

FRIENDSHIP NETWORKS OF PEOPLE WITH VISUAL IMPAIRMENT

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Submitted to
Central European University
Department of Sociology and Social Anthropology

In partial fulfillment of the requirements for the degree of Master of
Arts

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Budapest, Hungary

2013

Abstract

This research study is focusing on exploring visually impaired people's friendship networks. Twelve visually impaired individuals' friendship network formation, -structure, -content and -management were investigated in the theoretical frame of critical disability studies/disability culture, social network science and the anthropology and sociology of friendship. Methodologically, an ego-network questionnaire and structural network analysis were supplemented with semi-structured interviews to inquire about the informants' perception and evaluation of their own friendship ties and the functioning of these ties. The findings of this research allow for the assumption that visual impairment plays an important and integral role in the formation and management of friendship networks. Visually impaired people's interactional circumstances are different from sighted people and the consequences of this difference is mirrored back in the structure, heterogeneity, complexity and contact of their social networks. The interview results establish the supposition that these altered circumstances change possibilities and circles of people with whom friendship is realizable by visually impaired individuals. This study serves the purpose of more clearly understanding of visually impaired people's social roles, -constraints, possibilities and behavior in society. With this learning, the role of vision in social networking and the actual state of visually impaired people's social inclusion can be more clearly understood.

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Chapter I. Introduction

I am studying the dynamics and local patterns of visually impaired people's friendship networks because I want to find out how visually impaired people are integrated in society in terms of their social interaction system and what kinds of specific characteristics their networks have. I explore how visually impaired people's social networks are structured, managed, used, maintained, influenced and configured with their sighted and blind acquaintances. I conducted this study in order to understand the effect of visual impairment (and so, the role of vision) in the structure and management of social networks. With this learning, our knowledge of the general/exceptional characteristics of social networks will be broadened, and therefore blind people's social inclusion can be more successful. The object of this research is twofold: on the one hand it aims to learn more concerning the subculture of blind people and on the other hand it strives to reveal the attributes of friendship networks.

The friendship network analysis of visually impaired people is situated in a theoretically and methodologically interdisciplinary context. This research aims to involve the mutually contributing dimension of critical disability studies/disability culture, social network science and the anthropology and sociology of *friendship*. The necessity of this theoretical interplay inherently relies on the complexity of the inquiry's target. Methodologically, I wish to investigate the structure (size, density, balance, strength of ties etc.), content ("the type of things that flow from each node across the ties" (Albrecht, Seelman and Bury 2001:471.)) and function (what network ties do) of visually people's social networks by generating ego-network questionnaires and network analyses. Furthermore, I am investigating the quality of the friendship ties and their effects on the individual's

everyday life and the way these connections come together (Albrecht, Seelman and Bury 2001) with the method of semi-structured interviews.

I am working with the hypothesis that visually impaired people's interactional circumstances are different from sighted people and the consequences of this difference is mirrored back in the structure, heterogeneity, complexity and contact of their social networks. Vision is a crucial channel in interaction management, but since it plays an extremely limited or no role in visually impaired people's networks, the assumption is that the circumstances of their relationships will be altered, resulting in their networks being more confined.. This research also focuses on investigating the use and effect of those remaining interactional channels that are potentially used specifically by visually impaired people and can help compensate for their limitations to allow for the smooth handling of networks.

Visually impaired people's interactional webs are puzzling from a social network viewpoint because on the one hand, surveys on blind people's social networks establish evidence for the current status and possibilities of visually impaired people's social inclusion. In turn, these studies provide new information regarding visually impaired people's togetherness and cohesion (or dissension) as a minority group and as the producer and user of peculiar subcultures. On the other hand, investigations exploring visually impaired people's social networks inevitably shed light on the role of vision in sighted people's network formulation and management.

I decided to concentrate exclusively on the formation and structure of friendship ties because sociological research commonly focuses on the family members' influence on people with disability and literature scarcely deals with disabled people's friendship choices, possibilities and constraints. This paper examines 12 visually impaired individuals' personal non-kin community (friendship-network) in order to learn the degree of their integration to the 'majority-society' and to 'blind-communities'. The questions regarding visually impaired

people's embeddedness and social context in society derive from the disability studies' contradictory concepts concerning the preferences, opportunities and directions of disabled people's relationships as introduced below in the literature survey.

Focusing on a particular population (visually impaired people), this research deals with neglected aspects of social network research. Inquiries concerning visually impaired people's network characteristics would help us understand blind people's identification preferences, social roles, their attitude regarding integration and would shed light on difficulties and problems in the process of social inclusion, identity-construction and the need and place of intervention.

Concerning the structure of the paper, after this brief preamble a review of the literature in this field will be introduced. I will continue with the presentation of the methodological tools used (ego-network questionnaire, semi-structured interview) with a focus on their actual application. In the next section, the demographical data of the informants will be introduced. The presentation and analysis of the acquired data is divided into three main parts. First, the interviewees' interpretations and definitions will be introduced regarding the concept, role and influence of 'friendship'. The second part will elaborate on the influential factors that modifies these networks' structural properties. Additionally, the networks' mutual characteristics and difficulties of visually impaired people's network management will be proposed as well. Finally, the informants' own network perception, their preferences and identification in and through friendship networks is presented, and sheds light on the contradictions and parallels between narratives and networks. The conclusive chapter summarizes the outcomes of the empirical findings and indicates research directions for future studies regarding the issue.

Chapter II. Literature review

This section serves the purpose of introducing and summarizing the results, evidences, debates, concepts and achievements of social scientific literature regarding this particular issue, in order to contextualize the actual investigation. This survey aims to build on the theoretical frame of critical disability studies/disability culture, social network science and the anthropology and sociology of friendship.

II. a. Similis simili gaudet? – communality vs. rejection among people with disability

Society is a culturally anthropomorphized cosmos. A portrayal of encounters between entities, where one is both describing and described – adjusting the system to their own frames and having a frame adjusted by the system. When people meet, an anthropo-cosmic space is constructed in which knowledge can be gained about the ‘universe’ of the ‘other.’ This research attempts to reveal what kinds of rules are dictating how interactions are structured and what kinds of patterns do these networks have; while also examining the alternatives and perspectives for its development and formation.

“It is not our (disabled people) common symptoms that link us, but our common social and political situation” (Linton 1998:4). It is not – or not exclusively – the shared experiences, difficulties, means of livelihood and history that shape the networks of disabled people. Instead it is the legal, social position and the opportunity (or compulsion) of mobility in the social and daily space, which fundamentally determines the possibilities of work, education, self-governance – in short, of action and participation. The success or failure of vindicating the legal, economic, and social power depends (a large extent) on the dynamics

and quality of people with disability's relations in society. The social relations of people with visual impairment are in the focus of this investigation.

'Majority society', to various extents, has important and strong effects on the system of habits and behavior, the construction of networks, the opportunities and options of participation, and action of bodily or mentally disabled people. Distinct cultural communities regard different bodily, mental disadvantages, and injuries that are diverse in type and extent as disabilities. The concept of disability is always defined by the particular culture since "illness only has reality and value in a culture which recognizes it as illness" (Foucault, quoted by Bánfalvy 2006:62). The idea and concept of "disability" or "disabled people" are used in societies where social and economic usefulness, self-governance and autonomy are considered to be rather important values (Lipson and Rogers 2000).

In 'Western cultures', blindness or severe visual impairment is regarded as a *disability*. This concept (disability) is a permanent altering social construct that is interpreted on the basis of different paradigms and models (medical, social, socio-cultural) throughout history. According to the medical model 'disabled identity' or 'patient identity' is ascribed to people having peculiar mental or physical impairments. Disability was seen as a necessary consequent of impairment and an individual misfortune (Kálmán and Könczei 2002; Könczei and Hernádi 2011; Shakespeare and Watson 2002; Shakespeare 2006). This focus on bodily/genetic differences leads to biological deterministic perception and description of impaired people (Shakespeare 1996). The representatives of medical model (with their "technological optimism") wish to correct, improve and 'normalize' people with disability to the image of 'normal people' (Könczei and Hernádi 2011:7). This model is being replaced with the socio-cultural model of critical disability studies (Meekosha and Shuttleworth 2009; Goodley 2011). This model advocates that the concept of 'disability' is socially constructed

and the result of a social process¹. The ‘disabling environment’ eventuates disability and not just the impairment itself. As Shakespeare claims; “disability is a complex dialectic of biological, psychological, cultural and socio-political factors” (Shakespeare and Watson 2002:18). So as, according to the postmodern interpretation of disability it can be understood as the junction of bodily/mental damages various in type and extent and of specific social, environmental and individual factors (Kálmán and Könczei 2002). It proves that disabling factors derive not exclusively from the individual’s impairment but from the social, cultural and environmental factors as well.

In the literature of disability studies there is no consensus regarding the size and the quality of the inner network textures among and within distinct groups of people with disability. On one side, advocates of *disability culture* claim that “disability culture presumes a sense of common identity and interest that unite disabled people and separate them from their nondisabled counterparts” (Barnes and Mercer 2001:522). As a form of resistance and advocacy, disabled people constitute their own cultures (Riddell and Watson 2003). The concept of ‘disability culture’ is based on the revelation that disabled people’s collective experience², common life-situation, and social context is a uniting-force that makes them a community (or minority); having and creating common subcultures (Barnes and Mercer 2001; Peters 2000). On the foundation of this abstract framework, the assumption can be made that blind people rather establish friendship ties with other visually impaired people and these close connections foster their commitment to a positive ‘blind identity’.

On the other side however, surveys prove that “[there is an] unwillingness to identify as disabled [...] while some people with impairment resist identification as disabled, because they want to see themselves as normal, others are more likely to identify in terms of

²Collective experience regarding oppression, defenselessness, discrimination, segregation on the one hand and willpower, persistency, pain-tolerance on the other hand.

alternative parts of their experience” (Shakespeare and Watson 2002:21). This concept is underpinned with my personal experience that many people with disability explicitly refuse the concept of ‘disability culture’ and ‘disabled community’ and see it as the basis of spurious stereotypes and the majority society’s ignorance of individual differences. They claim that people with diverse disabilities are utterly different and individuals with identical impairments manage their life-situation even highly differently. Shakespeare (1996) claims that this negative identity experience is a result of socialization, and of the context of social relationships. This experience derives from all the relationships where the impairment gains an overemphasized status in the interaction. Furthermore, it is constructed when the impaired child does not have a chance to encounter impaired people with ‘positive disabled identity’ during their upbringing. This opposite – but less conspicuous and ‘loud’ – claim is to be discovered in disability studies literature as well, which states that people with disability search for non-disabled people company in order to avoid the external identification ‘as disabled’ and soften the inner identification as ‘the other.’ According to this interpretation my null-hypothesis would be that: there are no blind communities in Hungary and blind people try to ignore connections with each other in order to constitute a positive identity.

Nevertheless, it has to be noted, that communities of disabled people are expanding in their number and size around the world. Coherent groups of/with/for disabled people are in formation, willing to actively participate in social life. Sports and art clubs, on-line communities and legal redress associations are founded, and scholarly communities are organized. However, it must be clarified that disabled people do not form one single, homogeneous group or community. They are differentiated by their ethnicity, class, cultural environment, the type and extent of their injuries and a number of other personal, social and environmental factors.

Visually impaired people have permanent or temporal, formal or informal relationships with each other. The varying sized on-line and off-line communities are formed all over the country. There were always some kind of communities for blind people, organized around health-care and special educational systems and self-advocacy centers. During the last three decades along with the human rights movement new communities have been formed by blind people.

Recently, communities of visually impaired people are organized (in Hungary) mainly around rehabilitation centers (there are eight in Hungary), special educational schools (in Budapest, Debrecen and Pécs), NGO-s (LÁSS, Világ-Tér-Kép), foundations (Szempont Alapítvány, Informatika a Látássérültekért Alapítvány etc.), federations of the blind and partially sighted people (in every county), sport clubs and particular work places (such as call centers, massage centers and the Brush Factory). These mutually constructive relationship between the individual, the group, and the society can be regarded as the cornerstone of the development of social inclusion.

According to the 2011 census, the number of people living with various kinds of disabilities was 456,638 in Hungary. 82,482 people are visually impaired and from this, 9,054 individuals are registered as blind (KSH 2011³). On a worldwide scale, these numbers could be approximated to 161 million and 37 million (WHO 2002). What we know about the structure of social networks of people with disability, especially of blind people, is extremely exiguous. Findings regarding this issue are introduced in the next chapters. In Hungary, those people are regarded as visually impaired whose vision loss is more than the 70% of ‘normal vision’ with maximal correction on the more functioning eye or their field of vision is 20 degrees or narrower than 20 degrees (Pajor 2010). Blindness is considered to be a total loss of sight. Among my informants there are people who are blind, people who sense light (legal

³ <http://www.ksh.hu/nepszamlalas/> - 05.20.2013.

blindness⁴) and people whose visual acuity reaches the upper margin of law vision. The more detailed introduction of interviewees is to be found below.

With knowing these concepts and demographic data, it also should be kept in mind that as with all kinds of impairment, visual impairment as well is always a peculiar condition which requires and triggers “action and interpretation in a social context” (Albrecht, Patrick and Devlieger 1999:986). Social responses define the social status of people whose functional abilities differ from ‘average/normal’ abilities. As it was mentioned before, the state of disability partly results from a disabling environment and most importantly, from the “interaction of the two” (Albrecht, Patrick and Devlieger 1999:986). An individual “success or failure is tied to the kinds of relationships they create and maintain” (Albrecht, Seelman and Bury 2001:468; Fischer, quoted by Albert and Dávid 1998). These interactions were examined from diverse scientific viewpoints. Special education studies, sociological, psychological, anthropological, and social-psychological investigations were conducted to inquire about these characteristics. In the first decade of the 21st century, network sciences directed their inquiries towards the structure of disabled people’s network patterns. The network analyses of blind people’s social lives highly contribute to the mapping of the (sub)cultures of these individuals.

II. b. The formation and properties on friendship ties

In social integration studies, the sociological inquiries about friendship (its influence, role, function, consequence, structure etc.) gain increased scientific attention from the 1970’s and move beyond family and community-research (Adams and Allan 2007; Allan 1998).

⁴ Legal blindness refers to a state when the level of someone’s visual perception is lower than 10% of the ‘normal’ vision. (Pajor 2010)

Studies began focusing on friendships' social order, sustaining and challenging functions, and how friendships are socially formed and structured (Allan 1998).

The scientific discussion in sociological literature proves that defining the concept of 'friend' and 'friendship' is a complex task. There is no canonized and scientifically accepted 'friendship' definition in the sociological and anthropological literature (Albert and Dávid 2007). Different approaches mostly agree that "*friend* is an evaluative term rather than a categorical one" (Adams and Alan 2007:124). The decision concerning who is (and it follows who is not) regarded as a friend is a subjective decision based on socio-cultural influences and constraints. According to Hayes (1988), friendship is a voluntarily chosen dependence from each other – interdependence that is founded in mutual help and respect. Argyle (1995) Rawlins (1992) and Adams-Bleiszner (1994) agree that one of the most important characteristics of friendship is the 'voluntariness' and the lack of formality. Brown (1976) and Reisman (1979) added that friendships are those personal, intimate relationships where the connection is built on mutual equality and reciprocity. Allan (1979) defines friendship as a relationship that primarily contains positive (usually not sexual) feelings, trust and shared activities.

As it was mentioned before, the concept of an ideal 'friend' or 'friendship' is not defined exclusively on an individual basis but is severely influenced by socio-cultural and socio-economical contexts (Adams and Allan 2007). Eugene Litvak proved that friendship ties and types are the consequence of social and individual factors at the same time. Friendship patterns are highly influenced by individual's social roles and statuses – like age, gender, ethnicity, class, location, life course stage, and sexual orientation. "People's structural location routinely shapes the organization of their friendship;" the patterns of ties are primarily consequences of social structures (Adams – Allan, 2007:124). In the literature it is regularly stated (Verbrugge 1977; Kandel 1978; Albert and Dávid 2007) that individuals

usually prefer to choose friends who are similar to themselves, but Feld (1982) emphasizes that before the estimation of preference, the structure of opportunities must be understood. “The social structuring of activities tends to bring similar people in frequent contact to one another and thereby encourages the development of relationship among them” (Feld 1982:797). Marti and Zenou (2008) agree that the ego’s interactional cost-benefit ratio is as well a determining factor in ‘friendship preference’ since “it is always less costly to interact with someone from the same community” (Marti and Zenou 2008:1). In his research, Walker (1995) also proves this concept with introducing the network-pattern differences between working class and middle class suburbanites.

Friendships also have a very important role in identity formation. The expression ‘identity’ roots from the Latin word: ‘identitas’, from ‘idas’ that means ‘the same’, meaning that something is similar to something but at the same time different from something else (Shakespeare 1996: 95). Jenkins (2003) and Cerulo (1997) argue that identity came into being through interactions, in discourses. Collectives (collective of friend in this case) exert a great influence on identity-formation. The appearance of identities in a particular situation is always relational. The process of claiming an identity takes place in interaction with others. The literature distinguishes permanent and periodical identities as well; for blind people ‘being blind’ is a permanent identity but ‘being disabled’ is a periodical one (Shakespeare 1996). Different layers of the self; different identities manifest in diverse interactional and relational situations, Riddell and Watson (2003) adds that ‘being disabled’ is not the identity that is represented in friendship ties, but friendship relationships open space for the formation of those self-concepts that are difficultly realizable or accepted outside these ties.

Stryker also claims that individual’s social roles highly influence the quantity (extensiveness) and importance/quality (intensiveness) of ties he has in his social network. In her research, Callero (1985) proves this conception. She argues for example that an

individual's commitment to blood-donor identity increases as they establish relationships with others who usually donate blood. Stryker and Serpe (1982) found the same in regard to religious people. These concepts show that quantitative and qualitative dimensions also determine an individual's commitment to an identity. The increase in the number of close friends to whom one has connection through a peculiar identity increases the individual commitment to that particular identity (Stryker and Serpe 1994, Stets and Burke 2003).

The choice of friends is relatively voluntary, especially in contrast to the 'choice' of our family, but hastily must be added that the choice of friends are restricted and determined by many external factors as well (Adams and Bleiszner 1994). "Social structural and psychological aspects of individual characteristics operate together to shape behavioral motifs, which in turn, influence friendship patterns" (Adams and Bleiszner 1994:163). Social network analysis established a "non-normative and non-locality-oriented approach" (Adams and Allan 2007:128) to examining the patterns and influential factors an ego-network has. The contribution with its methodological and analytical framework opened new perspectives in friendship-studies.

Social network studies show that our social world consists of layers and consequently there are distinct friendship layers around the ego as well. The frequency of interactions and so, the strength of ties are different in these layers. Similar but still slightly different results can be found in the sociological literature regarding the average size of the ego's friendship network. Probably the most known and accepted concept on human network size was devised by Robin Dunbar. In a survey conducted with one of his colleagues (Hill and Dunbar 2002) they claim that the most proximate layer around the ego usually consists of five (not necessarily non-kin) individuals. The next one is made upon average from 15 individuals, the further one is from 50 and we can keep contact with about 150 people, but it can be extended beyond 1500. It is also proven that usually same-sex individuals dominate one's network;

females have more female friends and males more male friends. In another investigation, Roberts and Dunbar (2010) carried out a longitudinal study regarding network-size maintenance and decay with 25 students. Their findings show that at the beginning of their studies “the mean size of the inner layer of the network was 11.92+/- 6.06, made up of 6.00+/- 3.41 kin and 5.92+/- 4.14 friends [...] and the total network size was consisting of 28.71+/- 18.54 friends” (Roberts and Dunbar 2010: 190). A Hungarian survey by Albert and Dávid (2007) was conducted in a relatively small city (Veresegyház) inquiring as well about the inhabitants’ number of ‘best friends’. From the 662 informants, male interviewees on average had 2.4 best friends and females 2.1 friends. The difficulties in estimating the average number of friends among a certain population is always a ponderous and uneasy investigation since the above introduced subjective factors of ‘friendship’ can vary from person to person.

To conclude, it can be said that friendships are not solely dyadic or individual constructions. Social location has a very important factor on the individual’s personal community. Interactions are constructed contextually. Friendship ties are inherently social and cultural rather than just personal (Milardo and Wellman, 1992). Friendships are not free-standing from the context in which people live. “Friendships (and other equivalent ties) can play a significant part in informing people’s identities [...] friendships can signify the people we really are “(Allan 1998:700) which means that friendship has a clear function in mapping and maintaining social status.

II. c. Social network researches on friendship networks of people with disability

Social network analysis is an empirical and theoretical investigation that undertakes the task of bringing social ‘evidence’ into relation with social theories by means of

(linguistic, cognitive and technical) network representations (Hennig, Brandes, Pfeffer and Mengel 2012). The landscapes of human relations inside and between societies are the skeletons of our social lives (Barabási 2002) and so play a deterministic role in the formation of our lives. Network sciences aims to know the world through its structure and strives to find general laws in these structures (Barabási 2002, Degenne and Forse 1999).

The science of social networks in the 21st century claims that individual behavior, idea- and costume-system considerably derive from the individuals' social structure and social embeddedness. The structure of an individual's network has a constraining power on the individual; the pattern of the structure always influences the individual preferences, opinions, socio-cultural behaviors (Degenne and Forse 1999). Therefore, analyzing the structural position of individuals is suitable to determine the potential opportunities and constrains and provide explanation of behaviors.

The scientific literature is fairly broad concerning the old (Horsaff, Leonard, Evans and Armitage 2010; Gabriel and Bowling 2004; Gannon 1999, Keating, Otfinowski, Wenger, Fast and Derksen 2003) or ill people's social network, its significance and influence on their social behavior and individual life. The interaction systems of disabled people are much less researched though.

Visually impaired people's social (especially friendship) networks are an extremely under-researched issue among the surveys regarding people with disabilities' social networks. An investigation, conducted in the Netherlands with 315 visually impaired adolescents (aged between 14-24) shows that these individuals' have an average of 4.2 friends and 24% of the friends are visually impaired (Kef, Hox and Habetkothé 2000). Similarly to other research on the topic (Kef 1997; Sacks and Wolffe 1998), this survey shows that visually impaired adolescents have smaller social networks than non-disabled adolescents in the Netherlands. , The great effort to integrate these people into 'general society' does not seem to be

undoubtedly successful as the authors claim. The article's main argument is that reduced mobility results in certain restraints on the friendship network size and so, the altered possibilities of mobility result in smaller networks (Kef, Hox and Habetkothé 2000).

Another longitudinal inquiry, conducted in Birmingham researched the use of social network sites by young blind or visually impaired people. 91% of the research participants had their own profile or page on a social network site. This proportion is higher than Facebook or Twitter usage of non-visually impaired young people – reports the inquiry. The Braille-display⁵ users (those with the most severe visual impairment) had great trouble or were unable to register on social network pages (Hewett and Douglas 2012). Facebook is recently working to combat the visually impaired people's accessibility problems. On MySpace and on Friendster it is also impossible (yet?) to create an account without sighted assistance⁶. Therefore, an entirely accessible new social network site (The Blind Universe⁷) was established specifically for visually impaired people. (However it seems to be not too popular since it has 55 members.) Furthermore, there are chat-rooms exclusively for visually impaired people.⁸ Communities established by people with disabilities are not rare on the internet, for example, there are six different social network sites and chat-rooms specifically for deaf people.⁹ The investigation of the informants' profile and activity on social network sites is not the object of this study though.

To understand the reasons, ways and aims of our world's processes, network analysis aims to know the structure of complexity in our *small world* (Barabási 2002). It assumes that the network's characteristics are inherent in their pattern of its construction and its alternation (Barabási 2002). Evolutional psychology studies add that there is a correlation between the

⁵ Mostly a keyboard sized vehicle that can be connected to computers and is suitable to display the texts that appear on the monitor in Braille.

⁶ <http://www.afb.org/section.aspx?sectionid=57&topicid=167&documentid=3153> - 12.12.2012.

⁷ <http://theblinduniverse.com/activity/> - 12.12.2012.

⁸ <http://blindspots.net/> - 12.12.2012.

size of a human being's neo-cortex and the size of the individual's social network. The information processing capacity of the brain implies constraint on group size. Therefore, the ability to recognize and interpret visual signs (capacity of visual-memory, visual-manipulation ability) could influence the size of the group (Dunbar 1998). While this process is not verifiable in the reverse direction (smaller size of social networks do not result in a decrease in the size of human brains) there should be another influential constraint on the size of the networks. Supposedly, information and communication channels play an important role as well.

Until recently, scientific inquiries were focusing on the effect of the increase of information and communication channels (e.g. internet) to the structure of social networks. This research could shed light on the influence of the lack of one information channel (vision) on the density and number of social interactions. Furthermore it assumes that not only the quantity of these channels have a great influence on these network structures but their quality as well.

We do not know yet what kind of effect the functional reorganizations of blind people's visual cortex has on the structure of their social network. Due to the plasticity of human brain cortex in the case of visual impairment, the capacity and ability of the residual sensual channels is altered, and could influence the structure and size of blind people's social network. Furthermore, it has to be noted that blind people's visual cortex is not inactive; a significant activity is observable (during Braille-reading or loud-book listening) in their visual cortex (Burton 2003). Inquiries regarding this functional reorganization could contribute to the recognition of influential factors to the patterns of blind people's network structures.

⁹ <http://www.deaflinx.com/DeafCommunity/chat.html> - 12.12.2012.

Chapter III. Methodology

This chapter serves the purpose of presenting the data collection methods used during this research; as well as describing the process of the investigation and introducing the survey's informants. I used semi-structured interviews to inquire about visually impaired people's friendship network formation, perception, and management; and I applied name-generating ego-network questionnaires to acquire data regarding the structural properties of their friendship networks. The investigation was conducted with the participation of five female and seven male visually impaired individuals.

III. a. Ego-network questionnaire

Ego-network questionnaires were used with the attempt to reveal the egos' social embeddedness, and the density, size, balance, strength of ties, and influential factors of tie-structures. I applied an adapted ego-network questionnaire that is specifically configured to fit the focus of the inquiry. I received the original version of the questionnaire from Robin Dunbar Ph.D¹⁰ and modified it to my interest with his official permission. I employed the UCINET software to visualize the networks.

An ego network depicts either one particular individual's whole personal community or a particular segment of this community based on the individual's own report (Hanneman-Riddle 2005). The ego-questionnaire I used was solely concentrated on the individual's friendship ties, it does not inquire about the egos' kin- and acquaintance network. The task of defining the concept of 'friendship' or 'friend' was given to the interviewees with the assumption that the construction of the ideotypic notion of 'friendship' differs from

¹⁰ Contemporary British anthropologist and evolutionary psychologist.

individual to individual since it is influenced by socio-cultural and socioeconomic context on the one hand and individual circumstances, abilities, and preferences on the other (Allan – Adams 2007). The definitions, given by the informants are introduced and elaborated in the next chapter.

The ego-network analysis had a dual focus: on the one hand it investigates the network structure of the ego and on the other hand it also wishes to look at the structure of the acquaintance's relationships with each other. It follows that the research covers both the structure of relationships of the individual and his/her environment (Hennig-Brandes-Pfeffer-Mengel 2012:53). This inquiry served as preliminary research to specify what kind of questions should be asked in order to gain a holistic perspective regarding how 'local networks' create social capital (Gargiulo-Benassi 2000) in visually impaired people's lives. How does social context effect blind individuals, what are the origins of the structural holes in their networks (Zaheer 2009) and what are the consequences of exaggerated homogeneity or heterogeneity within their networks.

Ego-networks are usually analyzed with qualitative research perspectives and serve as a useful method to report about individuals' social embeddedness and their perception regarding their own social structures. This method has proven beneficial in analyzing relationships at a deeper level with exploring particular people's narratives concerning their social context, and the content, strength, reciprocity and maturation of these relationships (Charpenter – Ducharme 2005).

The ego-network questionnaires I used were filled out by myself, on the basis of the interviewees' answers, in the frame of personal structured interviews. The below used names are pseudonyms. Seven of the five interviewees preferred to conduct both the structured and semi-structured interviews on Skype. Filling out the ego-network questionnaires usually took

about 30-40 minutes. The questions inquire about the following characteristics of the interviewee's close non-kin friends:

- their sex
- if he/she is visually impaired or not?
- from where does the ego know the alter/what is the content of the relationship?
- how the ego evaluates the strength of tie that bound him/her to the particular friend?

(The strength of ties are mainly decided on intuitive basis and determined by the together spent amount of time, emotional intensity, intimacy and reciprocal services. The tie-strength is directly proportional to the number of common acquaintances (Granovetter 1973).

Furthermore, as it was mentioned before, the questionnaire reports the actual ties between the alters according to the ego's information.

III. b. Semi-structured interviews

Semi-structured interviews were conducted with the same informants, before filling out the ego-network questionnaires. In every case the ego-network questionnaire and the interview were conducted during one session, although I offered the option of a second meeting to every interviewee. After the clarification of my inquiry's target, I ensured the informants about the confidential handling and storing of their answers and about keeping their personal data absolutely anonymous. I clarified at the beginning of the interviews that although I prepared an interview outline, this conversation is flexible and I am willing to follow those issues that pop up in their mind (in regard the interview's actual topic) and they find necessary to mention it. I aimed to keep the interviews 'on track' but I also encouraged

the informants to open up new directions if something occurred in their mind and found it important to add. The interviews usually lasted for 50-60 minutes and with the informants' preliminary permission I recorded all of the interviews with a voice recorder. I did not feel a reclusive attitude from the side of any informants. Even with rather personal and intimate topics they seemed to feel comfortable speaking about the issues.

I used semi-structured interviews to inquire about the informants' concepts regarding the role, effect and definition of *friendships*. This task, the conceptualization of friendship seemed to be the most abstract and troublesome task. The interviewees often rephrased their statements and this question often generated a quasi self-discussion that the interviewees conducted with themselves. I also asked about their personal preferences in establishing friendship ties and what characteristics make somebody eligible to become a friend. I particularly focused on the interviewees' attitude regarding whether they prefer to establish friendship ties with other visually impaired people or rather with sighted individuals.

Another field of questions focused on how these visually impaired people perceived and evaluated their friendship networks and what kind of dynamics they saw effecting them. Throughout the conversations I also encouraged the informants to share experiences and 'stories' regarding the issue, and so, particular friendship management and -interactional behaviors, peculiarities, characteristics and oftentimes hardships and examples of predicaments occurred throughout the interviews as well.

III. c. Introduction of informants

I got in touch with the informants through either the Hungarian Sports and Leisure Association for the Visually Impaired or through the mailing list of visually impaired people. I was aware of the running of this sport club and the existence of this mailing list from my

former studies. Since it is an open sports club I attended regularly to sporting events from January 2013 and I requested five of my sport-mates (Ábel, Anna, Tibor, Olga, Szilárd) to be my informants for this investigation. Regarding the mailing list, I sent a request letter to the list asking for volunteers who would cooperate with me in participating in an interview – six individuals responded (Zalán, Laci, Andor, Rea, Lenke, Győző). Betti is the only one who was not approached through either of these methods – she is Ábel’s friend and he suggested that I can make these interviews with her so I contacted her as well.

I conducted both the ego-network questionnaire and the semi-structured interview with 12 visually impaired people who are between the ages of 20 to 47. All of them completed at least undergraduate studies. Ten of the informants are blind or legally blind; nine of them get around with a white stick and one with a leading dog. Two interviewees are low visioned; Anna sees 30 % of the ‘normal’ vision and under good light circumstances Tibor’s vision is 0.2 (20% of ‘normal’ vision). His vision decay started at the age of 33. Only one more informant (Andor) lost his sight as well later on in his life (age 29), but the other interviewees are visually impaired from their birth. Those people who are visually impaired from their birth attended special schools for visually impaired children except Betti. Seven of the informants live in the capital city, two of them in the metropolitan-area of Budapest and the others dwell in other Hungarian towns. Hereinafter the informants’ demographical data and their number of friends are displayed in one table. (For the sake of confidentiality the exact professions are not displayed and the exact place of dwelling is not indicated, unless the interviewee lives in the capital city.)

Name	Sex	Age	Visual status	Date of impairment	City	School	Occupation	Partner	Number of friends		
									Seeing friends	Blind friends	Total
Betti	F	22	Blind	Birth	Budapest	Integration	Student	Seeing	15	6	21
Zalán	M	47	Blind	Birth	B.	Special school	Works in show business	Blind	11	3	14
Laci	M	26	Blind	Birth	V.	Special school (until 7. grade)	Student	-	7	3	10
Andor	M	37	Blind	Age 29	K.	Not special school	Works in social care system (works with visually impaired people)	Seeing	5	1	6
Rea	F	26	Blind	Birth	Budapest	Special school	Unemployed	Seeing	2	1	3
Lenke	F	27	Blind	Birth	C.	Special school	Artist	-	5	4	9
Ábel	M	20	Blind	Birth	Budapest	Special school	Student	Blind	9	8	17
Anna	F	34	Low visioned (V0,3)	Birth	Budapest	Special school	Public servant in education (works with visually impaired people)	Blind	9	9	18
Tibor	M	42	Low vision	Age 33	Budapest	Not special	Officer, club	-	2	4	6

			ned (V0,2)			school	manage r (works with visually impaired people)				
Olga	F	30	Blind	Birth	Budapest	Special school (until 5. grade)	Works in social care system (works with visually impaired people)	Blind	2	6	8
Győző	M	32	Blind	Birth	A.	Special school	Works in social care system (works with visually impaired people)	Blind	5	9	14
Szilárd	M	22	Blind	Birth	Budapest	Special school	Student, adminis trator (works with visually impaired people)	-	3	11	14

Chapter IV. What is friendship? Visually impaired people's interpretations regarding the content, role and effect of friendship ties

This section provides a general introduction to the informants' narratives regarding their personal interpretations of the phenomenon, function and role of 'friendship' in their life. Furthermore, the opinions made about sympathy and what they find most important in a friendship will be discussed. These narratives shed light on the conceptions that established the interviewees' decisions of whom to include in their friendship networks and why specifically them. The understanding of these constructions undoubtedly contribute to the holistic grasping of these people's networking. The concrete friendship networks are presented in the Appendices as well.

The task of defining 'friendship' or describing the characteristics of an 'ideotypical friend' is proven to be a difficult task for the interviewees. This dilemma and hardship was anticipated by the sociological literature as it is presented in the literature survey. Specifying an abstract but widely used notion is never an effortless project, and the majority of interviewees admitted that they had never seriously defined the concept and meaning of friendship for themselves.

I mostly received extremely short answers and the informants always referred to the 'common sense' that they are sure that everybody enumerates the same features of *friendship* and they do not want to say stereotyped phrases. I stuck to the question and my curiosity encouraged them to elaborate in detail about their conceptions of friendship. Generally, they enumerated: trust, honesty, mutual acceptance, respect, attention, openness, help, persistency and similarity to define this notion. Oftentimes they provided greatly blurred clarifications, such as "those are my friends whom I miss after a while" (Győző), "that is a real friend who warns me when my T-shirt is dirty" (Andor), "with a real friend I forget that I am visually

impaired” (Olga), and “those people are my friends who want to be my friends” (Lenke). The significance of these (especially the latter three) ‘definitions’ shed light on the importance of three crucial factors in visually impaired people’s socialties: help, equality and openness. Beyond these, the most common characteristics of a ‘good friendship’ were ‘reciprocity’, ‘artlessness’ or ‘naturalness’ and ‘similarity’. After mentioning the problematic nature of these characteristic’s meanings in different ‘friendship layers’ the importance of these factors will be elaborated upon.

The interviewees defined different groups of ‘friends;’ what the literature designates as ‘different layers of friendship’. For example, Zalán explained that there are “friends with whom I have a great time while drinking a beer, than others with whom I regularly have a great talk, others whom I sometimes invite to my place and others who come to my place as they would go home.” Similarly, Ábel clarified that ‘there are my Facebook-friends, and then those whom I personally meet at times or are my university peers, and then a smaller circle whom I socialize with more often, and finally those who are real friends and know me very deeply.’ When enumerating these layers the interviewees did not draw strict lines between friends and ‘non-friends’ (acquaintances, dudes) or from which layer ‘real friendship’ begins. That supports Adams and Allan’s (2007) conceptual framework that asserts friendship is not a category but a relation. The content of this relation is permanently fluctuating with time and situation, and most importantly; ‘friendship’ has multiple and parallel meanings. The numbers that the egos assigned to particular relationships on a scale of 10 degrees to indicate the strength of ties provided information of these friendship layers. But both these numbers and the informants’ narratives leave unspecified the changing meanings or amounts of ‘equality, mutuality and naturalness’ from layer to layer.

‘Reciprocity’ was the most commonly occurring attribute the informants primarily mentioned in defining friendship. “Reciprocal help”, “- dependence”, “- understanding”, “-

support”, “- acceptance”. With the reciprocity of ‘contents’ they emphasized their equality in the relationship and defined friendship as a contact where they are not in the exclusive role of somebody who is ‘helped, supported or defenseless’. Or, at least they are not more in this role than the other member of the friendship. As active parts of these ties they are also helpers and supporters. They explained that in friendships they are equal partners with different abilities - similarly to non-visually impaired people’s friendships. The reciprocity is not the same content-wise, but still, the relationship stays balanced. Olga elaborated that in friendships they are not primarily defined on the basis of their impairment but on the basis of their holistic existence. Their abilities and disabilities are not escalated or generalized, but known, accepted and smoothly handled.

When I explicitly asked about friendship-dependency they all claimed that they aim not to depend on their friends but sometimes it is unavoidable to ask their help in certain cases. Szilárd and Zalán admitted that they do not like to “use their friends” but the sociological literature on friendship proves that there is nothing special in asking help from a friend and it is a usual practice. It can be said that reciprocity (reciprocal help as well) is a common and important attribute of friendship not exclusively among visually impaired people, but generally as well. The emphasis of this attribute however shows its importance and predestined value in the friendships.

Beyond reciprocity, the majority of interviewees underlined the importance of ‘artlessness’ and ‘openness’ in a friendship relationship. In these narratives, artlessness or naturalness is used to designate the acceptance of visually impairment in a ‘natural way’. As the informants elaborated this acceptance is usually a learning process of the sighted friend and it usually comes with time and shared experiences. Exaggerated kindness, -worry, pity and the feeling of shame is categorized as ‘artificial’ in a friendship. Considering the other as a ‘queer fish’ or the emphasis of disability is also meant to be artificial and avoidable

behavior. The circle of friends must be aware that blindness is a disabling condition in some circumstances but not in all situations. Olga emphasized that her visual impairment is obviously permanent but her disability, which derives from this impairment, is situation-dependent. She elaborated that after a while her friends usually knew in what circumstances they should draw her attention to what kind of things (e.g.: stairs, dirty T-shirt), and they do it without “artificial acts or tones in their voice”, they say it as “they would say to one of their friend that his fly is open”. Another interviewee; Rea added that she finds it inconvenient if her friends do not ask her about her blindness. “I do not like if they try to behave as I would not be blind”. She verified that “the topic of ‘how is it to be blind’ must appear at the beginning of friendship. But it is also important that it should not be a permanent topic afterwards.” Behaving naturally with friends and accepting his or her behaviors and necessities as Albert and Dávid (2007) unfolds is usually also a natural property of friendships. It can be assumed that the emphasis of artlessness as a crucial condition came to most of the individuals mind when defining friendship because ‘being handled naturally’ is an important experience for them. As Rea added “in many various situations during my daily life I have to face other people’s strange behaviors, many times with their artificial and exaggerated kindness that is mixed with pity and oftentimes with unconscious humiliation – with friends, I never feel that”. This quote refers back again to the above elaborated importance of mutual equality and acceptance.

As I was questioning the interviewees regarding their sociability and **openness** towards social relationships, they all (except Lenke and Rea) stressed that they are open to friendships. Lenke became more unsociable because her bad experiences with ‘friends’ and Rea is satisfied with her friendship network and she does not seek to broaden it. It is detailed and explained in the next chapter that because of some restrictive circumstances the majority of informants do not usually take the first step in building friendships but they commonly

accept and reciprocate if somebody opens up towards them. This openness plays an important role in not just the actuation of friendship ties but in the establishment of weak ties as well.

‘Similarity’¹¹ is as another substantial factor in building friendship relations as it turned out in the informants narratives and is underpinned by the sociological literature as well. There were two different kinds of opinions regarding the preferred extent of similarity in friendships among the interviewees. One group claimed that the more similar (to them) an individual is, the better friend he or she could be. When I was inquiring what kind of similarity do they mean, they mostly referred to inner characteristics and values (patience, curiosity, cynism, religiosity etc.) or interests (sport, books, music etc.). They claimed that similarity is always a basis of strong ties. However, other individuals among the informants stand for another attitude. They advocated that exaggerated similarity is not desirable in a friend because it makes the contact monotonous and unexciting. These individuals gave preference to ‘semi-similar people’. People who are similar enough to understand each other easily but besides distinct enough to keep the contact “interesting, fruitful and potentially illuminating” (Győző). They claimed that the potential learning process must be permanently inherent in a friendship and these situations always could be created if somewhat different people are together.

I was also enquiring about on what basis do they decide during the first meeting (for the first sight) if somebody is sympathetic to them or not. None of the informants gave me precise and detailed answers regarding this question but besides the individual preferences, a common characteristic occurred in all interviewees’ elaborations that gave a mutual pattern to the descriptions. By and large Olga summed up the general opinion of the interviewees with saying that; “I extract the information from their voice and way of talking that you get from

¹¹ There is a separate chapter below (Chapter VI.) that especially deals with the question if visually impaired people prefer more other visually impaired people company or not, therefore this chapter excludes this ‘factor of similarity’ and concentrates on the importance of other resemblances.

their face, sympathy for the first meeting is somehow an unconscious decision”. The crucial role of somebody’s voice and phrasing became clear as the establishing factor of sympathy and so, potentially friendship. Therefore, I was trying to get to know how a sympathetic voice and talking is like – is it deep or high, fast or slow, soft or hard, loud or quiet. The informants expressed that there is not one special voice that is the ‘golden standard’ but all kinds of voices can be sympathetic (“sympathy is a feeling, I cannot explain with words why somebody is sympathetic for me” Győző). Rea added that “I favor those people’s company who are more active, vivid and verbal because their activity gives constant feedback to me about their presence, but those people who are often in silence or their occupation is silent than I do not know what they are doing or whether they are present.” The importance of a friend’s verbal qualities, which was mentioned by all informants is clearly understandable if the role of verballity is extremely crucial in every dimension of their life.

At the end of the interviews the informants turned to be right more or less regarding the resemblance of understanding, perception and image of ‘friendship’. There were no significant differences in the construction of friendship among the interviewees. As they opened up, in ‘real friendships’ the individuals regard each other as equal people and their relationship is based on the reciprocity of emotions and contents that establish balance in both participants’ costs and benefits. These conceptual frameworks concerning the notion and content of *friendship* provide an essential basis to get to know and to understand visually impaired people’s network formulation and management.

Chapter V. Structural constraints on friendship-network formulation

The visualized networks are displayed in the Appendices¹². I used ego-network questionnaires (specifically to inquire about friendship ties) and social network analysis in order to acquire new information regarding visually impaired people's relational data, their networking possibilities, and preferences. In this chapter the networks' similar or common properties is indicated and I introduce those factors that primarily influence the formation of these ties. Furthermore, the second subchapter presents those peculiar circumstances and difficulties that severely influence visually impaired people's friendship network formation.

Based on the interviewees' own narratives, it appears that visually impaired people's possibilities to interact and deepen contacts with acquaintances and establish new friendship ties in numerous environmental settings, are altered and sometimes reduced compared to non-blind people. Underpinned by the research findings, the assumption is provided in this section that altered interactional possibilities are mirrored back in the networks' structures and content.

V. a. Influential factors on and general tendencies regarding the structure and content of ties

The most striking structural characteristic of these twelve non-kin communities is their heterogeneity. The average network size among the informants is 11.7, from the range of 3 to 21 and the average number of visually impaired friends is 5.4 which means 46.6% of the networks (from the range of 16.7% to 78.6%). This is a considerably higher ratio than

Kef, How and Habetkothé's (2000) findings in the Netherlands where only 24% of friends were visually impaired among visually impaired adolescent' friends. Dunbar's hypothesis that same-sex people are usually overrepresented in friendship networks is partly proven by this particular investigation; this concept is valid for 7 of the 12 networks.

The table below introduces the number of friends in different friendship layers. The first row indicates the numbers of the scale (2-10) that signifies the strength of ties (between the ego and the alter, based on the ego's evaluation) and the rows below signal how many friends the egos listed in particular layers.

	10	9	8	7	6	5	4	3	2
Betti	3	1	2	5	2	3	2	3	-
Zalán	-	2	1	4	1	6	-	-	-
Laci	-	1	2	-	-	2	4	-	1
Andor	-	2	3	1	-	-	-	-	-
Rea	1	-	2	-	-	-	-	-	-
Lenke	1	2	2	2	2	-	-	-	-
Ábel	1	-	2	7	5	2	-	-	-
Anna	2	2	1	5	3	5	-	-	-
Tibor	1	-	1	2	2	-	-	-	-
Olga	2	2	1	3	-	-	-	-	-
Győző	2	1	5	4	1	-	-	-	-
Szilárd	-	1	13	-	-	-	-	-	-

The alters that are ranked as a nine or ten can be considered 'best friends' to the ego. It shows that the average size of the egos' friendship network is 11.7, however the number of 'best friends' on average is 2.25. (Three people have four, another three have three, two egos have two, and five egos have one best friend.) These findings are greatly similar to the number of best friends (2,2) in non-visual impaired people's networks according to Albert and Dávid's (2002) findings. In contrast, the average size of the friendship networks in this particular

¹² The formal constraints of the actual paper does not allow for the detailed, one-by-one, textual introduction of the networks. These descriptions and the tactile versions of the networks are available with contacting the author.

investigation, with all layers (11.7) is slightly smaller than Dunbar's findings. According to Dunbar, the average number of close confidants by non-visually impaired people is 15.

The heterogeneity of these networks allows for the deduction that visual impairment, as a single variable does not necessarily indicate similarly structured social networks, however general tendencies are observable that will be introduced thereafter. These graphs are various in the number of alters, in density of ties, in the inclusiveness of the networks, in the embeddedness of blind individuals, in the ratio of male and female friends, in the strength of ties and in the number of clusters. The focus of my inquiry, the ratio of blind-sighted friends in the networks, seemed to differ from network to network as well. The acquired data proves that either the date of visual impairment or the circumstance of integrated or segregated primary school attendance does not seem to influence this ratio. But the investigation shed light on the importance of daily occupation and the place of residence as extensive influential factors on the ego's involvement in the blind communities.

As a general tendency, it can be said that the ratio of visually impaired and sighted individuals in the majority of networks is influenced by the egos' workplace community (with who they are working with) and their place of dwelling (where are they living in Hungary). It seems that those egos who live in the capital city (or in other large Hungarian cities) and who work in the education, training or psychological treatment of visually impaired people have more blind friends than those who dwell in smaller towns or on the countryside and/or have an occupation that is not primarily connected to visually impaired individuals.

I did not find any variable (among the investigated) that unambiguously influences the number of alters in the networks. Age or gender does not seem to influence the number of alters, neither do the severity of visual impairment or the date of visual impairment. However it has to be noted that those egos who became visually impaired later on in life, in comparison

with the other egos, both have relatively few (six) alters in their networks and almost all of these connections were tied after their vision decay. Regarding occupation it can be said that all students have 10 or more friends in their networks, but professions that require frequent contact with people does not necessarily substantiate a large social network. The student Bogi, who was studying in an integrated environment has by far the most friends and the most inclusive network. The city of residence does not seem to be an influential factor regarding the size of network either.

There are no networks where the strongest ties (among all friendship ties) bounds the ego to blind individuals exclusively. The strongest relationships (8-10) are towards both blind and non-blind individuals in the networks, except three. Among these exceptions the strongest ties bind the ego to exclusively non-blind friends. Two of these networks belong to those two people who were not born with visual impairment, but lost their sight at the age of 29 and 33 and one belong to the artist Lenke.

It is important to emphasize that individuals are structurally embedded in social context and circumstances outside the friendship that have a significant effect on the friendships themselves (Adams and Allan 2007). These circumstances could be *environmental* (where I am, where are the potential friends, what is between us, what/who supports me in reaching them, etc.), *individual* (how am I able to reach somebody, who I want to make contact with, etc.), *social* (who reciprocates my friending intentions), *cultural* (how is it usual to contact a friend, what friendship means etc.), or *material* (what kind of technical equipment, assistance is necessary and affordable to contact with a friend) etc. The investigation's findings also support the premise that socio-structural embeddedness solidly influence and oftentimes determine the chances of who we can reach and with who we can establish friendships.

The sociological and anthropological literature on friendship prove that friendships are usually developed and tied with people who are frequently around us, even on-line or off-line. The definition of ‘being around’ obviously depends on the nature of our perception: accordingly; who do we sense as ‘present’ around us. As the student Rea mentioned, for visually impaired people, other individuals are present if they are ‘actual’; whether audibly, tactilely or in an olfactory sense. Exclusive visual presence cannot constitute contact if one of the participants is blind. The questionnaires’ results establish the assumption that this circumstance limits those possibilities and circles of people with whom friendship is realizable by blind individuals. The average number of contents (places from where the interviewees have friendship ties) is three to four among the informants. The findings show that visually impaired people mostly have friendship ties with colleagues or student-peers if they are still students (ten of the twelve interviewees), with members of blind people’s communities (seven informants) and with former primary school mates from special schools. Seven of the nine visually impaired people (who were pupils in segregated schools) still keep one or more strong friendship ties with formal classmates from the School of Blind Children (in Budapest) or from the School of Low-Visioned Children (in Debrecen).

As it is introduced in the literature survey by evolutionary psychologists and - anthropologists, our brain’s capacity (and our time and energy investment) is limited. We are not able to establish an endless number of friendships and therefore there is a tendency that the previous friendships disappear if we decide to invest in a new one. It follows that long kept friendships stay constant if we do not have possibility/chance/wish/need to replace them. This evidence and the interaction-difficulties, introduced in details in the forthcoming chapter, establish the assumption that friendships from primary schools remain at the cost of new ones. But it must be emphasized that the acquired data does not provide an exact

clarification why these ‘old, primary-school friendships’ remain, but their inclination to persist is undoubtedly observable.

The participants in the other big circles of friends are either colleagues/student peers or members of visually impaired people’s communities. These clusters are constituted by those people whom the informants have daily interaction with and with whom they spend considerable amount of time either during their working or their leisure activities. The establishment of friendships with these people is not unusual or surprising, but the frequency of colleagues considered as friends in the majority of the networks, is another peculiarity of these graphs. This consistent and frequent recurrence of colleagues and student peers among friendships can also be caused by the limitation of forums a visually impaired person has to establish friendship ties.

Other frequently occurring contacts in these friendship-networks are family members (mostly mothers), partners and acquaintances from trams and buses. The inclusion of kins and spouses in a circle of friends is on the one hand a matter of the individual definition of ‘friendship’ and can reflect the complex and multilevel commitment to these people. However, on the other hand it can also be a result of scarcer opportunities for friendships and challenging possibilities for interaction. The findings of this investigation also shed light on a special forum where friendship ties are able to be developed. These forums are trams and trains where visually impaired people might ask for or are provided with help, which continues into chatting through stops and somehow ends with a relationship that is considered ‘friendship’ by blind people. Informants who did not include ‘tram-acquaintances’ in their friendship-networks reconfirmed that the action of asking for help or being orientated could turn to a friendship-establishing method that is used consciously by some (and refused strictly by other) interviewees.

In this section I elaborated on those circumstances that influence network formation in these visually impaired people's life and I introduced those factors that change these people's network management possibilities and contents. These socio-cultural constraining factors, individual circumstances and abilities play an important role in the state of blind people's network formation and accordingly, in their integration. The future analytical studies of these micro-level coercing components could result new knowledge regarding the necessity, date, method and content of social support and intervention in visually impaired people's network management.

V. b. Difficulties in network management

Blind people's altered and challenging circumstances, and specific interactional difficulties result in the above introduced pinch of networking and tie-establishing possibilities. Several of these concrete difficulties were made explicit by the interviewees. Since these phenomena (concrete difficulties that were made explicit by the interviewees) establish the conditions of interactions, their analysis is highly important in friendship network studies. As Adams and Allan (2007) pointed out, the construction possibilities of personal networks depends on one's structural location and the control one has on their ties. From the investigation it became clear that not only the supremacy of existing ties play an important role in the networking of visually impaired individuals, but also the control over the establishment of not actual, but potential ties. Certainly the establishment of ties could happen with different intentions and contents; from asking for help from unknown people to establishing strong bonds. In this chapter the difficulties of particular network-tie establishments will be presented based on the informants narratives.

The examination of tie establishment is an interesting and important factor in social network formation studies because every strong tie develops from weak ties and every weak tie must be established first. The majority of interviewees mentioned that the realization of the not yet existing weak ties are a permanent task for blind people (e.g.: asking for orientation-help in a non-familiar neighborhood, or inquiring about the bus number at a bus stop).

Visually impaired individuals are in the web of semi-existing ties during their everyday life. I call those relationships ‘semi-existing’ that are not yet actualized from both sides but the intention is already inherent in one of the participants of this potential future contact. This intent either comes into being in sighted people (who wish to help visually impaired people whom he/she sees on the street/tram/bus, in a bank, post office etc.) or in the blind individual who detects the surrounding with the intention to ask for help. The ability of realizing these semi-existing relationships, and the method of initiating and handling these situations is a long and complicated learning process, as Ábel, Sziárd and Tibor described. They elaborated that visually impaired people usually share experiences and ‘good practices’ with each other regarding the techniques of establishing contact, asking for help or refusing help and the way to chit-chat with absolute strangers on a daily basis whom they need to trust. The informants specified that if they need help they never “shout for help to the space” (Ábel) but always try to primarily detect the surroundings, such as hearing that somebody is around and then approaching that individual.

Examining these weak ties from a network perspective is a peculiar and yet under researched task. Although these contacts usually hold for view moments (exceptions mentioned earlier), they should be considered as nodes in visually impaired people’s social networks. They are not constant nodes, they are appearing and disappearing unusually quickly, but they cannot be ignored as social contacts. Albeit their content is greatly limited

and focused and these affiliations are verbally superficial, their importance in visually impaired people's life is apparent. These experiences show that blind people have and use a differently textured and, in certain aspects, considerably larger network on a daily basis than non-blind people. Surveys on blind people's whole social networks could shed light on the specificity of the texture of these networks, but the method of representing and analyzing these flashing and disappearing relationships is the duty of future investigations.

Regarding the establishment of friendship ties, all except one interviewee designated that they usually do not make the first step in establishing friendships with sighted people. Generally they do not refuse somebody's intention but for example in a circle of acquaintances it is difficult for them to select one sympathetic individual and initiate interaction with him or her. It is even more difficult if people are verbally not present around them. So, visually impaired people usually wait until they become sympathetic for somebody which limits their possibilities in broadening their friendship network. As it was introduced above, the initiation of interaction is unusually transferred when the stake is friendship-tie establishment and not weak-tie realization. Győző and Andor, who work in the social care system, affirmed as well that blind people are more defenseless in establishing amity ties and they do not usually initiate companionships. This passive initiator role extensively takes away the control from blind people in affiliation management and highly effects their network formulation.

The interviewees also emphasized that many times the sighted people's attitude generates difficulties both in realizing the semi-existing relationships to a weak tie or in establishing friendship ties. The lack of knowledge and experiment regarding the way of contacting visually impaired people generates misrepresentation, stereotypes, fears and exaggerated worries in the conception of 'majority society'. All of the informants highly affirmed that sighted people's information shortages regarding people with disability and the false

constructions widely harden their possibilities in establishing new amity ties. It became clear that sighted people are many times open and willing to support visually impaired people in short and easy tasks but less open in constituting strong affiliations with them. Among the informants there were three common reasons behind the distance keeping attitude of sighted people. One is the scarcity of information they know about visually impaired people, the second is their time and energy lack in paying attention to or helping their blind friends in particular situations, and the third is their fear of the majority society that they will be stigmatized as well if they hang out with visually impaired people. The most common reasoning in the interviews was the first one, so the upcoming paragraphs will introduce this problem in detail.

“Non-blind people usually do not know how blind people work” (Laci). They do not know what kind of activities, what kind of help they need and how to provide support to them. As Ábel unfolded an extreme example of people’s un-informedness; it happened with him that once a sighted female grabbed the end of his white stick and pulled Ábel after herself as a way of orientation. All of the informants experienced similar difficulties in contacting sighted individuals that it oftentimes derives from their lack of knowledge (e.g.: they were handled as they would have other disabilities as well, many times they were thought to be intellectually, physically disabled or deaf). A great problem that people do not know is how to orientate visually impaired individuals. Many times sighted individuals just grab their arms without any preliminary verbal contact. This unexpected physical contact is greatly inconvenient as the interviewees told. As they unfolded, the most preferable way to establish personal contact with visually impaired individuals on public places is firstly asking them if they are in need of help. After if it is made explicit that they are the target of the other person’s communication intention and they accept the offered help, then, usually the blind individuals prefer to hold the guiders’ arm above their elbow, rather than the guide holding

them. They explained that this is the safest way for them to be guided. There was a contradiction in the informants' narratives regarding where the sighted people are more knowledgeable and helpful in this matter. The German linguistic student Laci experienced that people on the countryside are more open and help visually impaired people because they are not in a constant hustle as people usually are in larger cities. Contrary, Rea explained that she prefers to live in Budapest because people here are more used to seeing visually impaired people on the streets and there is a bigger chance that they have experience in guiding them. Beyond that, Zalán elaborates that he has better experiences in establishing either weak or strong ties in the western part of the country. It must be added that there was a consensus among the informants that those initiatives are undoubtedly useful all around the country that aim to give information and experience about blind people to the 'majority society'.

The scarcity of forums is also an aggravating factor if visually impaired people wish to meet and interact with other visually impaired individuals. Six of the informants resented that regional associations usually organize forums for elderly people but except the sport association in Budapest the interviewees did not hear about other forums that targets mainly young visually impaired individuals. One of the informants, Tibor, has just established a forum that aims to facilitate the connections among the visually impaired youth. He also added and others confirmed that distance in space debilitates the strength of ties. It is validated by the fact that the majority of the interviewees still maintain friendship ties from their primary school. Even if it is not peculiar that long distances have tie-fading effects, it seems that this circumstance is more articulated among visually impaired individuals. Although the wide range of electro technical gadgets and the internet serve the virtual bridging of long distances, the scarcity of personal interactions weaken the strong ties. And since traveling is difficult for visually impaired people, especially in unfamiliar neighborhoods, the spatial distance is an important constraint in their networking.

In this chapter I introduced the importance of weak ties in visually impaired people's daily life and the geographical differences in interactional possibilities and sighted people's approaches toward them. This section shed light on blind people's difficulties in establishing relationships with sighted people that derives on the one hand from visually impaired people's special circumstances and on the other hand from the sighted people's misconceptions regarding them. It is also emphasized that the scarcity of forums also makes it difficult for young visually impaired people's to develop friendships with sighted and visually impaired people as well.

Chapter VI. Alone or together? – Network perception, preferences and identification in and through friendship networks

As it was mentioned in the introduction, one of the research questions was derived from the disability studies' contradictory statements (and my own empirical experiences) concerning visually impaired people's friendship preferences. More precisely; I was interested in whether visually impaired people prefer each other's company or rather reject it. I was puzzled by this question because on the one hand, research on blind people's individual communities provide data regarding the actual status and possibilities of blind people's social inclusion and also constitute knowledge regarding the inner network texture of their communities.

I used two different methods to gather data regarding the informants' preferences. First, I inquired about their own perceptions and narratives concerning this issue (if they rather prefer to have visually impaired friends or sighted friends) in the frame of a semi-structured interview, and afterwards the name-generating ego-network questionnaire was applied to collect evidence about blind people's friends. The results of the latter method are

presented in Chapter V., hereinafter, based on the interviews, the informants' narratives are introduced regarding their friendship preferences and regarding their own perception (and explication) of the number of blind-sighted people in their friendship network. Furthermore, their reasoning and justification behind their preferences and the comparative analysis of the questionnaires and interviews will be presented in this particular regard (proportion of blind and non-blind friends) as well.

None of the informants articulated that they would prefer more visually impaired people's friendship company than non-blind people's. However, the majority of them affirmed that they know such blind individuals who deliberately and exclusively search for likewise visually impaired company. When I was inquiring regarding their opinion about the reasoning of these acquaintances' preferences, I got a 'list' about the advantages of a blind friend. I was further exploring what my informants thought; what kind of advantages does a blind friend have, and they enumerated the following: "understands my daily life better" (Ábel), "understands blind jokes" (Zalán), "there is a big chance that we studied in the same special school, so regardless of our age, we share something in our past" (Olga), "I learn all kinds of practical things from them: for example how to make distinctions between the two kinds of flours or how do I know how much toothpaste I put on the toothbrush" (Rea), "they know what I am able to do and not do" (Tibor).

These quotes show that although the informants did not express that their intention is stronger in establishing friendships with visually impaired people than with non-blind people, they are aware of (and already experienced) the 'advantages' of a blind confidant. This is proven by the graphs as well (see Appendices), because there is at least one blind friend in every friendship network. This means that none of the informants totally reject the company of a blind friend. However, on the other hand the majority of informants also acknowledged that they also have blind acquaintances, who solely favor non-visually impaired people's

friendships. Anna explained that she thinks that some blind people refuse other blind people's friendships with the following reasoning (which is parallel with the literature's claims): "these people think that they are less visually impaired and less stigmatized by society if they are not in the company of other visually impaired individuals. They do not want to be a member of a group that they apprise negatively and that is why they think that everybody else has negative approaches towards this group as well." Olga unfolded the same reasoning in her narratives regarding blind people who refuse other visually impaired people's companionship. No one among 'my informants', according to their narratives, belong to this circle of people who totally reject other visually impaired people's friendships, but it turned out during the interviews that there are some informants who still prefer to have non-visually impaired people as friends.

Andor, who lost his sight at the age of 29, the artist Lenke and the student Laci voiced that they rather prefer to affiliate with non-blind individuals than with visually impaired ones. Behind this preference, Andor's reasoning was very clear: "seeing people who have different kinds of topics and problems than blind people and because I was sighted as well, I can see sighted people's problems more clearly. Maybe it sounds like an anomaly, but sighted people let the world open for me towards them". Although he feels that sighted people's world view is closer to his, he did not preserve any friendships from those times when he was sighted but affiliated and bounded friendship ties with 'new' sighted people. His narrative that he has more sighted than blind friends and he does not search for the companionship of visually impaired individuals is underpinned by his friendship network where only one person is blind. The most interesting aspect of his chronicle is that he, according to his narratives, consciously refuses blind people's friendship, although he is working with them in the social care system.

Laci and Lenke both justify their distance-keeping attitude from visually impaired people with their bad experiences from the special elementary school where Laci studied until the seventh grade and Lenke until the eighth grade. Laci felt unsafe and often humiliated in the school; he remembers that he was the target of verbal aggression because his deep religious commitment. He even left the school earlier because he could not stand the unfriendly environment any more. He adds that later on in his life he attended religious camps organized primarily to visually impaired students and there he realized that “there are cool and kind blind people on earth as well”. He added that he is self-constrained in the company of other blind individuals and that is why he is not a member of any blind communities. His and Lenke’s narratives that they have more sighted than blind friends are also verified by their friendship networks. Lenke unfolds that she broke off friendships with blind people because she did not find they shared her interests.

Beyond Laci, Lenke and Andor, all other informants asserted that visual impairment is not at all a factor considered when choosing someone as a friend: “I am searching for the human in every person, I do not care if they are sighted or not” (Győző), “the person matters; not if he or she is visually impaired” (Zalán), “I have no preference, I like both visually impaired and sighted friends” (Anna), “I am open towards blind and non-blind people as well” (Betti). Ábel and Tibor shared these opinions as well however Ábel added that “somebody’s visual abilities are as important to me as his or her hair color [...] it is only important in organizational matters. When we need to organize a trip, for example to Lake Balaton, then I must pay attention to invite sighted friends as well; two blind people cannot go there alone.” Olga also emphasized that she does not care who is sighted and who is blind among her friends, and it is only a matter in concrete practical things, for example “who sits in front on a tandem bike”. With these two informants, the ‘functional benefit’ of a sighted friend was made clear as well.

Those interviewees who enumerated more visually impaired than sighted people in the ego network questionnaire, verified in their oral narratives as well that they have more visually impaired friends. Usually they reasoned it with the fact that they grew up and worked among visually impaired people, and this primarily influenced those people who got closer to them. Only Szilárd, who works as an administrator in an association for visually impaired people stated in the interview the opposite of what his network shows. In the interview he expressed that he has much more sighted than visually impaired confidants, but the network shows that he has friendship ties with 11 visually impaired and three sighted people. This inconsistency between his narratives and his answers to the ego-network questionnaire draw attention to a new possible direction of future research about visually impaired people's social networks regarding the relation between 'actual' network structure and it's personal perception.

However there were only two people among the interviewees who became visually impaired in their adulthood, and there is a clear contradiction in their preferences regarding this matter. Unlike Andor, Tibor stated that he is consciously searching for other visually impaired people's affiliation and he feels more loose, safe and accepted in their company, although the first layer of his friends are sighted individuals.

In the majority of interviews the informants mentioned characteristics or stories of 'how *blind people* are' or 'how *other blind people* are'. Some of these have already been introduced in the earlier chapter. These constructions are important and engaging from a social network viewpoint as well because it offers insight into a peculiar social group's concepts that seem to play an important role (consciously or unconsciously) in their network construction and their friendship preferences. These narratives serve a role to shed light on visually impaired people's opinion and choice regarding why they do and why they do not prefer to establish friendships with other visually impaired people. Future investigations

should incorporate in their focus how visually impaired informants' narratives regarding visually impaired people influence their friendship preferences. The great majority of the informants (except Tibor and Anna) provided characteristics or examples about 'blind people' that they consider as negative. Zalán and Győző mentioned the disadvantages of closed networks that solely include visually impaired people. According to their narratives those blind people who live together and contact rarely with sighted individuals become to constitute a "flock" (Győző) and they handle sighted people as bad-willing ones. Zalán adds that "these groups are obstacles to social inclusion because they do not pay attention to anything outside their group and oftentimes they neither take care about each other. [...] their mentality becomes highly problematic". On the contrary, Betti claims that many visually impaired people regard sighted people as some kind of 'models', "they look up to sighted people and wish to do everything like them". The majority of the interviewees share the opinion that some blind people have peculiar "non-preferable" (Szilárd) habits, as an example the informants mentioned "permanent head or upper-body swaying" (Laci, Ábel). As they explained, it is disturbing to see for sighted people and also distressing for them because this permanent moving hardens the understanding of the other's verbal expressions. Lenke who explicitly prefers non-blind people's company emphasizes that "firstly, order should be made in the blind people's head, they should know that they do not have a different world apart from sighted people and since they are a minority, they should learn to accommodate themselves in many various situations". Laci adds that he experiences many conflicts and misunderstandings among visually impaired people. However, Tibor states the contrary of this assertion and claims that visually impaired people in Hungary constitute a cohesive group. Orsi adds that visually impaired people are just as open towards each other as other members towards their own minority and there are all kinds of people among visually impaired people as well. According to Anna's narrative, visually impaired people are more

maximalist than sighted people because they always wish to show that they can do the same activities with the same outcome and many time the same performance need more effort but they are still persistent.

It is clear from the investigation that the majority of interviewees do not have a preference of who they are friends with in terms of being visually impaired or not, but they find it important and fruitful to have both blind and sighted friends. This shows that the interviewees do not wish to establish closed clusters that includes exclusively visually impaired people. They do not aspire to create segregated groups, but prefer and enjoy the company of different kinds of people. This micro-level study sheds light on the circumstances based in these people's narratives, that the literature's hypotheses and assertions are exaggerated. This is a common behavioral patterns among these people that they do not strictly hold aloof neither from visually impaired people, nor from sighted people, however their preference and reasoning of preference vary from individual to individual.

Chapter VII. Conclusion

This research focused on visually impaired people's friendship networks. Twelve visually impaired individuals' social network formation, -structure, -content and -management were investigated. Methodologically, an ego-network questionnaire and structural network analysis were supplemented with semi-structured interviews to inquire about the informants' perception and evaluation of their own friendship ties and the functioning of these ties. Ego-network analysis helped to grasp the structure and formation of these visually impaired people's social environment and the qualitative approach was used to include the ego's narratives regarding these networks' formation and influence on their social life.

The analysis of these 12 ego-networks does not allow for generalized arguments regarding visually impaired people's social embeddedness and friendship network management. Constructing general arguments regarding Hungarian visually impaired people's friendship networks was not the aim of this survey. Nevertheless, the collection of ego-network data and the attention to questions regarding people with disabilities social interactional possibilities, constraints and preferences facilitate our understanding – and the adequate intervention if necessary – of the formation, structure and 'texture' of these networks. With this learning visually impaired people's social status and the actual state of social inclusion could be more clearly understood.

The main findings from this research study are twofold. On the one hand it proves that visual impaired people's friendship-networks are heterogeneous and visual impairment, as a single indicator does not shape friendship networks unexceptionally to the same pattern. The investigated networks are heterogeneous regarding their size, the number of friendship-layers, the density of ties and the strength of ties. These outcomes strengthen the concept that

visually impaired people do not constitute a homogenous group and so, their network construction and management differ as well.

On the other hand however, this survey's findings allow for the presumption that visual impairment plays an important and manifold role in the formation and management of friendship networks. Nevertheless it must be noted that its effects are closely tied to other variants (age, gender, socio-economical status, personal skills and abilities etc.) in the context of network construction. Visual impairment seemed to have an extensive effect on the establishment of contacts. This broad influence can be explained with the circumstance that it is a usual cultural behavior in Hungary (and in other 'Western' countries as well) that visual communication (eg.: establishment of eye contact) foregoes the verbal communication and so thus substantiate the situation of conversation. Since this 'visual foundation of verbal communication' (to what sighted people are used to) is not performable by visually impaired people, it makes the establishment of the contact more difficult. The informants also explained that they the absence of eye-contact disturbs the sighted people in conversations with them, however they always try to speak towards the face of the interactional partner. The results from the interviews established the assumption that these circumstances alter those possibilities and circles of people with whom friendship is realizable by visually impaired individuals.

The investigation introduced the informants' conceptions regarding the notion of 'friendship', presented the structure of friendship networks with graphs and shed light on personal preferences and friendship establishing difficulties. According to the informants' definition; reciprocity, equality and mutual respect establish the basis of all good friendships – these are the primary characteristics of 'friendships' by the sociological literature as well (Adams and Allan 2007; Albert and Dávid 2007). The informants' average friendship network size is 11.7 and the average number of visually impaired friends in the network is 5.4

(46.6% of the networks). The number of best friends (friends in the two closest layers to the ego) on average is 2.25. The presence of visually impaired friends is a common characteristic in every single networks without exception. The ratio of blind and non-blind friends in the networks however is not constant. Thus these findings call attention to the literature's exaggerations and construct a 'middle-way' with justifying that these people do not entirely refuse either other visually impaired people's, nor sighted people's friendships.

On the basis of the investigation's result it can be claimed that among the informants those people have more visually impaired friends who regularly do activities (working, studying, practicing sport) together with other visually impaired people, and those who live in the capital city or other large cities. Dunbar's findings (2011) as well underpin this concept, proving that activities done together and the amount of time spent together significantly strengthens the social relations. As main networking difficulties, primarily the majority society's lack of information regarding visually impaired people, the shortage of associating forums and the plight of making the first step in an interaction were mentioned. So as, these findings shed light on the importance of vision, mostly in establishing contacts in the networks and to ensure the conversational partner regarding our permanent attention.

The main goal and novelty of this study is to raise attention to the importance of social network research among people who live with disabilities and to contribute in finding out the potential application forms of social network analyses in practical social problems. The view it offers can be called multi-dimensional, since it springs from its density of functions allow for 'zooming in' to observe and enlarge the tiny details, while also providing options of examining the larger context as a whole. The research has no intention to think that the patterns of social network structure are explainable exclusively with the state of visual impairment. The scope of future research should focus on the investigation of the multi-dimensional causes of these network structures.




Our local networks, our perception and evaluation of it severely influences our physical and emotional well-being (Auslander – Litwin 1987). Therefore, our well-being can be increased with the progress of our social network. The methods of ‘network-intervention’ gain more and more attention with the accumulation of knowledge regarding the characteristics, functions and operation of social networks (Auslander – Litwin 1987:310). The method and process of social support of visually impaired people’s network management (and its necessity) is still a task for future research. Ego-network analysis has a proven and acknowledged contribution to community-studies. It is as well suitable to be used in mass representative surveys in the future and would enable us to make generalizations about the characteristics of visually impaired people’s social networks (Hennig-Brandes-Pfeffer-Mengel 2012:53).

The present finding of these concepts leave many opportunities open for further research. This study serves the purposes of a clearer understanding and cognition of blind people’s social statuses, -roles, -constraints, possibilities and behavior in society. Future investigations may result in revealing and integrating further layers of visually impaired people’s networks and their structure, content and function. Social network research of visually impaired people may provide a new, complex basis of knowledge, which would facilitate a more holistic understanding of our world.

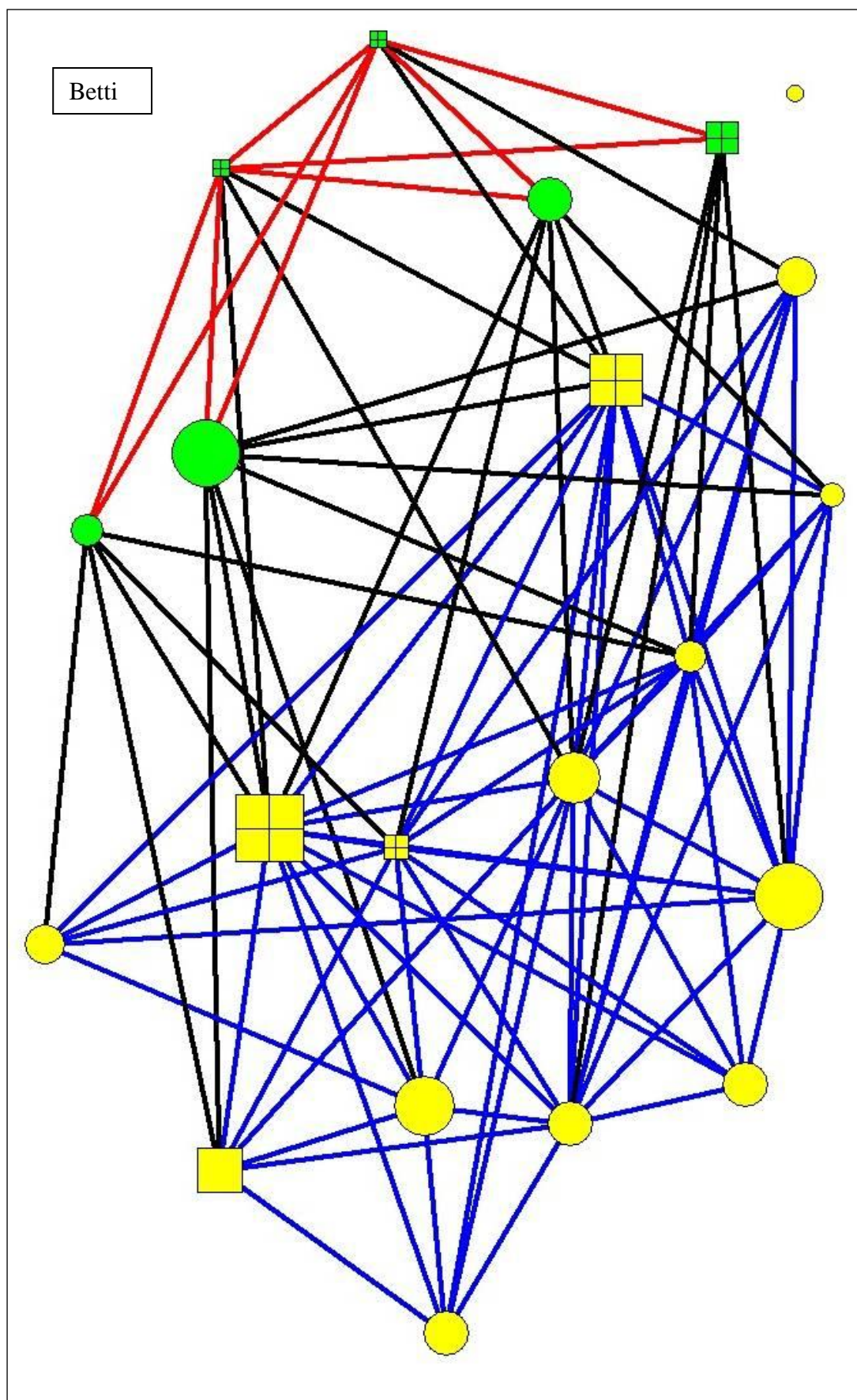
Appendices

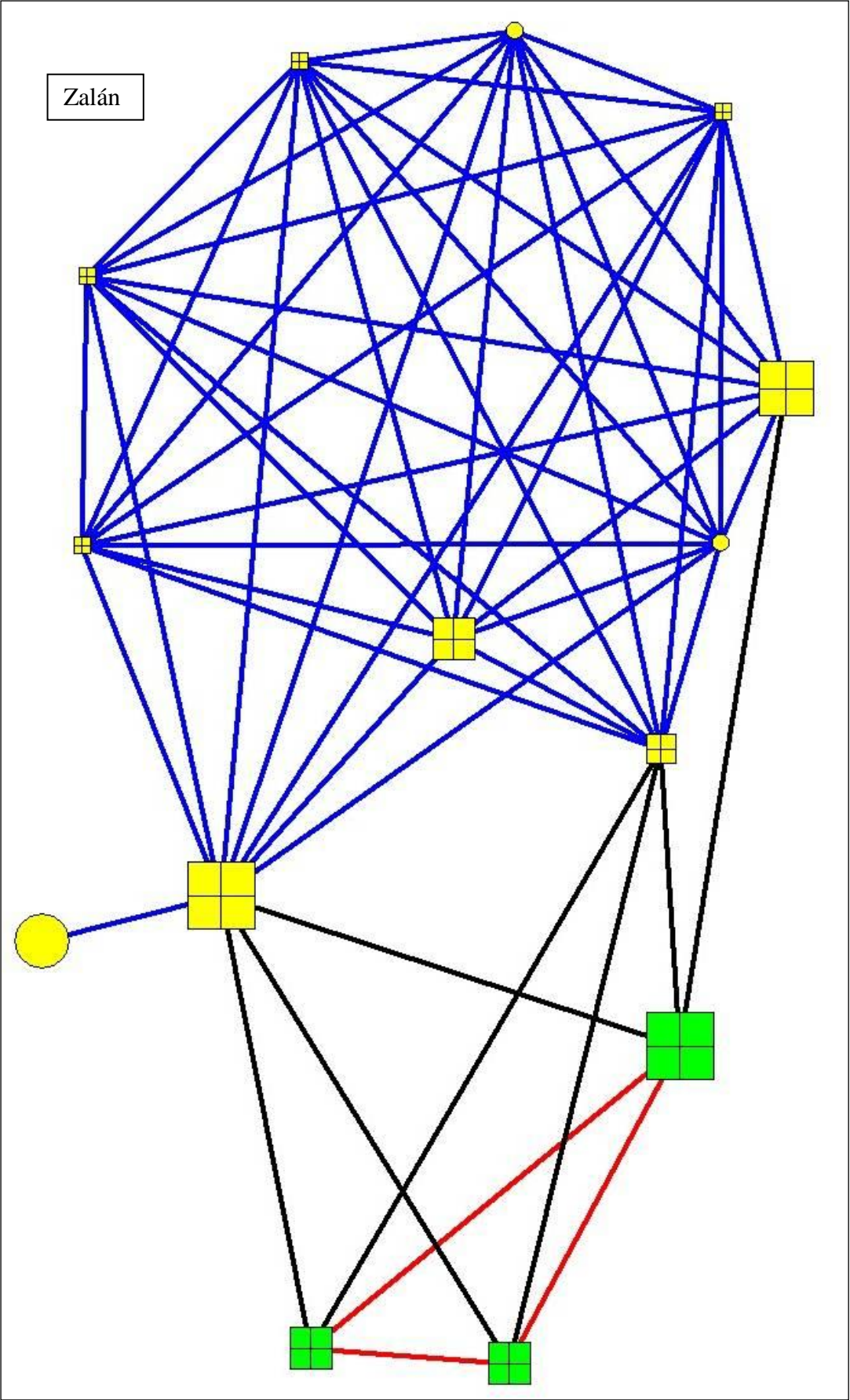
On the visualized relationship-webs, the informant (ego) is not indicated because it would disturb and harden the visual understanding of the image. By reading the graphs it should be taken as default that the ego is connected to every node (alter) in the net. The graphs below visualize 12 interviewees' close non-kin networks and the alters' connections with each other. The images show the alters' connectedness (a line between two nodes indicates that these two particular individuals mutually know¹³ each other), the alters' sex, if she/he is blind or not and finally the strength of the ego's commitment towards them on a scale of 10 degrees, where 10 indicates the strongest commitment.

To comprehend the graphs the following markings should be considered:

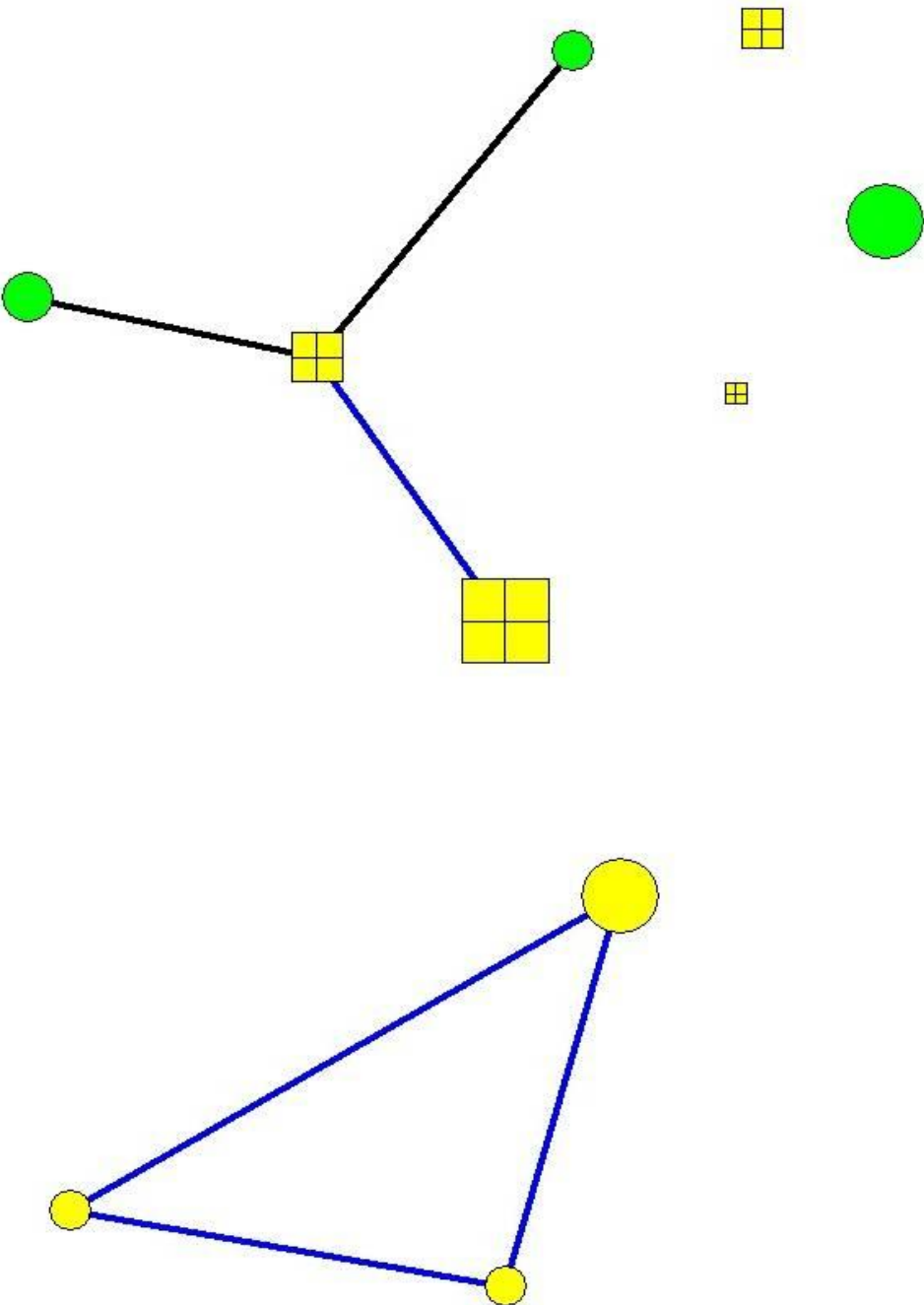
- **Green** nodes indicate those alters who are **visually impaired**
- **Yellow** nodes indicates the **non-visually impaired** friends
- Circles (○) sign the female and boxes (□) the male confidants
- The size of the nodes express the degree of ego's commitment to these people
- Blue lines () indicate the connection **between sighted people**.
- Red lines () indicate the connection **between blind acquaintances**.
- Black lines () indicate the connection **between blind and sighted friends**.

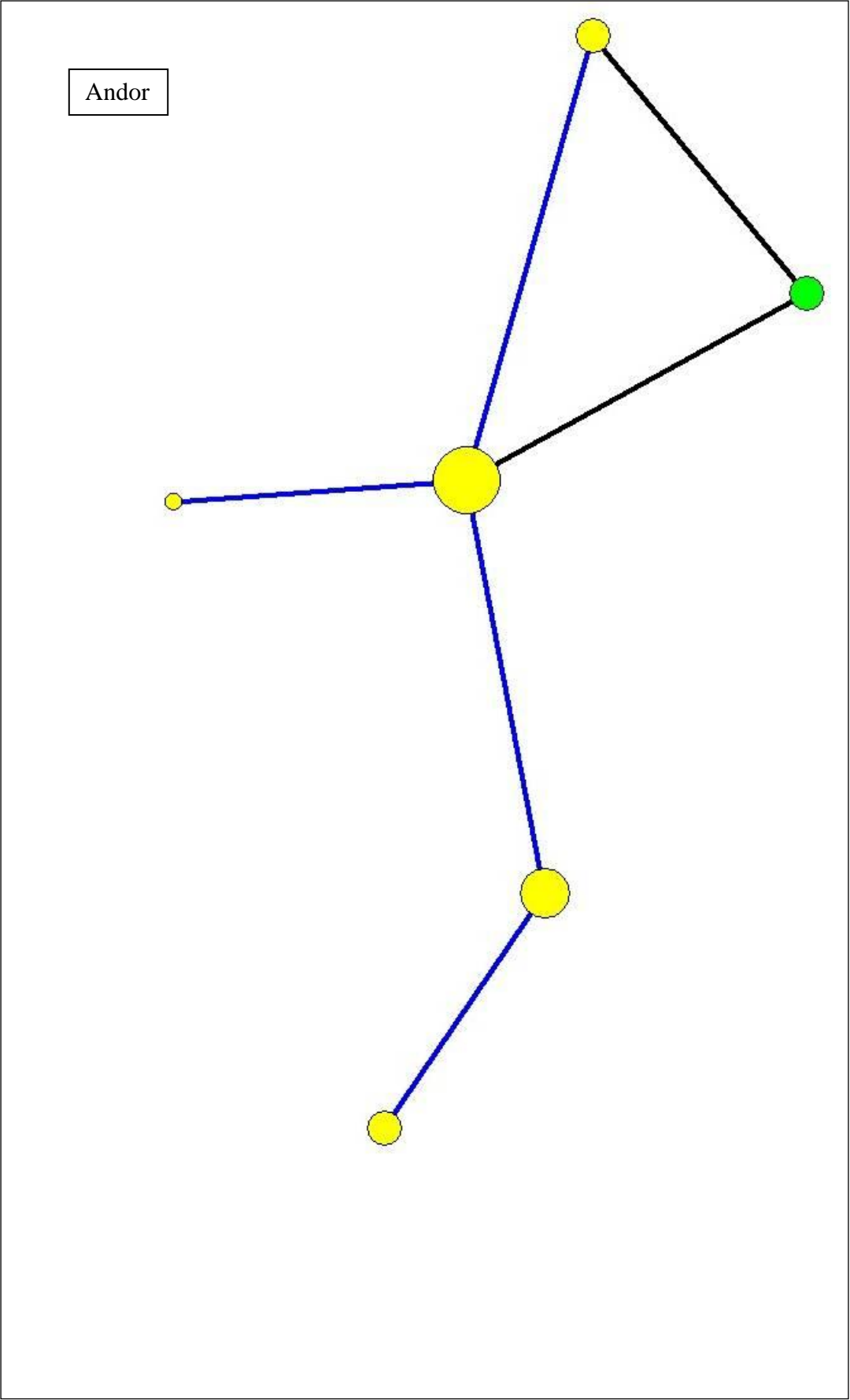
¹³ In this survey the connection between two alters is defined on the basis of the ego's narratives. If two alters 'know' each other it does not necessarily mean that a friendship tie bounds them. It means that, according to the ego's information, they personally met with each other and they know each other by first name.



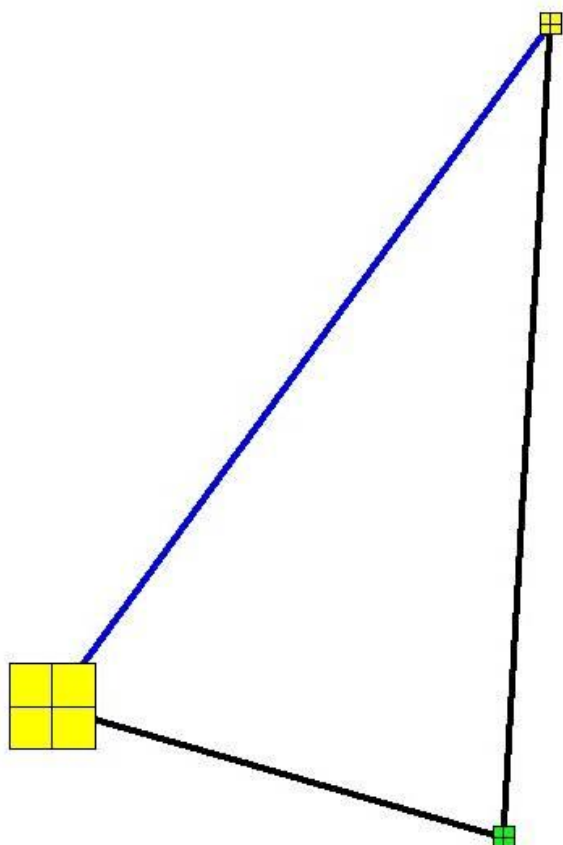


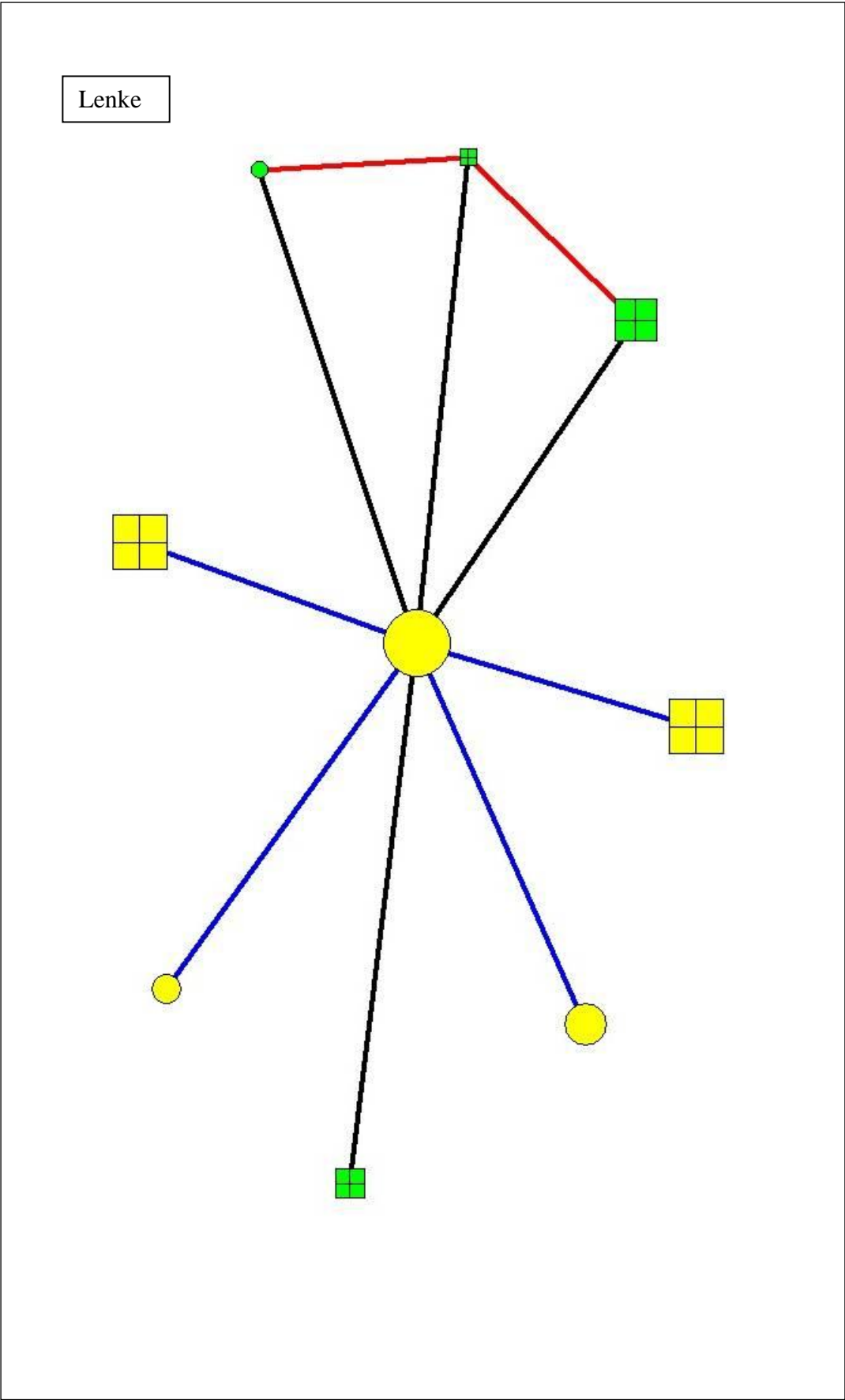
Laci

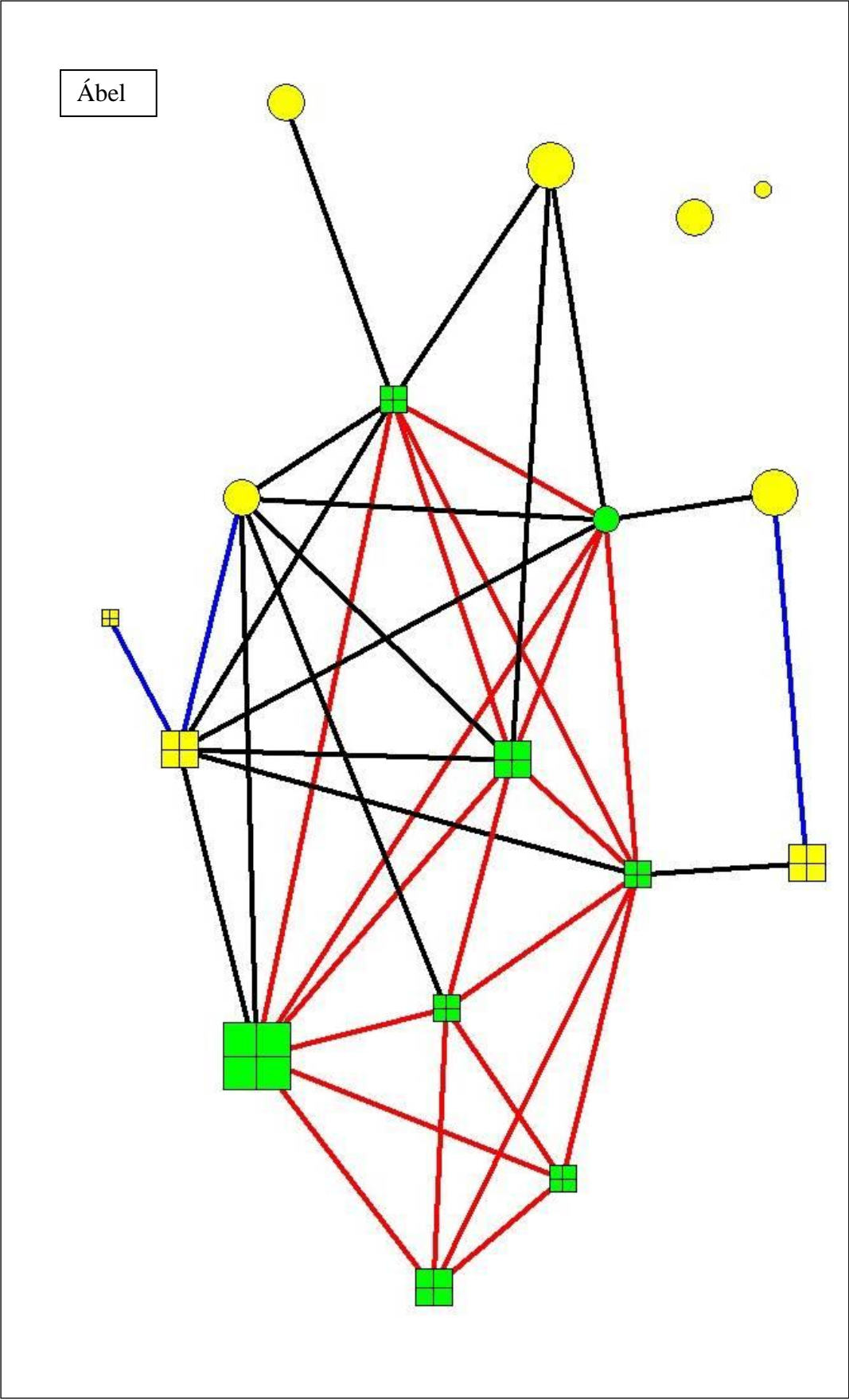


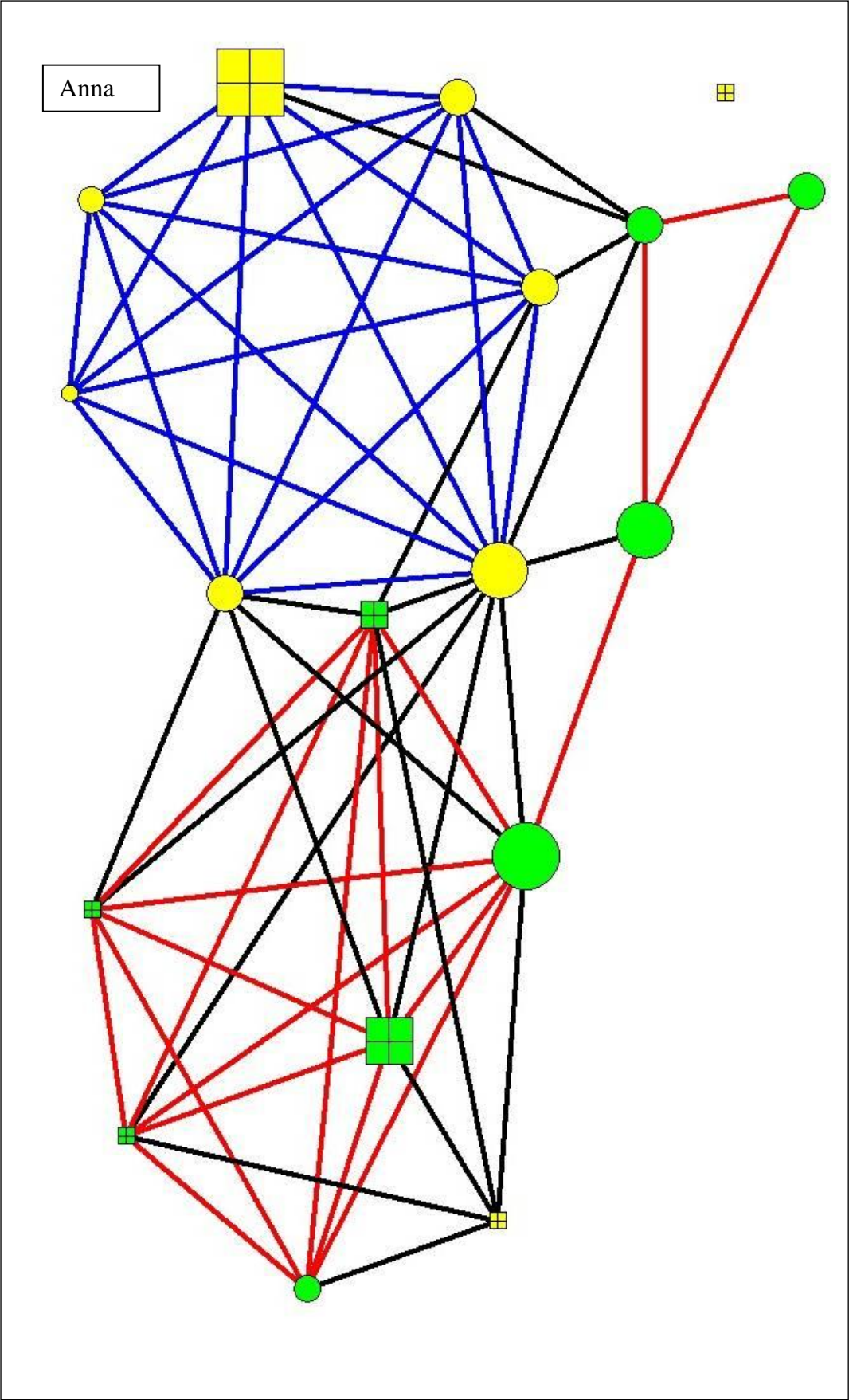


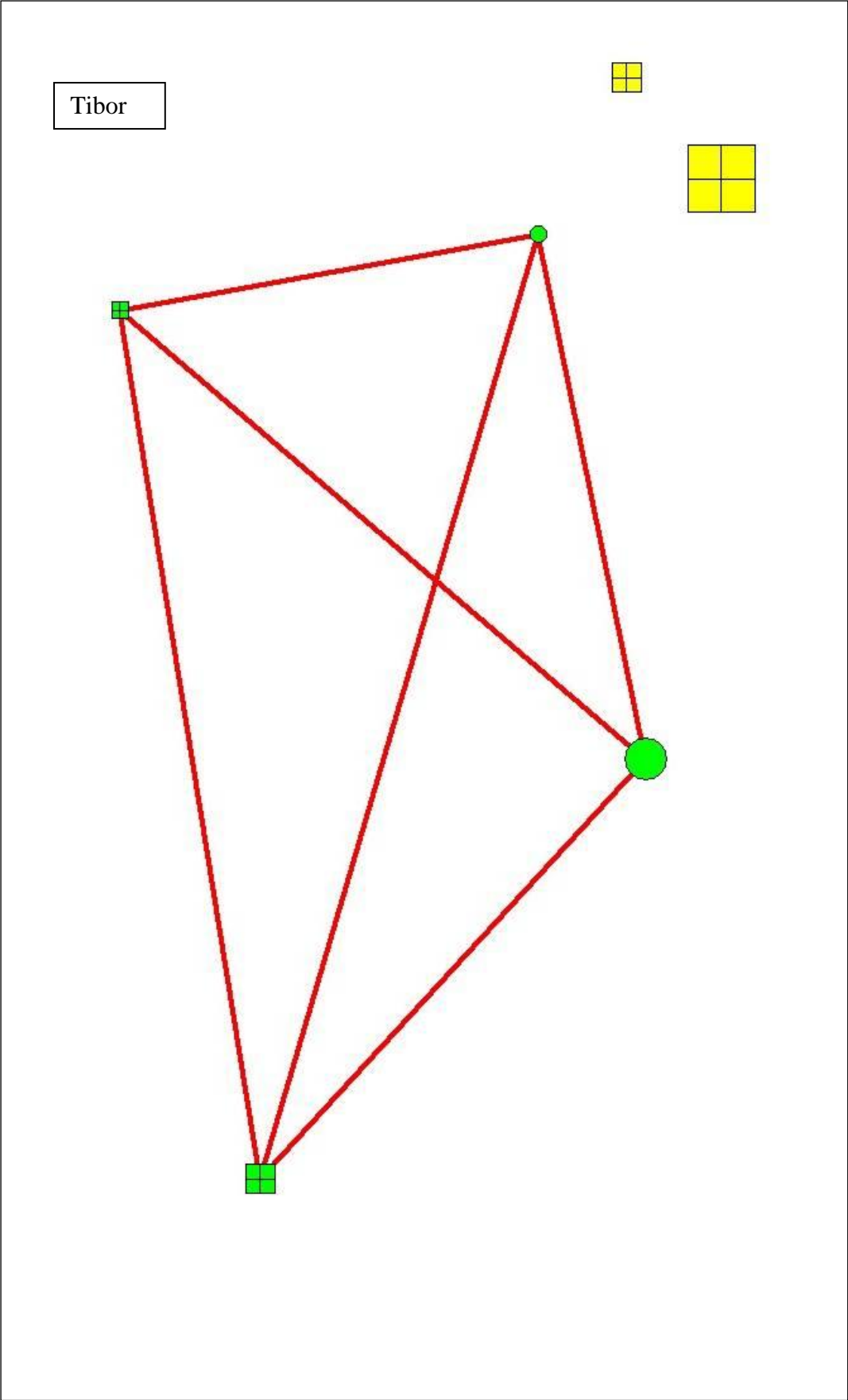
Rea

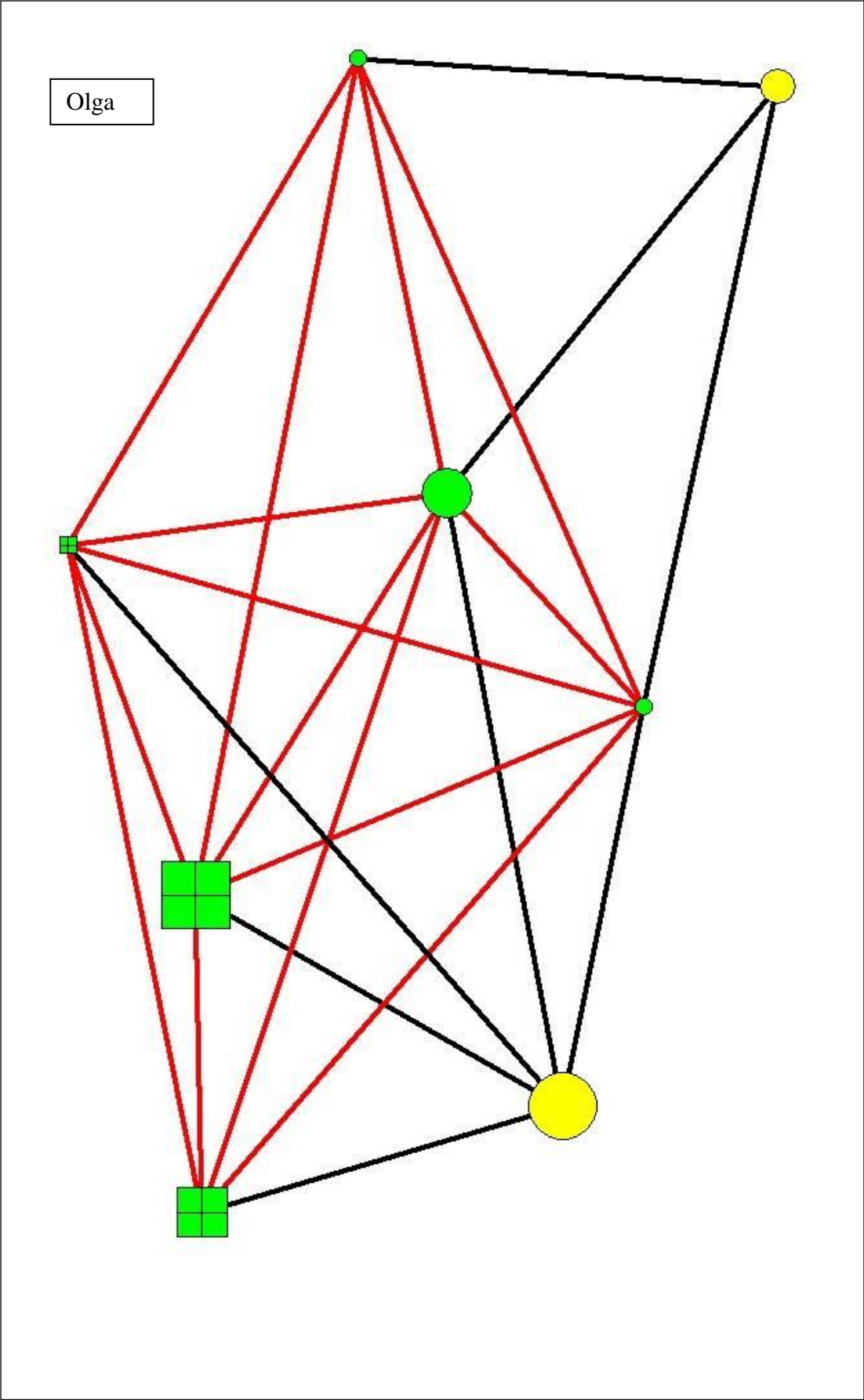


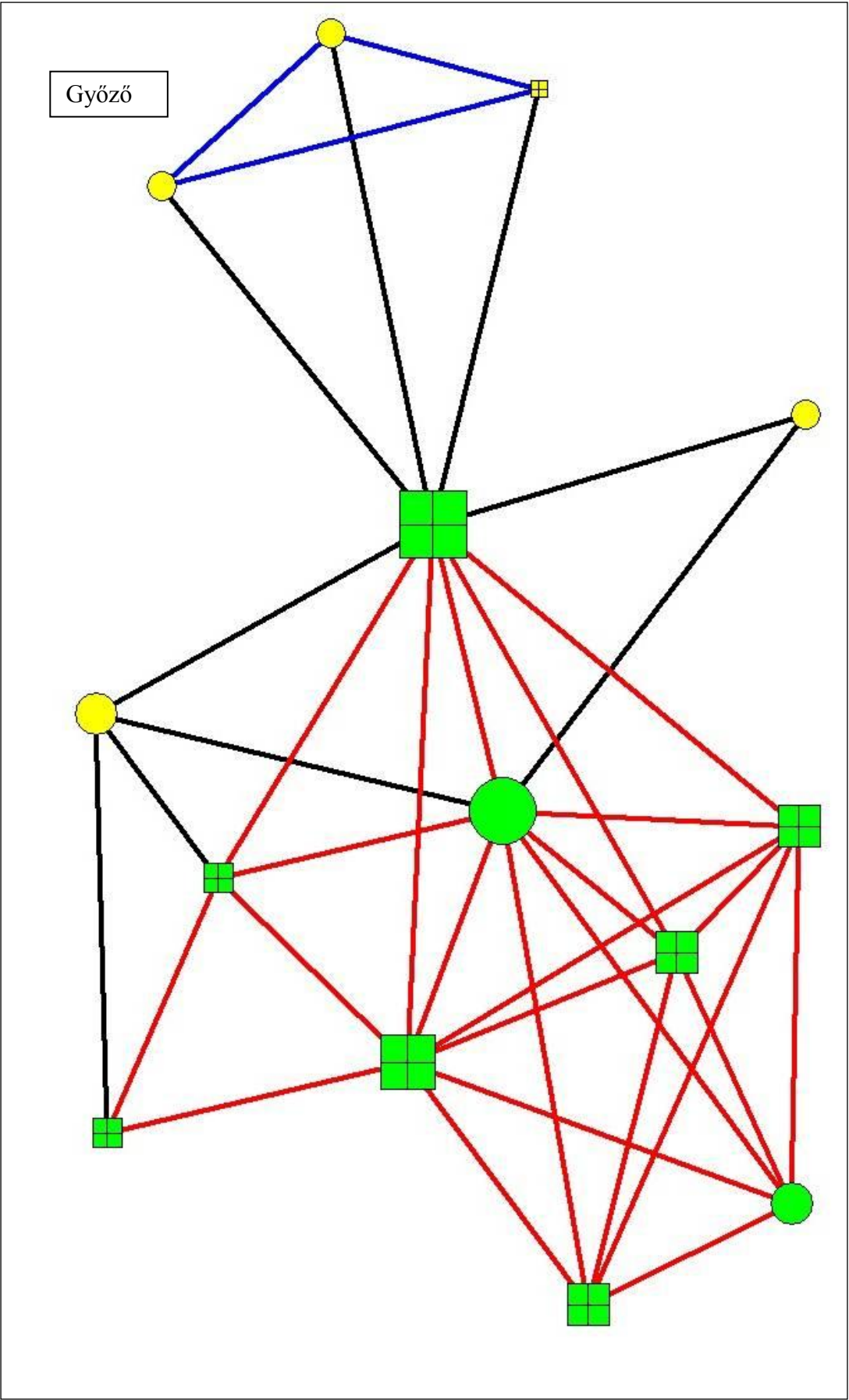


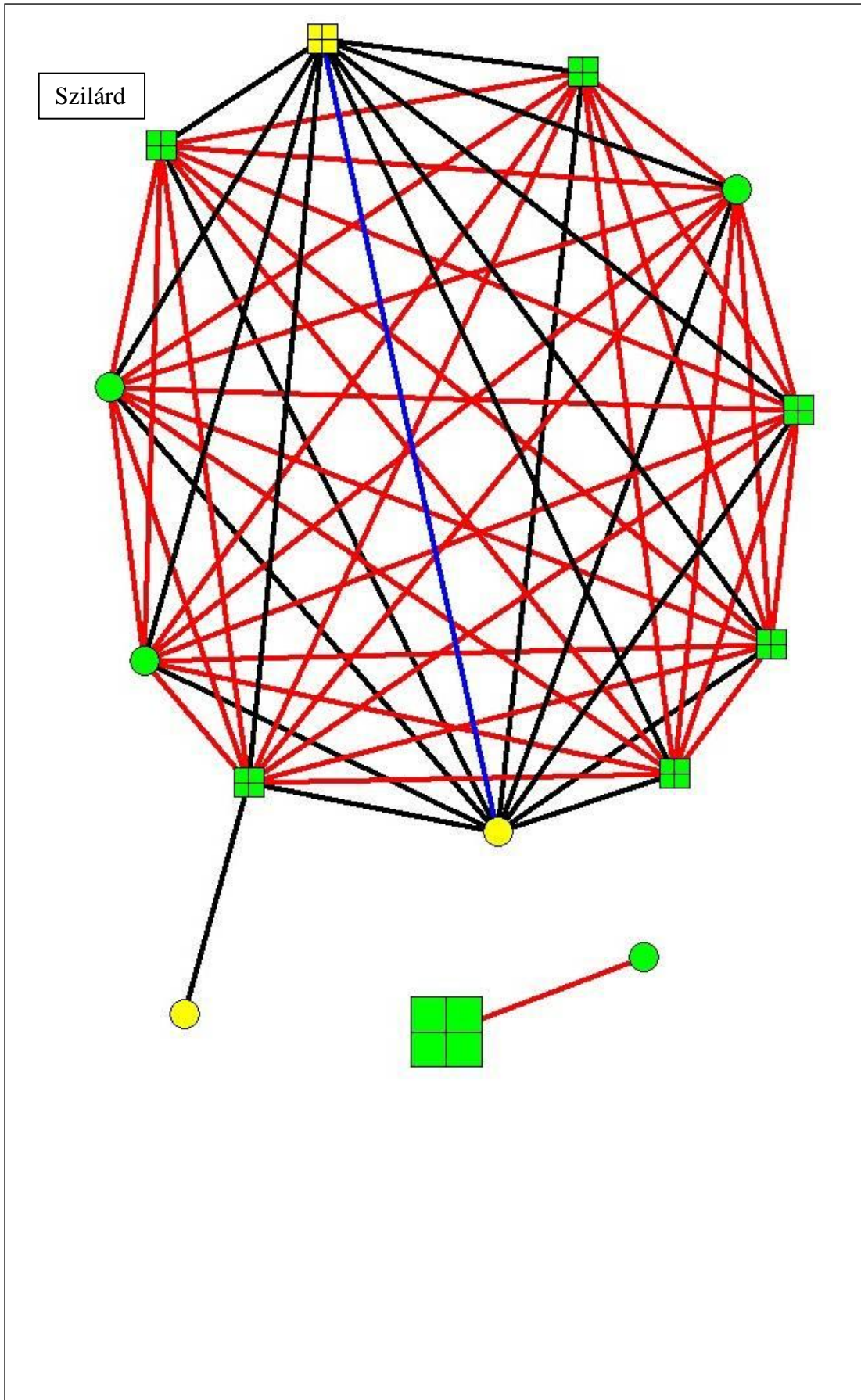












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