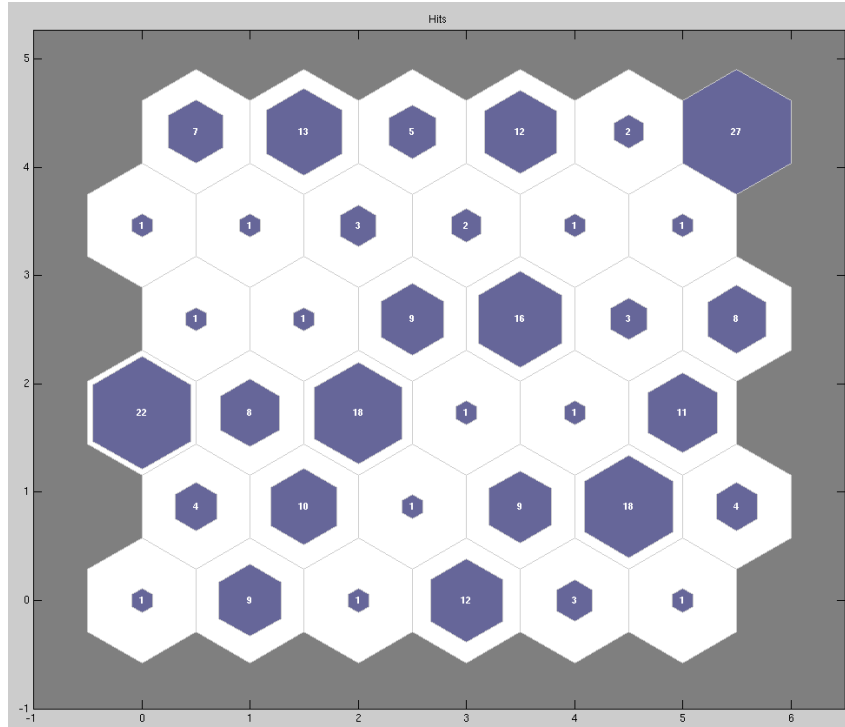


Figure 4: Results from the mapping phase of the SOM for female profile pictures.

However, Figure 4 also provides some insight on how the data may be split into three large groups, albeit with very weak borders: FEMALE GROUP 1 consists of neurons 2, 7, 8, 13, 14, 15, 22 and 23 with 96 members, FEMALE GROUP 2 contains 58 subjects mapped to neurons 4, 10, 11, 18 and 24, while the top row (neurons 31, 32, 33, 34, 35, 36) corresponds to FEMALE GROUP 3 which contains 66 subjects. The borders (although weak) can be seen in Figure 3 by the darker shades of orange used between the aforementioned groups.

6.2 Statistical significance analysis of differences between different groups

Statistical significance testing relies on the calculation of p-values (Schervish, 1996). They are formally defined as the “probability of obtaining a test statistic at least as extreme as the one that was actually observed, assuming that the null hypothesis is true”. In other words they express the probability to generate the different samples obtained through experimentation based on a probability distribution thought to express the characteristics of the entire

population. In relation to the data analyzed in this dissertation the null and alternative hypotheses are the same in each scenario:

H0: The characteristics of the groups identified by the SOM are likely to be reproduced by random sampling from the probability distribution that characterizes the entire sample (either male or female)

H1: The characteristics of the groups identified by the SOM are **NOT** likely to be reproduced by random sampling from the probability distribution that characterizes the entire sample (either male or female).

However most commonly used statistical significance tests (e.g. z- , t-, and chi-square- tests) cannot accommodate for discrete values such as those we are concerned with here. Therefore in order to calculate p-values for the data the following process is carried out:

1. The expected probability of observing each individual value is calculated by counting its occurrences within the entire sample (i.e. all males or all females) and dividing by the corresponding total number of subjects. We will refer to this probability as **E** (for expected).
2. The occurrences of each value in the group under analysis are counted and referred to as **O** (for observed).
3. The number of ways in which a sample of the same size of the group, with the same number of occurrences of the value in question is calculated. This is given by nC_O , where C stands for combinations, and n is the number of subjects in the group.
4. The p-value is finally calculated by: ${}^nC_O * E^O * (1 - E)^{n-O}$

The null hypothesis is rejected only if there is less than 1% chance of recreating the observed values in the group using the probability distribution of the entire sample. That is to say that

all statistical significance testing results reported herein are at the 1% level. The use of such a strict test threshold is justified as the number of subjects available is relatively small.

6.2.1 Male profile pictures

Table 1 gives the variables for which the five groups are found to significantly differ from the entire male sample. A “+” indicates that the particular group contains significantly more occurrences of the value in question than would be expected from the probability distribution of the entire sample, while a “-” indicates that it contains significantly less occurrences than expected.

MALE GROUP 1

This group contains significantly more pictures whose profile owners are not obvious than would be expected. This so since there are more than one people and no one is emphasized or in focus.

Users in this group do occasionally use profile pictures that have been taken outdoors, but this is less frequent than expected. Warm months are preferred (summer/ spring) as well as night shots. Significantly less day time photographs were found in the group than could be expected considering the overall sample.

Camera position in profile pictures belonging to young Cypriot men in this group is usually at eye level, as well as the Face position.

There are significantly fewer users than expected that are depicted alone for this group, whereas pictures with couples and a few friends are preferred. Moreover, members of the group are depicted from chest up (1/4) significantly more frequently. What is more, there are a lot more passive photographs than expected, which usually implies that the depicted are posing.

Although the SNS users that belong to this group in their majority choose to present themselves as cool there are fewer than expected, considering all the male pictures in the sample, categorized as mysterious.

It seems as if the people belonging in this group do not want to give out the fact of posing in Facebook, so alternatively they include more people in the photographs to show that they are part of a bigger picture.

MALE GROUP 2

Similarly to MALE GROUP 1 profile owners that belong to MALE GROUP 2 are not obvious. This applies to pictures with no presentation of profile owner but an indication of the person's identity.

Visually analyzing a picture one can uncover and decode semantics and ‘hidden’ messages.

This sometimes functions as a teaser; one would be more keen to engage in following a subject (or a “friend”) when only little information is given about it.

The indication is often done by creating an identity through the usage of a part of the whole – synecdoche (Burton) - of their character and personality. This tactic is intriguing since it may have two different usages, as a teaser to attract “Facebook friends” or repel anyone who is not really a friend (of original weight and meaning) and keep a more private profile.

Overall, 144 men and 96 women used hints to disclose their identity (see Appendix I). The usage of objects, illustrations and internet photographs is most preferred among men that belong to this group. Musical interests are also sometimes indicated but not in significantly different frequency than would be expected.

Fully exposed self presentation is avoided; however it seems that the members of this group form a sexy mysterious and “anti-cool” self image through the absence of an actual photograph of the profile owner.

MALE GROUP 3

The profile pictures contained in this group are very straight forward, depict one person (and fewer couples and friends) which makes the owner obvious. This group contains significantly more pictures taken indoors, where as fewer pictures than expected are taken outdoors, during day time or the seasons of summer or spring.

Among profile pictures that belong to MALE GROUP 3, more pictures are found in the group than in the whole sample that are taken at eye level camera and face position, which is thought to be more direct. The population of this group appears to be less active and playful, in relation with the rest of the sample, and more passive and mysterious instead.

MALE GROUP 4

GROUP 4 is very distant from any other group. Its borderlines (all the neurons around the group, shown in Figure 1) are exceedingly dark - which means that the people of this group differ the most from the rest- which also makes them unique (or labels them “freaks”).

A great amount of pictures in this group are taken indoors, with the camera position facing up, meaning that the camera has an upward angle, which adds grace and power to the depicted. This is one of the reasons why men in this group seem to be overly confident. However the most favorable face position is that of 3/4, the face is not in profile nor enface but usually at 45 degrees away from the camera lens. This position improves the way they look. It also seems to be done for artistic purposes. Furthermore these men provide more information about themselves by including objects in their profile pictures – such as large cylinder capacity motorbikes and cars, or sound mixing consol. Thus the sate of depicted

here is significantly more active and less passive than in the entire sample. The indication of musical interest is another characteristic of this group, which is translated through included objects, clothing, and presentation during musical performance. Men of this group that are engaged with music usually choose profile pictures 'caught in action' with their musical instrument.

Cypriots that belong to MALE GROUP 4 present themselves as artistic and eccentric more than expected, considering the entire male population.

MALE GROUP 5

The young men of MALE GROUP 5 pose as active (dare to say socially active), and advertise that they know how to have fun and party. The amount of pictures that are taken outdoors during day time and warm months of the year prevails in this group. The idea of having fun is usually connected with night life; however this group seems to disagree since there are fewer pictures taken during night time.

Camera position is facing down, to capture the moment, livelihood and more information; This removes any meaning given to the technique of using this camera perspective, for example, by the movie industry – which gives less power to the depicted, implies that the person in the frame is helpless and out of control. Additionally in the case of facebook photography, it often portrays an unprotected cute person, or mysterious and sexy since they get the chance to have their head facing straight and look up to the camera usually in 3/4 face position.

Big groups of people are exceedingly depicted in profile pictures of MALE GROUP 5. Moreover the size of the depicted in the frame is full body significantly more frequently.

Male Facebook users of the specific group tend to present themselves as playful and the vast majority is topless; men -unlike women- tend to have a sly or even charming look on their

faces. There are not so many wide smiling pictures but mainly they just posing for their audience.

		Group 1	Group 2	Group 3	Group 4	Group 5
Colour	Profile Picture					
	Obvious Profile Owner	-	-	+		
Location	Black & White					
	Colour					
Season	Indoors	+	-	+	+	-
	Outdoors	-	-	-	-	+
	Other			+		-
Time of Day	Summer/Spring	-		-		+
	Winter/Autumn		-			
	Other	+	-	+	+	-
Camera Position	Day	-	-	-		+
	Night	+	-			-
	Other		-	+		-
Face position	Facing up				+	
	Eye Level	+	-	+		
	Facing down					+
Number of people	3/4					
	Other	-	-			
	Looking up		-			
Symbol of their Personality/Character	Eye Level	+	-	+		
	Looking down					
	3/4		-		+	
Number of people	Other	-	-			
	No people		+			
	One	-	-	+		
Symbol of their Personality/Character	Couples	+	-	-		
	Of loved ones					
	With Friends	+	-	-		
Symbol of their Personality/Character	With Animals					
	Big Group					+
	With Objects		-		+	
Symbol of their Personality/Character	Other					
	Objects		+			
	Sports					
Symbol of their Personality/Character	Political Views					
	Body Parts					
	Pets/Animals					
Symbol of their Personality/Character	Statement					
	Celebrities					
	Same Sex					
Symbol of their Personality/Character	Opposite Sex					
	Illustration		+			
	Internet Photograph		+			
Symbol of their Personality/Character	Own					
	Photo					
	Arts&Crafts					
Symbol of their Personality/Character	Creation				+	
	Other					

		Group 1	Group 2	Group 3	Group 4	Group 5
Size of person in frame	Indication of musical interests				+	
	Full Body		-	-		+
	3/4					
	2/4		-			
	1/4	+	-	+		
State of Depicted	Face					
	Close Up					
	Younger Version					
Self Presentation	Active	-	-	-	+	
	Passive	+	-	+	-	
	Artistic/Eccentric	-			+	
	Funny					
	Sexy		-			
	Playful			-		+
	Mysterious	-	-	+		
	Friendly					
	Serious					
	Cool	+				
Spotty						
aggressive						
Topless					+	
Other						

Table 1: Statistically significant differences between the five male groups and the entire male sample. . A “+” indicates that the particular group contains significantly more occurrences of the value in question than would be expected from the probability distribution of the entire sample, while a “-” indicates that it contains significantly less occurrences than expected.

6.2.2 Female profile pictures

Table 2 gives the variables for which the five groups are found to significantly differ from the entire female sample. A “+” indicates that the particular group contains significantly more occurrences of the value in question than would be expected from the probability distribution of the entire sample, while a “-” indicates that it contains significantly less occurrences than expected.

FEMALE GROUP 1

Female profile pictures of this group seem to provide mostly visual self presentation (‘you get what you see’). Similarly to MALE GROUP 3 users, only one person is depicted and fewer with friends, thus the profile owner is obvious.

Locations that are preferred by this group are indoors and less outdoors in correlation with the overall female sample. Fewer pictures of these female members are taken in summer and spring during day time than would be expected based on the overall female sample.

As far as the camera position is concerned it is set to eye level and the person is depicted from chest up (1/4).

This group of young women is mostly posing, thus the state of depicted is passive – therefore less than expected active.

Members of FEMALE GROUP 1 also tend present themselves as sexy and playful.

FEMALE GROUP 2

This group of photographs depicts one person and it is obvious who the profile belongs to, similarly to FEMALE GROUP 1 which resembles a passport picture, with the only difference that the representation includes the whole body.

The amount of expected full color pictures exceeds the sample of female profile pictures on the whole, whereas there is a smaller amount of black and white pictures.

On the contrary with FEMALE GROUP 1 outdoor locations are preferred by this group; whereas the preference in warm seasons and day time and camera position is more than expected.

The face position that these young Cypriot women tend to use is at eye level with an inclination of 45 degrees (3/4 of the face shown).

In this case the self presentation of women in this group is significantly more playful and less mysterious than would be expected. In all members of this group appear to be more active, outdoors oriented people.

FEMALE GROUP 3

The last group is a mixture of different groups with similar characteristics, many of which provide information and symbols of their personality -such as hobbies, field of studies or occupation, even political views.

There are less than expected obvious profile owners, the pictures of whom are taken with day light at eye level. There are more pictures without any people - or in a passive state, with a

few friends (waist up-2/4) significantly more than expected and significantly less that depict one person which include objects in their pictures.

Corresponding to MALE GROUP 3, there is a great usage of illustration and internet photographs as well as own creations such as arts and crafts.

Women that belong to GROUP 3 are presented as playful, and can be seen as arty/creative people.

		Group 1	Group 2	Group 3
Symbol of their Personality/Character	Profile Picture			
	Obvious Profile Owner	+	+	-
	Colour			
	Black & White		-	
	Colour		+	
	Location			
	Indoors	+	-	-
	Outdoors	-	+	-
	Other		-	
	Season			
	Summer/Spring	-	+	-
	Winter/Autumn			-
	Other	+	-	
	Time of Day			
	Day	-	+	-
	Night			
	Other	+	-	
	Camera Position			
	Facing up	-		
	Eye Level	+	+	-
	Facing down			
	3/4			
	MySpace Angles			
	Other			
	Face position			
	Looking up			
	Eye Level		+	-
	Looking down			-
	3/4		+	
	Other			
	Number of people			
	No people			+
	One	+	+	-
	Couples			
	Of loved ones			
	With Friends	-		+
	With Animals			
	Big Group			
	With Objects			-
Other				
Objects				
Sports				
Political Views				
Body Parts				
Pets/Animals				

		Group 1	Group 2	Group 3
Size of person in frame	Statement			
	Celebrities			
	Same Sex			
	Opposite Sex			
	Illustration			+
	Internet Photograph			+
	Own Photo			
	Arts&Crafts			+
	Other			
	Indication of musical interests			
	Full Body		+	
	3/4			
	2/4			-
	1/4	+		
	Face			
State of Depicted	Close Up			
	Younger Version			
	Active	-		
	Passive	+		-
	Artistic/Eccentric			
	Funny			
	Sexy	+		
	Playful		+	-
	Mysterious	+	-	
	Friendly			
	Serious			
	Cool			
	Sporty			
	aggressive			
	Topless			
Self Presentation	Other			

Table 2: Statistically significant differences between the three female groups and the entire female sample. A “+” indicates that the particular group contains significantly more occurrences of the value in question than would be expected from the probability distribution of the entire sample, while a “-” indicates that it contains significantly less occurrences than expected.

7 Conclusion

People tend to use domestic photography for their profile, with the exception of a few semi professional and artistic images. There is a small amount of revealing photographs as well, with limited clothing in a pure artistic form and on the other hand in its provoking form (of the profile owner or internet picture).

All in all Cypriot residents have a profile picture, with limited exceptions that don't, and in 50% of them the profile owner is obvious. Full color images are preferred. The most preferred location seems to be indoors (45%), and men tend to have pictures taken outdoors more than women do. Any extreme angle is rare. Nevertheless there is a typical angle that pictures are taken. Both gender prefer eye level camera and face position, women seem to prefer the 3/4 position and men more clear positions, somewhat higher or lower than eye level. The majority of profile photographs depict one person, most likely the owner, and men seem to prefer to include objects. 144 male and 96 female Facebook users had pictures indicating their identity, a symbol of their personality such as a musical instrument. The most preferable size of person in frame is at 2/4 and 1/4 giving more information space. The majority of profile pictures are not plain portrait photos, but a 'mirror' of the persons self, or at least the desired parts; it is rare if a person is depicted against a plain background in a strict position. People tend to use pictures that include themselves at a place with certain people-like a photographic diary. The depicted tend to be passive while further information is provided through poses. Some people pose as lifestyle models and some keep their Halloween/carnival photos as profile pictures (usually people express their inner urges at these occasions because it is 'okay'). Most women see and present themselves as playful and sexy and some as artistic/eccentric. In the contrary, male self presentation varies among the 'stereotypes' of cool, artistic/eccentric and mysterious. It is expected that female and male

self presentation differs. In our society the male and female models are very clearly defined from day one, the birth of every person. Even games promote a certain life style. Games for boys usually promote an intrigue, immature, risky lifestyle (macho well-built men of action, fast cars). Whereas games indented for girls promote a more mature lifestyle through simulation of an adult passive house wife wrapped up in a fairytale (princess dolls, kitchen gadgets etc).

The fact that in memory of our life we carry life models of other people, (Gergen, 1991) resulting a mosaic personality appears clearly in the samples. As was seen in the analysis presented in the previous chapter, standard societal stereotypes do persist in Facebook profile pictures. In the case of men five groups were identified: MALE GROUP 1 members seem to perceive themselves as part of a bigger whole – they use pictures posing with their other half or close friends. Another set of male users in MALE GROUP 2 opted not to use pictures of themselves to a large extent. These are expected to be people that identify themselves with certain objects of the interest, seeking to hide their full identity behind such objects. In contrast members of MALE GROUP 3 seem to be open and honest as the pictures they provide are simple clear depictions of themselves. MALE GROUP 4 consists of the ‘alpha-males’ in our sample; they are seen as confident, with strong interests (musical or otherwise) that they do not attempt to hide. MALE GROUP 5 seems to be the most concerned with the image they present to the outside world – they choose pictures from outdoor social events and parties to exhibit their social status.

Even though the dichotomy between groups as far as female Facebook users are concerned is not as clear as for males, we observe similar patterns here. FEMALE GROUP 1 corresponds loosely to MALE GROUP 3 – they choose clear photographs from the chest up to represent their identity. However they are usually dressed and made up to present an improved, sexy

and playful representation of themselves, in contrast to MALE GROUP 3. Members of FEMALE GROUP 2 share similar characteristics and motives although their pictures include full-body shots much more frequently. This can be seen as an indication of courage and comfort with their entire physical image. Finally FEMALE GROUP 3 differs the most from the rest of the pictures in the sample. These are young Cypriot women who are not afraid to stand out by virtue of their unique identity, and can thus be matched with MALE GROUP 4.

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Appendix I: Cumulative Sample Statistics

I studied 500 facebook profile pictures, 250 female and 250 male profile owners. I had three people of different age (two women 28 and 20 years old and a man 28) and genders analyze 40 of the pictures with the same order and the same coding scheme (see tables), our results converged with 88.8%.

There is a different approach of self representation depending on the sex.

Studies have shown that people gradually change their beliefs in order to comply with the rule of a group. Sometimes there is a deep human desire of acceptance by a team which leads to this trend. (Μπέρκερ, 1983) This seems to be the reason why there is so much similarity in the tactics used to build a profile image for presentation and promotion.

On the other hand I observed that there are interesting similarities in the combination of visual elements to succeed in bringing out the wanted result. The main difference was basically concerning their self presentation, not how but what they build and present as their image.

Some of the cases included in the coding scheme (tables) have sub-cases to choose from.

Each sample (profile picture) sometimes corresponds to more than one sub-case.

I.1 Profile Pictures

Table 1: Profile Pictures

Coding	Male	Female	Average (female/ male)
Profile Picture	250 (99.60%)	246 (99.59%)	99.595%

Obvious Profile Owner		108 (43%)	128 (51.8%)	47.4%
Color	Black & White	24 (9.5%)	34 (14%)	11.75%
	Color	227 (90%)	212 (85.8%)	87.9%

Practically every one changed the default facebook profile substitute of picture to their own profile picture, (99, 6% males and 99, 59% females). It does not necessarily mean that the profile picture was related to the profile owner or that it was obvious, that is why it is called profile and not portrait picture. A photograph in a different context such as in the case of Cypriot school yearbooks, where the main purpose is to identify who the student - is accompanied with an annotation with the name and surname of the depicted. This type of photographs have a strict recognizable style, the person is depicted from shoulders up looking straight into camera with wearing the formal school uniform. As well as in passport pictures, the depicted person must be easily identified. Facebook style photography is still evolving. The style range is far broader than of that of MySpace.

After Facebook launched MySpace target audience/users focused on musical interests, it seems that this justifies the similarity in the photographic style. Facebook was originally created for college students inspired by yearbooks that are established in the US, which led to a certain photography style; (Fincher, 2010) whereas now the audience (without common backgrounds) and style varies. The fact that the percentage of how obvious the profile owners are, only by their front-page photograph, is limited to a 43% for males and 51,8% in the case of females indicates that an online 'Persona' can be built in different ways, somewhat similarly to interpersonal communication. Sometimes there are more than one person depicted or there is no sign of a person using, for example an animal's photograph instead. The majority of pictures are in color, black and white pictures are not so common, they are

however used twice as frequently by women than by men (men reached a 9% and women 14%). Lack of color can also make it harder to distinguish the time of the day, if it is day or night, there's less contrast and sometimes more softness.

I.2 Space and Time

Table 2: Space and Time

Coding		Male	Female	Average (female/ male)
Location	Indoors	110 (43.8%)	112 (45%)	44.4%
	Outdoors	81 (32%)	53 (21.45%)	26.7%
	Other	21 (8%)	67 (27%)	17.5%
Season	Summer/Spring	49 (19.5%)	43 (17.5%)	18.5%
	Winter/Autumn	46 (18%)	42 (17%)	17.5%
	Other	118 (47%)	151 (61%)	57%
Time Of Day	Day	79 (31.47%)	63 (25.5%)	28,5%
	Night	71 (28%)	67 (27%)	27.5%
	Other	63 (25%)	111 (44.9%)	34.95%

The location the images are taken is 50% indoors, the location is indistinguishable in 27% of female and 8% of male owners due to various factors, like close ups and out of focus dark backgrounds. The season at which the photograph was taken seems to be indifferent in half of the pictures it cannot be distinguished. However warm months of the year, summer and spring are slightly preferred, male profile pictures with 19, 5% and female 17, 4%.

As it seems people have high preference in uploading pictures that captured the moment before or during their nights out and create a visual history of them, as well as of their habits

and trips. Other categories include just posing to the camera lens or a picture of themselves; whenever they believe to be the best version of themselves. For instance there are people juggling with fire Diablo and fire poi, there is another person playing drum, there are pictures of objects revealing one person's passion, such as cars or motorbikes, while one picture presents foggy weather and one edge of the rainbow leads on a trailer caring a certain beer brand. The data show that day time is more preferable for men (31, 5%) as opposed to 28% at night. Women seem to prefer night time with a slight higher percentage, 25,5% preferred day time and 27% night time. The rest wasn't clear whether it was day or night time or did not have profile pictures containing themselves.

I.3 Camera Positions

Table 3: Camera Position

Coding		Male	Female	Average (female/ male)
Camera Position	Facing up	16 (6%)	22 (8,9%)	7.45%
	Eye Level	156 (62%)	166 (67%)	64.5%
	Facing down	23 (9%)	6 (6%)	7.5%
	¾	25 (9,9%)	28 (11,3%)	10.6%
	Other	43 (17%)	35 (14%)	15.5%

Camera positions vary; the options I gave were: facing up meaning that the camera has an upward angle, which usually adds grace and power to the depicted. If the position is at eye level the camera is facing the depicted straight forward, whereas facing down stands for a slightly higher than the eye level position facing down which gives less power to the depicted, it is usually used in the movie industry as well when to imply that the person in the frame is helpless. In the cases of facebook photography, it might portray an unprotected cute

person, or mysterious and sexy since they get the chance to have their head facing straight and look up to the camera usually in 3/4 face position.

The most preferable camera position is at eye level, at 65% sometimes in combination with other angles. Furthermore the camera facing at three quarters, diagonal at eye level mostly appear at female pictures. Facing up gives a certain status and appeals to both genders, while the camera facing down is preferred mostly by men. Even if the camera position is at eyelevel, the pictures are not always taken from a straight forward but diagonal perspective.

Extreme angles are not so usual in Facebook - deforming the depicted people in a deceiving way; there certainly is the capacity of editing and improving the picture in editing software. The depicted do not always look straight into the camera/ audience though, sometimes they even 'ignore' its existence, which gives a more natural look to the picture. This can be translated into mysterious, in some cases as artistic or even playful. The camera and face position vary, as well as the eye position; there is the case where the head faces slightly down to have a piercing look which sometimes gives an aggressive, playful, sexy or even cute look.

When the photographer, is also in the picture, doesn't fit him/herself in the frame by stretching one's arm but through reflecting surfaces such as mirrors, but it is not common. It is more common between younger ages among males wanting to be more obvious that the picture is taken by them (mirror reflection).

People often wear sunglasses or do not look straight into the camera.

I.4 Face Position

Table 4: Face Position

Coding		Male	Female	Average (female/ male)
Face Position	Facing up	32 (12.7%)	48 (19.4%)	16%
	Eye Level	92 (36.6%)	103 (41.7%)	39%
	Facing down	15 (5.97%)	26 (10.5%)	38%
	3/4	60 (23.9%)	76 (30.7%)	27%
	Other	77 (30.6%)	47 (19%)	24.8%

The 3/4 position is not common among male pictures, instead there is a trend to include after all clear positions like profile, straight forward or no contact with lens at all or aiming for a 'natural'/ 'carefree' result. There is either straight forward eye contact or no contact at all. There are other face positions as well such as slightly tilted head down to be able to achieve a mysterious or aggressive look.

Women's approach is slightly different, even if the face is looking straight into the lens, the body is usually twisted, or not in a straight, horizontal position. If it is obvious that it is taken by the depicted person is usually through a mirror or a reflective surface as in males. The person depicted is not always looking into the camera. There are pictures that imply that they are being watched without their knowledge.

I.5 Number of People

Table 5: Number of People

Coding		Male	Female	Average (female/ male)
Number of people	No people	15 (5.9%)	16 (6.4%)	6%
	One	124 (49.4%)	140 (56.5%)	52.95%
	Couples	33 (13%)	32 (12%)	12.5%
	Of Loved ones	0 (0%)	4 (1.6%)	0.8%
	With Friends(2-3)	30 (11.9%)	34 (13.7%)	12.8%
	With Animals	5 (1.9%)	3 (1.2%)	1.55%
	Big Group	12 (4.7%)	9 (3.6%)	4%
	With Objects	80 (31.8%)	41 (16.5%)	24%
	Other	1 (0.39%)	9 (3.6%)	1.99%

The number of people affects also the fact whether profile owner is obvious or not. For instance there is a picture with a group of people, there is no indication or focus on the owner, and is usually not at the foreground either. A 5,9% of male profile pictures that do not depict people and 6,4% of women.

The majority of profile pictures depict one person who is supposedly the owner; this is more common in women with 57% and men 49%. Although only one person is depicted, it seems more life-like. In addition to that more information can be derived from a Facebook profile pictures than from an old fashion portrait or passport picture.

People posing with objects are often seen in my sample. Surprisingly 31, 8% of are male and only 16, 5% are female. It is believed that it is women who usually carry gadgets and wear accessories.

There seems to be a preference of posing with fewer friends to big groups of people and friends (male 4, 7% and female 3, 6%). There is almost the same amount of pictures with couples as images with one or two friends among the ladies, 12, 9% couples and 13, 7% with friends. As for men, there are fewer pictures in this category (11, 9%) than couples (13%).

There is also the same amount in both genders depicted in couples. Men don't appear as intimate as women; they present themselves in a 'manly, macho' way. Usually they show intimacy through their partner and imply that they are 'reserved' and intimate with the person. Some seem funny, aggressive, cool or easy going with their partner. Among younger ages profile pictures appear to have names, quotes and other typography especially on pictures with couples. Regarding female SNS users, when couple pictures are shown, the pictures appear to be more sentimental through themselves, even though there is similar posing style with male profile pictures. Some also have funny or easy going poses, which indicates they are comfortable with each other.

I observed that some pictures with animals depict pet-owners whereas some just generic pictures of animals and others contained just the pet. Regarding male profile pictures, animals seem to project the same attitude (a man dressed in black staring at the camera lens with a black cat on his shoulders looking straight at the lens as well) some showed affection and ignoring the camera lens (man kissing a kitten), aggression (a dog in an aggressive mood and a part of the photographers hand), as trophy (food chain... man showing of his catch, fish), as an artistic image, in a funny mood (a donkey making a crazy face).

Among female, pets seemed cute (a young poodle sleeping in pink sheets), showing their affection to the animal (sitting outdoors petting a cat) ignoring the camera lens, even just holding their pet as if showing it off.

No male profile photographs depicted loved ones; pictures of relatives such as children. Whereas women are expected to be more family oriented and still only four female included loved ones. This might be due to the age group (18-25 years old). One depicted a man holding a child in a swimming pool pointing at the photographer who might be the profile owner, in another, a group of man, woman and child, in the next one we see a woman with a male child close together in a bumper car and at the last one there is another woman with a female child outdoors in a field with flowers. The last two seem to be posing with their siblings, and the first two seem to include their own child.

I.6 Synecdoche (Symbols of Personality)

Table 6: Synecdoche (Symbols of Personality)

Coding		Male	Female	Average (female/ male)	
Synecdoche (Symbol of Personality)	Objects	13 (5.1%)	4 (1.6%)	3.35%	
	Sports	14 (5.57%)	1 (0.40%)	2.98%	
	Political Views	0	2 (0.80%)	0.4%	
	Body Parts	2 (0.79%)	4 (1.6%)	1.19%	
	Pets/ Animals	3 (1.19%)	1 (0.40%)	0.79%	
	Statement	1 (0.39%)	1 (0.40%)	0.39%	
	Celebrities	Same sex	4 (1.5%)	1 (0.40%)	0.95%
		Opposite sex	4 (1.5%)	1(0.40%)	0.95%
	Illustration/ Cartoon		13 (5%)	7(2.8%)	3.9%
	Internet Photograph		9 (3.5%)	9 (3.6%)	3.55%
	Own Creation	Photo	4 (1.6%)	1 (0.40%)	1%
		Arts and Crafts	2 (0.79%)	7 (2.8%)	1.79%
		Other	13 (5%)	6 (2.42%)	3.7%
	Indication of musical interests		64 (25.5%)	50 (20%)	22,75%
SUM		144	96	47.69%	

I.6.1 Indication of their musical interests

Among these, one can see indications of musical interests of the people as well. Men tend to express it slightly more than women apparently, 64 men suggest their musical interests and

50 women with accessories, clothing, presentation during musical performance, being with certain people at certain places, having a 'look' that is labeled and refers to a music type. Men that are engaged with music or play in a band usually choose profile pictures 'caught in action' with their instrument, a lot more than females do.

Women have different tactics than men when it comes to indication of interest in a music style, usually from something in the background; like the place they are at, clothing, accessories, make up, hairstyle, attitude, 'style' of posing.

I.6.2 Objects, Sports and Politics

Objects take the place of a SNS user implying whose profile it is or a mood they have, men tend to do that more often (5,1%) but it does not occur so much in women (1,6%). Men have large cylinder capacity motorbikes or cars as profile pictures (usually without a driver) it seems as if those are cars that they would like to have; a fridge full of beers and only beers, a beer truck, an arrangement made of beer bottles and cigarette packets a tattooed arm (band name and lyrics) with a lighted cigarette next to it, headphones on a consol, shisha, juggling gadgets and a TV showing football match results. The same applies when it comes to sports, some men are depicted doing sports, show off their well-built body, or use pictures that imply the sports they like. Only one woman had a picture of the football team she supported.

Female usually wear the objects; sun glasses, a small fairy statue, DSLR cameras and a sculpted coffin in a geometric space with writings on it.

Men seem to expose their sport interests whereas women expose their political views through party slogans, flyers of events by the political party they support.

I.6.3 Body parts

There is also the tendency of focusing on body parts to emphasize some interests, a part of their personality, something that seems to be their strong characteristic; e.g. one female's image presented the person as ballet dancer by focusing only on feet dancing in ballet shoes, when a guy had a headless picture of supposing his torso showing a overly well-built body.

I.6.4 Statements

There were self presentations through making a statement; at a female profile for instance a t-shirt that had "Hollywood mad in a satiric mood" written in the same format and template of a whiskey label on a boyish black loose t-shirt, having black nails and a lot of accessories implying a punkish/ metal/ 'aggressive' style.

I.6.5 Celebrity Photographs

There are even a few celebrity pictures of the same (1, 5% of male and under 1 percent of women-0, 40%) or opposite sex (2 male and 2 female used a celebrity of opposite sex as profile picture) of the person, in some cases out of admiration, wanting to look like or even consider themselves having qualities in common with them or that person expresses them.

I.6.6 Illustrations and cartoons

Illustrations and cartoons are also used; 13% of men and 2,8% of women. For instance a lady uploaded an image of a classic cartoon character from 101 Dalmatians, Cruela, it seems that she is either implying that she is cruel as the cartoon character or that she likes the cartoon in general.

Some people get creative or even have a great sense of humor. There was one male profile picture (in the format of the default picture of facebook, where the default no-profile picture image is changing into superman).

I.6.7 Internet Photograph and own creations

Others use pictures taken from the world wide web (3,5%). As mentioned earlier some people do get creative and they show their creations, on facebook as a part of their artistic personality and eccentricity or as self promotion (11, 15% of men and 6% of women). As a matter of fact some of my acquaintances were asked for collaborations and jobs in general through facebook, from people that saw their work. Artistic work vary, it is sometimes an artistic photo they took or arts and crafts.

I.7 Size of person in frame

Table 7: Size of person in Frame

Coding		Male	Female	Average (female/ male)
Size of Person in Frame	Full Body	42 (16.7%)	38 (15.38%)	16%
	3/4(knees up)	21 (8.36%)	21 (8.5%)	8.43%
	2/4(waist up)	61 (24%)	54 (21.86%)	22.93%
	1/4 (chest up)	66 (26%)	78 (31.5%)	28.75%
	Face	13 (6.8%)	17 (6.8%)	6.8%
	Close up	7 (2.78%)	7 (2.83%)	2.8%

The protagonist is not always obvious, at the foreground or at the centre of the frame or stands out. In social environments everyone performs a part in the ‘play’ of social interaction, as well as in virtual reality according to Goffman, this also seems apply in SNS.

The size and position of person in frame can also reveal information. The size of the depicted has 6 sub-categories; full body, 3/4 which includes in overall knees and upper body part, 2/4

from waist up, 1/4 from chest/ shoulders up, face and close up. “Close up” emphasizes on a body part or face. The tendency between genders is very similar in this case as well, with preference in the size of 1/4 covered in the frame (26% men and 31, 5% female). There are 16, 7% men with full body pictures and 15, 4% women, 8, 4% male are depicted from knees up and 8, 5% female. There is also an observable preference in the waist up position in the photograph (23%). Not so many people choose picturing only the face or close ups.

I.8 State of depicted

Table 8: State of Depicted

Coding		Male	Female	Average (female/ male)
Younger Version		2 (0.79%)	3 (1.2%)	0.99%
State of Depicted	Active	56 (22%)	43 (17%)	19.5%
	Passive	147 (58.5%)	170 (68.8%)	63.65%

The usual state of the depicted is passive because there are more chances to look better when in a ‘controlled’ smiling pose- posing for the hungry eyes of their audience- than when caught in action. Female (68,8%) in majority appear more passive than men (58,5%) in their pictures.

Carefree, aggressive or ‘natural’ almost everyone is posing to portray the best version of one’s self, not necessarily the better looking one, but an image that would support the desired identity. Some imitate poses from mainstream lifestyle role models like models eccentric musicians, in a theatrical mood. There are times that posing seems ironic, eccentric, good,

sexy, cool etc. In general posing like somebody or something else. It seems like half (51, 7% male and 48% female) of SNS users have a thing for 'role playing/posing'.

There was a small trend of uploading childhood pictures of the facebook user at some point as well; it is not so appealing anymore.

I.9 Self presentation

Table 9: Self presentation

Coding		Male	Female	Average (female/ male)
Self Presentation	Artistic/ Eccentric	64 (25.49%)	71 (28.7%)	27%
	Funny	45 (17.9%)	15 (6%)	11.95%
	Sexy	43 (17%)	82 (33%)	25%
	Playful	50 (19.9%)	89 (36%)	27.95%
	Mysterious	57 (22%)	37 (15%)	18.5%
	Friendly	12 (5%)	31 (12.5%)	8.75%
	Serious	35 (14%)	11 (4.5%)	9.25%
	Cool	79 (31.5%)	13 (5%)	18.25%
	Sporty	17 (6.7%)	6 (2.4%)	4.55%
	'Aggressive'	21 (8%)	6 (2.4%)	5.2%
	Topless	19 (8%)	-	-
	Other	73 (29%)	67 (27%)	28%

Last but not least the categorization representing self presentation. Most of the differences I observed between genders were in reference to the self-image they intent to present with the above tactics. For instance one woman swipes her lips posing as sexy or another person was making funny (maybe was the intention but he seemed ugly) faces. One other user had this profile picture where he poses as a metal-head version of Jesus, with a humoristic mood (beard long hair...who actually does look like Jesus with piercings and all).

Male interpret funny usually as ironic and not cute funny, black indirect sort of humour, regarding playful they tend to have a sly or even charming look on their faces. There are not so much of wide smiling pictures but mainly just posing for their audience.

Self presentation categorized as 'playful' with 89 people, ranged first of all in the case of social networking communities' female users. Right after came sexy (82) and artistic/eccentric (71). Followed by a representation that is not really obvious or that does not apply to my categorization (67), mysterious (37), friendly (31), funny (15), cool (13), serious (11), sporty and aggressive with just 6 women.

The majority of males matched with cool (79 people), moreover they are widely presented in a unique way presentation that as said before does not apply to my categories or it is simply indiscriminable (73), as artistic and eccentric (64 people), mysterious(57), 'playful' (50), funny (45), sexy (43), serious (35), aggressive (21), topless (19), sporty(17), friendly (12).

Some get creative and some pose as artistic/ eccentric, 64 male and 71 females. There are not specific poses or patterns, for example one guy had an internet front-page stating that 'music is my religion'. Among male there is more action concerning this 'category'. There is a man caught in action, night shot taken with slow shutter speed showing the movement of him doing his magic with fire Diablo. An intentional case of artistic profile picture caught my eye; it professional photograph has a theatrical and surrealistic mood with two men wearing have-face animal masks, black and white, in a narrow corridor. There are other approaches as well, artistic from the camera position (facing up from a slight diagonal perspective) and image color is handled, capturing a musician in live action with his bass at the foreground. There are also the cases of posing as eccentric and artistic; in a certain hairstyle in combination with clothing style and some objects.

I noticed that male seem very musical through at this category, playing an instrument (hand drum, bass, mixing deck and jamming on a consol etc). On the other hand one had a black and white picture posing with a crazy 'Mohawk-like' hairstyle and a stripy t-shirt. Men tent to show off their achievements, but they also have different sense of sexy than women. Sexy can by represented by power, muscles, capability of achieving and being macho, while usually men that pose as sexy gaze.

Appendix II: Sample Facebook profile pictures collected

II.1 Male Profile Pictures



M1_1989.jpg



M2_1989.jpg



M3_1988.jpg



M4_1992.jpg



M5_1993.jpg



M6_1990.jpg



M7_1989.jpg



M8_1986.jpg



M9_1993.jpg



M10_1992.jpg



M11_1991.jpg



M12_1988.jpg



M13_1987.jpg



M14_1990.jpg



M15_1991.jpg



M16_1989.jpg



M17_1990.jpg



M18_1992.jpg



M19_1992.jpg



M20_1989.jpg



M21_1993.jpg



M22_1988.jpg



M23_1990.jpg



M24_1991.jpg



M25_1986.jpg



M26_1986.jpg



M27_1988.jpg



M28_1993.jpg



M29_1988.jpg



M30_1988.jpg



M31_1989.jpg



M32_1987.jpg



M33_1990.jpg



M34_1991.jpg



M35_1989.jpg



M36_1988.jpg



M37_1990.jpg



M38_1989.jpg



M39_1991.jpg



M40_1988.jpg



M41_1990.jpg



M42_1993.gif



M43_1990.jpg



M44_1987.jpg



M45_1989.jpg



M46_1986.jpg



M47_1989.jpg



M48_1989.jpg



M49_1989.jpg



M50_1992.jpg



M51_1987.jpg



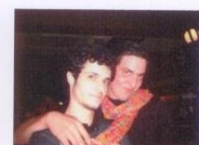
M52_1987.jpg



M53_1989.jpg



M54_1991.jpg



M55_1986.jpg



M56_1992.jpg



M57_1990.jpg



M58_1987.jpg



M59_1987.jpg



M60_1990.jpg



M61_1991.jpg



M62_1986.jpg



M63_1990.jpg



M64_1989.jpg



M65_193.jpg



M66_1988.jpg



M67_1990.jpg



M68_1988.jpg



M69_1987.jpg



M70_1992.jpg



M71_1989.jpg



M72_1992.jpg



M73_1990.jpg



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M87_1992.jpg



M88_1991.jpg



M89_1988.jpg



M90_1989.jpg



M91_1992.jpg



M92_1988.jpg



M93_1990.jpg



M94_1988.jpg



M95_1992.jpg



M96_1988.jpg



M97_1988.jpg



M98_1992.jpg



M99_1992.jpg



M100_1988.jpg



M101_1990.jpg



M102_1990.jpg



M103_1989.jpg



M104_1989.jpg



M105_1993.jpg



M106_1990.jpg



M107_1988.jpg



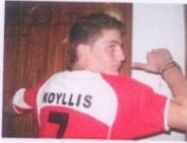
M108_1988.jpg



M109_1989.jpg



M110_1989.jpg



M111_1991.jpg



M112_1989.jpg



M113_1989.jpg



M114_1990.jpg



M115_1988.jpg



M116_1988.jpg



M117_1988.jpg



M118_1986.jpg



M119_1991.jpg



M120_1991.jpg



M121_1987.jpg



M122_1990.jpg



M123_1990.jpg



M124_1989.jpg



M125_1992.jpg



M126_1989.jpg



M127_1989.jpg



M128_1991.jpg



M129_1988.jpg



M130_1990.jpg



M131_19987.jpg



M132_1987.jpg



M133_1986.jpg



M134_1992.jpg



M135_1988.jpg



M136_1991.jpg



M137_1988.jpg



M138_1991.jpg



M139_1991.jpg



M140_1986.jpg



M141_1992.jpg



M142_1989.jpg



M143_1990.jpg



M144_1989.jpg



M145_1989.jpg



M146_1988.jpg



M147_1987.jpg



M148_1992.jpg



M149_1989.jpg



M150_1989.jpg



M151_1992.jpg



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M153_1993.jpg



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M155_1991.jpg



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M160_1992.jpg



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M162_1988.jpg



M163_1990.jpg



M164_1988.jpg



M165_1987.jpg



M166_1990.jpg



M167_1987.jpg



M168_1991.jpg



M169_1990.jpg



M170_1989.jpg



M171_1988.jpg



M172_1986.jpg



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M175_1990.jpg



M176_1988.jpg



M177_1988.jpg



M178_1991.jpg



M179_1988.jpg



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M181_1992.jpg



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M194_1988.jpg



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M200_1990.jpg



M201_1987.jpg



M202_1989.jpg



M203_1986.jpg



M204_1990.jpg



M205_1988.jpg



M206_1990.jpg



M207_1991.jpg



M208_1989.jpg



M209_1988.jpg



M210_1988.jpg



M211_1987.jpg



M212_1989.jpg



M213_1989.jpg



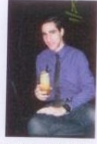
M214_1986.jpg



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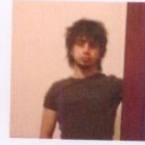
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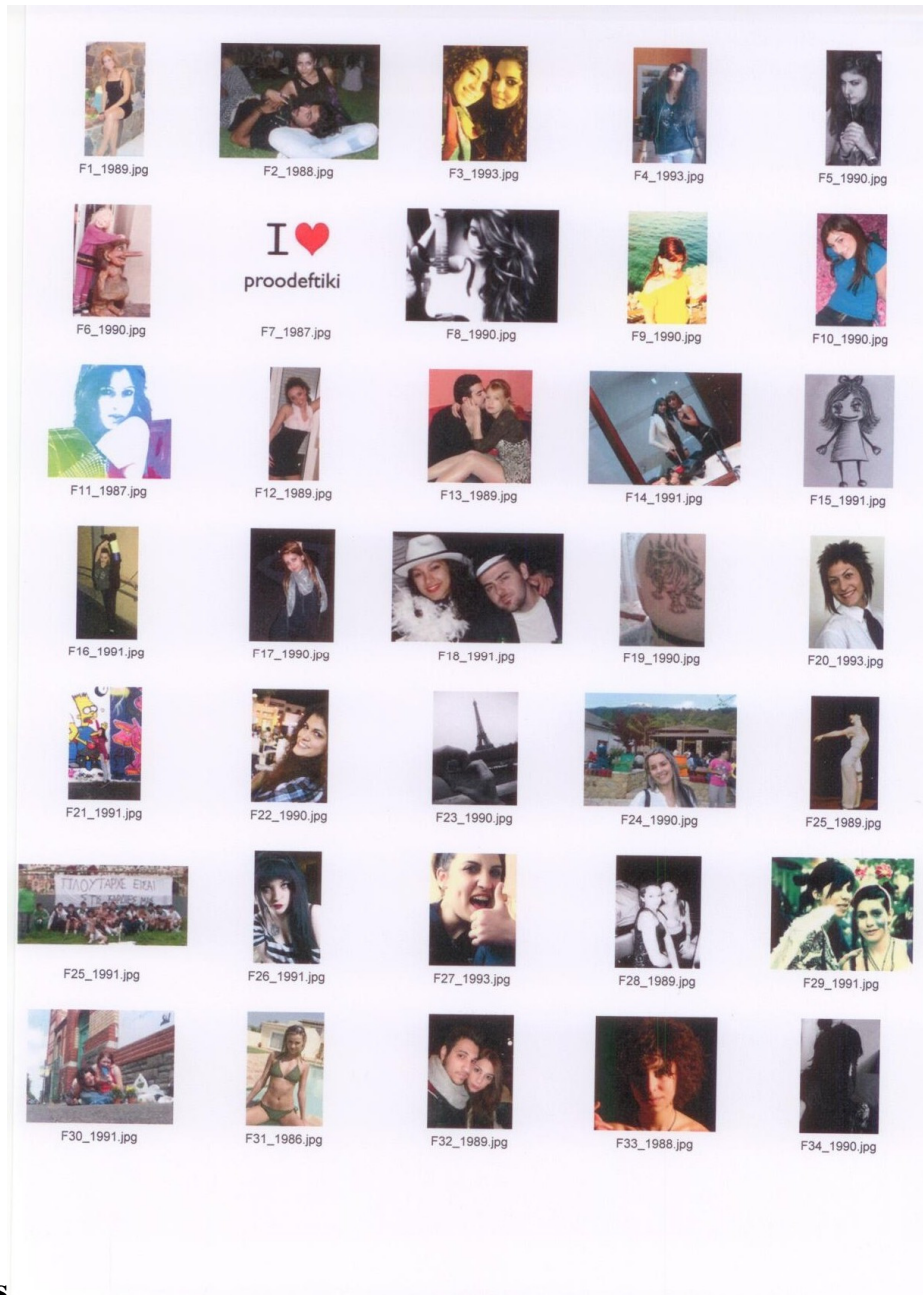


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II.2 Female Profile



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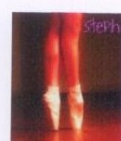
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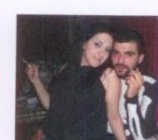
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