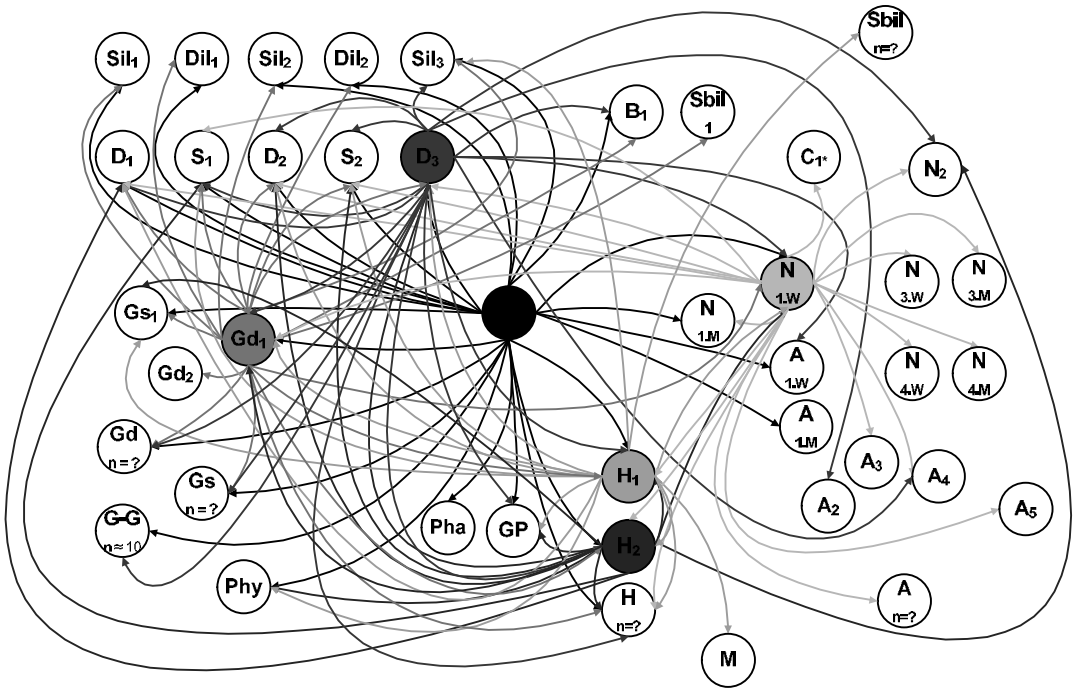


# Support Networks of the Elderly as Organisations



# **Support Networks of the Elderly as Organisations**

*An Exploratory Study on the Contribution of Organisation Theory to the Understanding and Design of Mixed Support Networks of Non-Institutionalised Elderly Persons*

A thesis submitted to the University of Twente for the degree of  
Ingenieur in the School of Management and Governance

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2010



We shall not cease from exploration  
And the end of all our exploring  
Will be to arrive where we started  
And know the place for the first time

From 'Four Quartets - Little Gidding'  
T.S. Eliot (1944)



# Acknowledgements

Finishing a thesis nearly inevitably means that you still need to write the acknowledgements. I find these last words quite hard to write, partly because the conventions are not as strict as for other academic writing. Personally, I tend to think that it would be desirable to position the acknowledgements at the end of the report. In that case readers might decide whether they did like the previous report before taking a look at the names of the people who contributed to the development of the research project. Additionally, an author might even be able to warn the readers not to proceed to the acknowledgements if they did not enjoy their read. Though an author has some freedom in writing the acknowledgements, it is common practice to place them before nearly everything else. Therefore, I would like to take this opportunity to say - or more precisely write - thank you to the people who contributed to the completion of the project reported in this thesis. Maybe it is needless to say, but I would like to stress that all mistakes and imperfections in this thesis are attributable to myself and myself only.

Firstly, I would like to express my gratitude to my supervisors. I thank Bert de Vroom for supporting this project at crucial moments. I think your comments regarding the informal organisation certainly helped to improve this thesis and provided a way out of some of the dilemmas faced at that stage. Eef Weenink generously shared the data he had collected. Moreover, I greatly benefitted from your knowledge of actual support networks and your down to earth suggestions for the application of the theoretical framework to the cases. I hope that the case studies remind you of the times that you held the interviews and that my analyses of your data provide additional insights. Toon Kerkhoff was the one who made me aware of the possibility to write my thesis on support networks of the non-institutionalised elderly. I consider it a privilege that you agreed to supervise my thesis despite that fact that you turned professor emeritus a while ago. Moreover, you proved to be a constant factor during my time at the University of Twente. Therefore, the thanks that are due to you exceed those for merely supervising this thesis. Especially the period that I was attached to you as a teaching assistant and the Austrian internship you initiated, did contribute more to my education than most class-room based subjects and were influential for the development of my research interests. In German speaking countries, people use the terms 'Magistervater' and 'Doktorvater' to refer to their primary thesis or dissertation supervisors.<sup>1</sup> It is to be regretted that a Dutch equivalent at the Ir./Drs./MSc. level is lacking, because I think that these terms rather nicely indicate that a supervisor might contribute to someone's thinking in a way that has a long-lasting impact. Additionally, it was good to know that I could always rely on you for some - sometimes even nearly overnight - 'letter writing' to get me somewhere or to try get my plans funded.

Secondly, I would like to thank the people who participated in the interviews which I used as data source for this thesis. Although I did not meet them personally, this research project would not have been possible without the information they provided. Words of gratitude are also due to Marianne Goorhuis of the 'Eigen Kracht Centrale' in Zwolle. Though you might not recognise much of what we discussed during our meeting in this thesis directly, the opinions you expressed and the way the 'Eigen Kracht Conferenties'<sup>2</sup> are organised undoubtedly shaped my thinking on the possibility to design mixed support networks of the non-institutionalised elderly as if it were organisations.

Finally, this thesis marks the end of the period of my life as student in Enschede. Therefore, I would like to express my gratitude to all people who made my time inside and - especially - outside the lecture-theatres enjoyable. Since the list of names of people and organisations in this category grew rather long, I will not mention any names. The risk of omitting somebody is simply too high... Nevertheless, I would like to make one exception, because I want to thank my family for continuing practical and moral support and their visits during my studies in Twente, Graz and Manchester.

Ellen van Reuler  
Enschede, Driebergen and Manchester, 2009-2010

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<sup>1</sup> Since the implementation of the Bachelor Master system, the term 'Mastervater' seems to become in use.

<sup>2</sup> The equivalent of Eigen Kracht Conferenties in English are Family Group Conferences. See van Pagée (2003) for an introduction to this phenomenon.



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# 1

## Rationale of the Research Project

### 1.1 Introduction

The shortest summary of the aim of the research reported in this thesis is that it explores whether the models, which are used in Industrial Engineering & Management (IE&M)<sup>3</sup> to design organisations, are also of value in the case of elderly who live in their own home, but are supported by other people to compensate for illnesses or disabilities. I can recommend continuing reading this chapter to those interested in the backgrounds and relevance of this research topic. Others might wish to proceed to Chapter 2, in which the research design is elaborated.

This introductory chapter provides the rationale for this research project. The chapter commences with a short discussion of public attention for the care of the elderly and the governmental policy in this field. In Section 1.3 is dealt with the care for the non-institutionalised elderly. Categories of people involved in care for the non-institutionalised elderly and their cooperation are the first two subsection of the section. These discussions result in the identification of several perceived problems in Subsection 1.3.3. The subsequent section introduces the idea that solutions to these problems might be generated if we conceptualise the networks of caregivers as organisations and apply the 'toolbox' used for organisation design. A concise literature review on care for the non-institutionalised elderly is included in Section 1.5. Since this review shows that the care giving networks of non-institutionalised elderly have not yet been studied as organisations, the idea of conceptualising these groups of people as organisations is elaborated further in Section 1.6. The chapter closes with an outlook on the remaining content of the thesis (Section 1.7).

### 1.2 Public Attention for Care for the Elderly

#### 1.2.1 Introduction

Care for the elderly - either living in their own homes or in institutions - is a topic that attracts a significant amount of public attention. Internationally, several western countries and international organisations, such as the European Union, have published action plans to support healthy ageing (Gezondheidsraad (1990)). The Dutch government took also several initiatives during the last few years. These initiatives range from the implementation of the Social Support Act<sup>4</sup> to policy programmes to enable people to continue living at their own homes by paying attention to neighbourhoods (Minister voor Wonen Wijken en Integratie & Staatssecretaris van Volksgezondheid Welzijn en Sport, 2007) and from the establishment of a research Institute for Healthy and Successful Ageing<sup>5</sup> (Gezondheidsraad, 2009) to plans for the prevention of depression among the elderly (Staatssecretaris van VWS, 2007a). Another example is the initiation of a National Programme for Elderly Care<sup>6</sup>

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<sup>3</sup> The term Industrial Engineering & Management (IE&M) is used here to refer to what is called 'Technische Bedrijfskunde' in the Netherlands. This is actually the study programme for which this thesis was written. Anglophone readers, however, should be aware that the Health Care Technology & Management track of the IE&M programme at the University of Twente as was delivered to the students who entered in 2001, might be more similar to what they refer to as Health Care Management or 'Business Administration for the Health Care Sector' than to what they call IE&M. Van Gils (1991), for example, indicates that 'Technische Bedrijfskunde' as known in the Netherlands is hardly found in the international circuit. Florusse (1991) provides an example of the discussion about the distinctions between 'Technische Bedrijfskunde' compared to 'Bedrijfskunde' (generally translated as Business Administration) in the Netherlands.

The term IE&M will be used in this thesis at all places where I wish to refer to the body of knowledge I got to know through this study programme.

<sup>4</sup> In Dutch: Wet Maatschappelijke Ondersteuning (WMO).

<sup>5</sup> In Dutch: Topinstituut Gezond en Succesvol Ouder worden (Ti-GO).

<sup>6</sup> In Dutch: Nationaal Programma Ouderenzorg.

by the 'Ministerie van Volksgezondheid, Welzijn en Sport' (VWS)<sup>7</sup> in 2008. This programme is planned to run until 2011 and has a budget of € 80.9 million at its disposal. Elderly with complex medical, nursing and social problems are the target group of this programme. The programme consists of research projects and the development of regional network organisations to support the development of a comprehensive care offer adjusted to the needs of individual elderly persons (ZonMw, 2008a; ZonMw, 2008b).

### 1.2.2 Demographic Developments

The Ministry of VWS frequently mentions ageing as one of the major challenges for the future in its policy documents (e.g. Ministerie van Volksgezondheid Welzijn en Sport, 2007; Staatssecretaris van VWS, 2007a; Ministerie van Volksgezondheid Welzijn en Sport, 2008). Indeed, all predictions point in the direction of an ageing population in the Netherlands during the next decades. According to a (middle scenario) prognosis by Statistics Netherlands (CBS), the number of people over 65 year will increase from 2.29 million in 2005 to 3.82 million in 2030. More than this absolute growth of over 50%, it is the share of the people over 65 in the population that is considered reason for concern. This measure will rise from 14.0% in 2005 to 22.3% in 2030. From 2030 the absolute and relative number of elderly people will decrease slightly, though, the share of very olds in this group will increase (Gezondheidsraad, 2005). The increase of the absolute number of elderly persons is caused by rises in the life expectancy of men as well as women. While the life expectancy for men rose with 5.8 years since 1950 to equal 76.2 years in 2003, women gained 8.3 years in the same period to achieve a life expectancy of 80.9 years in 2003 (De Hollander, Hoeymans, Melse, Van Oers & Polder, 2006).

Ageing is not only related to a higher mortality, but also to higher morbidity levels. The healthy life expectancy, measuring 69.9 years for men and 69.8 years for women in 2003, was significantly below the total life expectancy as reported in the foregoing paragraph (De Hollander et al., 2006, p. 49-51). The elderly of over 65 suffer, for example, relatively heavily from specific diseases, such as coronary heart diseases, stroke, COPD, diabetes, lung cancer and dementia (measured in DALYs<sup>8</sup>). (De Hollander et al., 2006). Moreover, the elderly have to cope with complex health problems, the so-called 'geriatric giants' - which - though in general not lethal and therefore not expressed a major problems when measured in DALYs - has a seriously impact on their daily lives. The most common geriatric giants are forgetfulness, dementia, deafness and sight impairments, incontinence, and mobility disorders (Ministerie van VWS, 2005). Frailty is a term which refers to such a reduction in the physical and mental capabilities of an elderly person that minor incidents might result in a combination of symptoms and a reduction of the ability to live independently. This group of elderly is particularly prone to needing various forms of support. Predictions suggest that this group of elderly will rise from circa 247,000 in 2006 to 415,000 in 2025 and 505,000 in 2040. This implies that the percentage of frail elderly as percentage of all people over 65 will increase from 11.2% to 12.0% (Staatssecretaris van VWS, 2007b).

These data on the ageing of the population imply that the demand for various forms of care will rise in the future. Data over the period 1985-2005 have shown that 40% of the total real growth of 'Algemene Wet Bijzondere Ziektekosten' (AWBZ)<sup>9</sup> costs, which were as high as 92% over this period, was caused by the ageing of the population. Ageing of the population was actually identified as the only factor contributing to the volume growth of AWBZ care (Eggink, Pommer & Woittiez, 2008). If we take into account that circa 363,000 persons received some form of AWBZ funded extramural care<sup>10</sup> in 2005, and that this involved expenditures of nearly 3.6 billion euro (Eggink et al., 2008), we can see that significant financial resources are used for care for the elderly. Questions related to the affordability and availability of this type of care have been raised at various points in time.

### 1.2.3 Extramuralisation and Informal Care as Governmental Policy

Responsibility for elderly care became a major issue on the political agenda in the early 1980s when the Lubbers I cabinet took office. After the Second World War, a large system of publicly funded provisions for the elderly had emerged. By the early 1980s, budgetary constraints due to a financial crisis made cost cuts necessary in nearly all

<sup>7</sup> In English: Ministry of Health, Welfare, and Sport.

<sup>8</sup> DALY is and abbreviation for Disability Adjusted Life Year and refers to the years lost by death and loss of quality of life due to a disease.

<sup>9</sup> In English: Exceptional Medical Expenses Act. This law establishes a social insurance that, originally, aims cover the whole population for unforeseeable medical costs.

<sup>10</sup> In Dutch: Verpleging en Verzorging. This is a specified type of provision under the AWBZ act.

branches of the public sector. This issue was experienced as extraordinary pressing for care for the elderly, because estimations of the future composition of the population became available. As a response the cabinet opted for a shift from intramural to extramural care in the health care sector in general and the geriatric sector in particular. This move towards an increasing responsibility of individuals for the wellbeing of themselves and their relatives, implied a more prominent place for informal care (Minister en Staatssecretaris van WVC, Staatssecretaris van SZW & Staatssecretaris van VROM, 1983).<sup>11</sup> In other words, formal care became an adjunct to informal care and was only used in cases where informal and self-care failed to provide sufficient care, while in earlier times formal, collectively funded care was more common (Ministerie van WVC, 1983a; Ministerie van WVC, 1983b). In addition to cost containment, the move towards extramural care was also justified by the fact that independent living had been shown to contribute to mental, social and physical functioning of the elderly (Staatssecretarissen van CRMW; VRO; SZW & Minister van VoMil, 1982; Minister en Staatssecretaris van WVC et al., 1983) and that outcomes of care - such as the speed of recovery after surgery - was quicker at home than in an institution (Tweede Kamer der Staten-Generaal, 1997).

From the early 1980s onwards, governmental policy continues to aim at extramuralisation of care. The position of informal care in the spectrum of elderly care, however, shifts from a relatively voluntary and supplementary position to more obligatory provision. The adage became that if you are able to provide some care you should provide that care (for example, Tweede Kamer der Staten-Generaal, 1997). An investigation of the informal care available, for example, became part of the standard intake procedure during the 1990s (Van der Lyke, 2000).

During recent years, this trend towards obligatory provision of informal care continued. In 2007, the Secretary of State wrote that formal care is an addition to informal care and only available for those who cannot be expected to take this responsibility themselves. This toughness was justified by ageing of the population as well as the reductions in the availability of people who are able to provide formal care (Staatssecretaris van VWS, 2007b). Informal care was still seen as the solution to make care demands met. A difference with the previous decades, however, was that more concrete measures were taken to support the provision of informal care. The publication of a policy memorandum by a committee of the House of Representatives named 'Elderly Policy in the Perspective of an Ageing Population'<sup>12</sup> (Tweede Kamer der Staten-Generaal, 2005; Ministerie van VWS, 2005) was an impetus for these developments.

### 1.3 Care for the Non-Institutionalised Elderly

#### 1.3.1 Categories of Carers for the Non-Institutionalised Elderly

The governmental policy aiming at extramuralisation of care has led to a shift from elderly living in homes for the elderly and nursing homes to elderly who live in their own houses. If these people require care to enable them to continue living independently, they do often receive care from professional caregivers as well as people who were not educated to provide care. Professional caregivers can also be named formal carers - just to distinguish them from the informal carers. Examples of these formal carers are general physicians and home care service providers. The latter category includes nursing related tasks as well as household support. These services can be provided by commercial as well as non-profit organisations.<sup>13</sup>

Informal carers are a second category of people who support non-institutionalised elderly. Since this group is less widely known than the formal caregivers, some background data on informal carers and their tasks are presented in this subsection. Informal carers are generally relatives, friends or neighbours, who help an elderly person with various daily tasks. This care is not provided professionally or as part of organised voluntary work, but ensues from a previously existing relationship between the elderly person who needs support and the informal carer. In the case of the elderly, informal care is often given over sustained periods, but it might also

---

<sup>11</sup> Informal care can be defined as all care provided as a result of a social commitment to the person supported (for example, Van der Lyke, 2000). Several synonyms are used in Dutch: 'mantelzorg', 'primaire verzorgers' or 'centrale verzorgers'. In this thesis, I will use informal care throughout, because this term is most widely spread in the international literature. Formal carers can be defined as those who provide care in the context of a professional relationship, which is generally related to being paid for carrying out the task. The boundaries between formal and informal care are fluid and open, but in most instances classification of the people involved along these lines is possible.

<sup>12</sup> In Dutch: 'Ouderenbeleid in het perspectief van de vergrijzing'.

<sup>13</sup> The classification followed in this thesis does not differ from those described in the literature. See for example Qureshi & Walker (1989, p.20), who distinguish between the statutory, voluntary, informal, and commercial sectors of welfare services.

aim to compensate for temporary incapability to perform certain daily tasks of the recipient. The most recent data on this category of carers in the Netherlands cover the year 2007. Unfortunately, these data do not discern among receivers of informal care according to their age. Therefore, only a general view of providers and recipients of informal care can be sketched in these paragraphs.

Research has shown that approximately 1.7 million persons provided informal care in 2007 (De Boer, Broese van Groenou & Timmermans, 2009a).<sup>14</sup> Most informal carers provide care over many years. The average duration, for example, was found to be 5.1 years. Informal care can be very intensive. While people caring for their parents or parents-in-law - roughly 40% of the informal carers - spend at average 16 hours per week to this support, people caring for their partners devote at average 45 hours per week to this care. Giving informal care to other persons, such as brothers, aunts, and friends, is at average less time consuming, because it takes at average ten hours per week (De Boer et al., 2009a). Not only on a personal level, but also at the level of care provision in general, informal care plays a significant role. Measured in hours of care provided, it was estimated that these informal carers deliver no less than approximately 75 to 80% of all care hours (Gezondheidsraad, 2005; Quist & Swarte, 2006).

The majority of informal carers is between 45 and 65 years old and a women (De Boer et al., 2009a). However, this image has been shown to be a bit overly stereotypical. Recent research has shown that gender inequalities in this field are smaller than generally assumed. Moreover, it was found that the chance to be an informal carer, is more strongly determined by the chance to know somebody who is in need for care than by the personal characteristics of the informal carer (De Boer & Keuzenkamp, 2009; Kooiker & de Boer, 2008). Tasks generally carried out by informal carers are providing emotional support and assistance and supervising the care receiver. Additionally, more than a quarter of the informal carers also supply personal care or nursing care. A clear majority of these people regard providing informal care as a natural thing to do and often link this motivation to love and affection for the beneficiary of the care. However, also more pragmatic reasons, such as preventing the person supported to move into institutional care, play a role for nearly half of the providers of informal care (De Boer et al., 2009a).

The recipients of informal care are most frequently women who are over 65 years of age. Most receivers of informal care suffer from serious physical impairments and circa 40% of them is at least regularly bedridden (De Boer et al., 2009a). Regularly, a person receiving informal care is cared for by multiple informal carers. In 2000, at average 1.6 informal carers took care of one indigent person (Quist & Swarte, 2006). In approximately 25% of the cases, people receive informal care from somebody who is a member of the same household (De Boer et al., 2009a).

In addition to informal carers, we might also encounter community-based voluntary carers providing care for the elderly. These people lack a previous relation to the elderly person, but offer their support through a non-profit organisation. The aims of this type of support might be various: some volunteers replace the informal carer for some time, while others organise holidays for disabled elderly persons. Although this type of support seems to be widely available, no estimation of the total amount of support provided by voluntary community-based care organisations is available (Devilee, 2008).

### 1.3.2 Cooperation between Carers for the Non-Institutionalised Elderly

In the previous subsection, the various types of providers of care for the non-institutionalised elderly have been discussed. In many situations, the care for the elderly person will be too intensive or complex to be provided by one person. In this subsection, some patterns of cooperation between the people who care for non-institutionalised elderly persons are presented.

Which combination of caregivers operates in a specific situation is to a high extent determined by the care situation. People caring for their partners are relatively often the only carer, while is relatively common for children who take care of their parents or parents-in-law to share this responsibility with other caregivers. Moreover, the degree of complexity of the care situation is of importance. A higher level of complexity generally implies the need to share the burden with others (De Boer et al., 2009a).

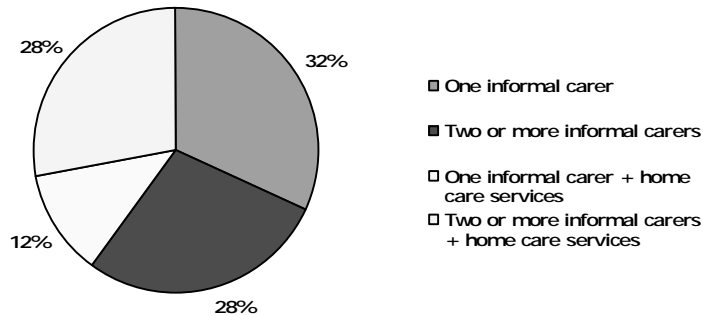
Different patterns in sharing care responsibilities with other informal carers can be recognised. On the one hand, people who care for their partners do relatively infrequently share the care tasks with other informal carers. If other informal carers are collaborated with, they generally devote just a few hours to this activity. On the other hand, informal carers of parents and parents-in-law tend to share the care responsibility with other

---

<sup>14</sup> Estimations, however, differ significantly between various research reports. This can mainly be explained by the definitions of informal care used. Compare, for example, to, De Boer et al. (2009a); Gezondheidsraad (2005); Quist & Swarte (2006).

members of the family, with siblings being the obvious partners for sharing. In these situations, the informal carers tend to try to make an equal effort (De Boer et al., 2009a).

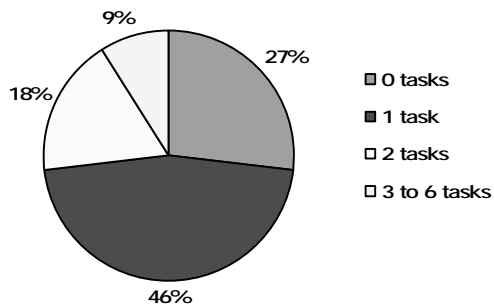
Research among informal carers made clear that approximately a third of the informal carers are the only persons providing care for a specific person. A slightly lower portion of the informal carers - measured at 28% - shares the informal care responsibility with other informal carers. Nearly one out of ten informal carers does only have formal care in addition to the care they provide. The remaining 28% of the informal carers is involved in what the researchers call a mixed network. Such networks combine the availability of other informal carers and formal home care services (De Boer et al., 2009a).<sup>15</sup> Illustration 1.1 depicts these data graphically.



**Illustration 1.1 - Carers involved in situations where informal care is available**  
Based on De Boer et al. (2009a).<sup>16</sup>

As we can see in the previous graph, in approximately two thirds of the situations, informal carers cooperate with other informal carers or home care services. Although the inclusion of professional carers might result in some kind of task division between formal and informal caregivers, task divisions among informal carers were hardly found in most situations. As a consequence of this overlap, a need for deliberation on the provision of the care arises. The majority of the informal carers are satisfied with the cooperation with other informal carers. Nevertheless, 17% of the informal carers report discord with other informal carers on the informal care to be provided. Generally, this disagreement is found among siblings who care for their parents (De Boer et al., 2009a).

As mentioned before, involvement of one or more informal carers as well as home care services results generally in some kind of task division, which need not be surprising because of the governmental policy to reserve home care services for those people for whom care is too intensive or complicated to expect informal carers to be able to provide this care (see Section 1.2.3). This is shown in Illustration 1.2, which represents the number of tasks shared between informal carers and home care services. Only in slightly over a quarter of the cases informal carers and professionals from the home care services share two or more tasks.



**Illustration 1.2 - Number of tasks shared with home care services by informal carers**  
Based on data presented by De Boer, Broese van Groenou & Timmermans (2009b).

<sup>15</sup> As for the data presented in the previous subsection, the data on informal carers and sharing care are based on informal carers in general, because of the availability of data. The same holds for the data on cooperation with home care services.

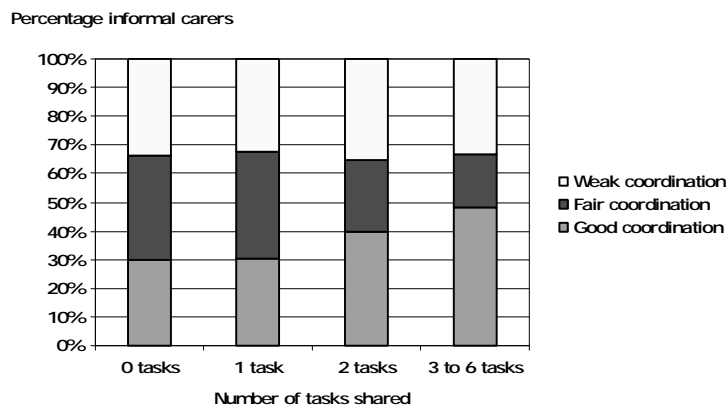
<sup>16</sup> These data were compiled from the perspective of the perspective of informal carers. An unfortunate consequence of this perspective is that we lack insight in the number of cases in which only professionals from home care services are involved, because of an absence of informal care. Given the focus of this research project on support networks composed of various actors, this lack of data is not considered problematic.



### 1.3.3 Experienced and Expected Problems

As we have seen in the previous sections, care for the non-institutionalised elderly is shared by several providers of care, who cooperate in various arrangements. Unfortunately, research findings suggest that the care for these elderly persons is not free from problems. In this subsection, some of these difficulties are discussed. It should be noted that the purpose of this section is not to give a full overview of all problems in these care situations. Problems related to, for example, the system of home care services are not included.

As mentioned before, if people share the responsibility to care for an elderly person, a need for coordination arises. In Illustration 1.3, an overview is given of the satisfaction of informal carers with the coordination between themselves and home care services. As we can see in this picture, it is the relatively limited group of informal carers sharing three or more tasks with home care service personnel (see Illustration 1.2 in Section 1.3.2) who assess the coordination between themselves and the formal carers most favourably. Compared to the people sharing a more limited number of tasks, it is the reduction of fair coordination in favour of good coordination that causes this difference, because the percentage of informal carers labelling the coordination as weak remains relatively constant over the categories at between 30% and 40% of the informal carers. In this context, we might find it notable that even those informal carers who do not share tasks with providers of home care services judge the coordination of the care as weak within this range. If we do also take into account the percentage of informal carers who assesses the coordination as fair, we can conclude that for two out of three informal carers the coordination of their tasks with home care services is an issue.<sup>17</sup>



**Illustration 1.3 - Satisfaction of informal carers with the coordination between themselves and home care services according to the number of tasks shared**

Based on data presented by De Boer et al. (2009b).

In contrast to the cooperation between informal carers and home care services, the collaboration with other informal carers is generally satisfactory. Informal carers report that they are happy with the care provided by others and that they receive a great deal of support and appreciation. Nevertheless, 17% of the respondents had disagreements with other informal carers involved. Those disagreements occurred relatively often between children who are providing care for a parent or parent-in-law, and occur mainly between informal carers who perform the same tasks (De Boer et al., 2009a).

Dilemmas regarding task division and coordination have also been found in research among voluntary carers. They were, for example, unsure about providing personal care such as providing help with taking a shower or administering medicines. In general, these tasks are left to formal carers, but if only a small number of these tasks need to be done, some volunteers thought it unnecessary to call in formal carers for these tasks (Devilee, 2008).

Although almost three-quarters of the informal carers reports having (reasonably) favourable experiences - such as an intrinsic sense of fulfilment or learning new skills - with providing informal care, giving informal care can burden informal carers. Nearly half of the informal carers reports experiencing the care provision as a moderate to severe burden. Moreover, 17% of the informal carers have difficulty in combining the informal care tasks with a job and family obligations. Whether people report experiencing their informal care

<sup>17</sup> The number of 66.4% is the mean of the percentage of informal carers judging the coordination between themselves and the home care services as weak or fair corrected for the relative size of the groups of informal carers (as represented in Illustration 2). This figure was calculated using data presented by De Boer et al. (2009b).

tasks as a burden does not significantly correlate with their judgment of their experiences as favourable or unfavourable. A positive relation was, however, found between the experience of the informal care as a burden and to the intensity and the complexity of the informal care given (De Boer et al., 2009a). Also people who provide informal care for independently living parents or parents-in-law experience this care relatively frequently as a serious burden (Quist & Swarte, 2006).

Moreover, the balance of the effects of providing informal care on the health of the carers seems to be a negative one. Whereas approximately 10% of the informal carers state that they became happier due to informal care provision, 15% of the informal carers experiences negative consequences for their health. An additional 15% of the informal carers report feeling depressed because of the provision of informal care; 9% of the informal carers experience a reduction of life satisfaction. Especially informal carers providing intensive forms of informal care and those caring for people with emotional or behavioural problems are prone to experience a decline in their perceived health. Negative consequences of providing informal care are linked to each other. For example, the combination of experiencing a high burden and a deterioration in health often occurs (De Boer et al., 2009a).

In addition to the drawbacks of providing informal care discussed in the previous paragraphs, giving informal care often requires a significant amount of time to be devoted to it. In spite of that, 71% of the informal carers who are younger than 65 year are in paid employment. Most of these informal carers are of the opinion that their job and providing informal care can be combined. However, 30% of the informal carers have trouble in combining these tasks and 7% find this extremely hard. Nevertheless, many informal carers report being pressed for time and find it hard to fit all obligations in their schedules. To remedy these problems, 35% of the informal carers takes off days from work, 25% of the informal carers makes individual arrangements - in 60% of the cases about flexible working hours - with their employers, 24% of the informal carers transfers household tasks to their partner, and 19% uses formal leaves to provide informal care. Some informal carers, however, have taken measures that are more drastic: 7% reduced their working hours and 3% quitted - at least temporarily - working. These measures are often accompanied by a reduction in affluence, because of the decrease of the income of the informal carer (De Boer et al., 2009a).

Whereas problems related to the coordination of care and negative consequences of providing informal care were discussed in the previous paragraphs, demographic and societal developments which can be expected to influence the availability of informal care in the future are discussed in this paragraph. A first category of these influences has a predicted negative effect on the availability of informal care. For example, the birth rate has been declining over the past decades. As a result, the future elderly will have fewer children available to care for them. Concretely, this means that instead of 3 children of circa 50 years per elderly person of around 80 years in need for care in 2005, just 1.5 child is predicted to be at hand in 2030 (Ministerie van VWS, 2005). Additionally, the female participation in paid employment is increasing (Tweede Kamer der Staten-Generaal, 1997). Given the trend that the age of women at the time they give birth to their first child has increased over the past decades, we can expect that increasing proportions of the population will have to provide care for their children as well as their elderly relatives during a period of their life in the nearby future. This phenomenon is named the 'sandwich generation' (De Hollander et al., 2006). Especially, if we see the two foregoing developments in conjunction, they might have a negative impact on the provision of informal care. Another development which may lead to a comparable result is the increased mobility of the population. Due to geographical dispersion it is no longer self-evident that several generations of a family live in each others proximity and take care of each other when needed (De Boer & Timmermans, 2007; Tweede Kamer der Staten-Generaal, 1997). Moreover, the divorce rate has risen significantly over the past decades. As long as people do not get involved in new relationships, this development reduces the number of partners caring for each other (Ministerie van VWS, 2005). Despite these trends that might impose limitations on the amount of informal care available, some contrary developments can be identified. The fact that the life expectancy of men increases faster than the female life expectancy, for example, will mean that people are longer able to live as partners and can care for each other if needed (Tweede Kamer der Staten-Generaal, 1997). Moreover, during the past decade declining age at retirement had a positive influence on availability of informal care (Tweede Kamer der Staten-Generaal, 1997). However, currently doubts exist whether these relatively low retirement ages can be sustained in the future.

#### 1.4 Organisations?

To summarise the argument in the previous sections, we can say that:

- 1) The number of elderly people in the Netherlands is increasing
- 2) The government aims at an extramuralisation of health and social care
- 3) This policy leads to increasing numbers of elderly persons being supported for in their own homes

- 4) These non-institutionalised elderly are supported by various people: informal carers, voluntary carers, and formal carers
- 5) These people have to cooperate, which sometimes leads to coordination issues. Moreover, providing informal care often poses a serious burden on the informal carer, who might have to cope with physical, mental, social and financial consequences.
- 6) The demand for informal care will rise in the future, while the informal care available might be limited.

If we realise that the number of people involved in informal care is significant, we can see that even problems reported by just a relatively small proportion of the informal carers affect large groups of people. For example, the fact that one out of every five informal carers is seriously burdened or overburdened by their care tasks means that several hundred thousand people are experiencing this problem. To provide another example: the low percentages of informal carers quitting their jobs or reducing their hours in paid employment presented in Subsection 1.3.3 mean that between 50,000 and 100,000 informal carers felt the need to make such a decision (De Boer et al., 2009a).

With these data in mind, we can conclude that improvements in the provision of care for the non-institutionalised elderly can influence the lives of many people at the moment as well as - due to the ageing population maybe even especially - in the future. Given the problems mentioned in Subsection 1.3.3, a share of these problems concerns the cooperation and coordination between the various people involved in care giving for an elderly person living at home. Within academia, cooperation and coordination are topics typically belonging to the field of IE&M. Moreover, the techniques of organisation design are claimed to be able to contribute to the achievement of a wide variety of goals. In the preface of the first volume of their handbook of organisational design, Paul Nystrom and William Starbuck formulate this as follows:

'All designers hope to improve organizations - to make organizations more efficient, more humane, more rational, more fun, more useful to societies, more profitable for owners, more satisfying to members, more submissive to top managers, more democratic, more stable, more flexible, or whatever - and the opportunities for improvement are tremendous' (Nystrom & Starbuck, 1981, p. xiii).

Therefore, if we could design the groups of people involved in providing care for the non-institutionalised elderly as if they are an organisation, major possibilities for improvement might be created. An increased efficiency of some care tasks could contribute to reducing the burden of informal carers or enable them to provide more care in the same time to the elderly person. Other benefits we might think of are a better interplay between informal, voluntary, and formal carers because of improvements in the coordination. Although studying and designing these care situations is promising from the perspective sketched above, it has not yet been reported in the academic literature on the non-institutionalised elderly and their carers. To illustrate this, Section 1.5 provides a short overview of the literature available in this field.

## 1.5 Academic Research on the Non-Institutionalised Elderly and their Carers

### 1.5.1 Introduction

In Subsection 1.3.1, various types of potential supporters of non-institutionalised elderly were described. These groups of people have been investigated by researchers from several angles. As a result, a vast body of literature on the elderly and their supporters is currently available. In this section, a short overview of this literature is given. Most of the literature discussed in this subsection can be classified under the heading social gerontology - opposing it to biological aspects of ageing (Blaikie, 1999). The research referred to in this literature was carried out in various countries and contexts. Nevertheless, all research reported concerns western countries - mainly European countries or the United States. Since several articles report that differences between the findings in different countries exist, but are rather limited (e.g., Jones, Victor & Vetter, 1983, Phillipson, Bernard, Phillips & Ogg, 1998; Taylor & Chatters, 1991), I do not consider it to be necessary to develop the international differences and similarities further in this subsection or to pay explicit attention to the country of origin of each publication.

### 1.5.2 Research on Categories of Carers

A notable aspect of this literature is that researchers commonly focus on a specific category of caregivers. Especially, informal carers have received relatively much attention (for example, Askham, Ferring & Lamura,

2007); A.E. Benjamin even states that 'no theme related to home care has received more attention in gerontological research than the role of social supports or informal caregivers' (Benjamin, 1992, p.27). However, also within the category of - potential - informal carers, researchers often focussed on a particular group. Some researchers, for instance, concentrate on the family and the provision of informal care (for example, Finch, 1995; Kosberg, 1992; Qureshi & Walker, 1989; Sarkisian & Gerstel, 2004). Also within this group researchers might specialise even more, for example, by paying attention to children or siblings in particular (for example, Burholt & Wenger, 1998; Coward & Dwyer, 1990; Lee, Dwyer & Coward, 1993). Another category of informal carers who have attracted attention are non-kin, such as friends, as source of support (see Adams & Blieszner, 1989; Barker, 2002; Crohan & Antonucci, 1989; Lund, Caserta, Van Pelt & Gass, 1990).

Various relations between these groups of informal caregivers and the care receiver, and the care provided have been studied in studies. Examples are the gender relations between child and parent care, which shows that it is common that children of the same gender care for a parent, but that daughters on average provide more care (Dwyer & Coward, 1991; Lee et al., 1993). Other studies focussed, for instance, on the relation between informal carers and the knowledge and use of formal care (Ward, Sherman & Lagory, 1984; Stoller, 1989).

### 1.5.3 Social Networks and Support

From the mid 1980s, the focus in social geriatrics shifted from individual relations between care and caregiver and specific categories of actors to the whole spectrum of social relationships and social support. From this time onwards, the social network as conceptualisation became a central tenet in social geriatric studies (Wenger, 1991; See for example Messeri, Silverstein & Litwak (1993) Victor (1994); Willmott (1986)). This social network related branch of research on the elderly and their care providers started with the investigation of the same kind of measures as described in the previous paragraph. To give an impression: Grundy (1996) investigated the relationships between structural characteristics of social networks of non-institutionalised elderly and instrumental and emotional support, Seeman & Berkman (1988) found that the types of support provided relate more to the characteristics of the relationship between the caregiver and person cared for than to characteristics of the individual network members - strong ties provide relatively often emotional aid, small services, and companionship, and Wellman & Wortley (1990) found fairly strong evidence for a relationship between social support, network structure and health status of the elderly person and the risk of entry into institutional care (comparable results were reported by Bowling & Browne (1991), House, Umberson & Landis (1988), and Moren-Cross & Lin (2006)). Gender differences are also a theme for researchers with an interest in social support networks. The results of this research tells us that women have larger social support networks than men and receive support from multiple sources, whereas men often rely on their spouse exclusively (Bowling, 1991). Antonucci & Akiyama (1987a) explored gender differences in care giving to elderly parents. Another topic attracting attention is the strength of the support network in relation to the personal situation of the elderly person and patterns of marriage and fertility (see for example, Finley (1989); Wenger (2001a); Wenger, Scott & Patterson (2000); Wenger, Dykstra, Melkas & Knipscheer (2007) on childlessness and support networks, and Soldo, Wolf & Agree (1990) on the marital status and the size and composition of care giving networks).

Relatively contemporary research has paid attention to several additional issues. A general trend is that researchers tend to investigate increasingly specific groups. Investigation of groups of a limited size enables comparison with other groups. An example of a newly developed focus for research on support network of the elderly is the investigation of networks of people with a specific - to old age related - disease. The articles by Barrett & Lynch (1999), Burholt, Wenger & Scott (1997), and Wenger, Scott & Seddon (2002) on the social support networks of people suffering from dementia provide examples of this type of research. Also the differences in geographical circumstances have been taken into account (for example, Wenger (2001b)). Additionally, ethnic differences became more of an issue in the research into social support networks of the elderly during roughly the last decade (see for example, Allen, Hogg & Peace (1992); Thomese & van Tilburg (2000); Tonkens, Van den Broeke & Hoijsink, 2008). Another recent research result was reported by Moren-Cross & Lin (2006), who paid attention to the impact of time of changes in the health and functional capacity of elderly people on the composition of their support networks. These authors describe a pattern of network expansion, in which declines in health status were accompanied by reports of assistance from sources increasingly distant from the older person.

#### 1.5.4 Linking the Provision of Formal and Informal Care

The reader might already have noted that the research described in the previous paragraphs mainly focuses on a limited number of providers of care in certain circumstances. Moreover, even if several types of care providers are included in, for example, a book or research report, they are often discussed separately and attempts at linking the two are often absent (for example, Willmott, 1987). In contrast to the abundance of this type of literature, research on the cooperation between formal and informal carers is sparsely available. Moreover, this research was often published recently. The book chapter by Soldo, Agree & Wolf (1989) is a notable, early attempt to develop an integrative approach to formal and informal aspects of care networks of the elderly in a book in which formal and informal care giving are discussed separately in other chapters. Wenger (1997a) describes three forms of relationships, which may develop between family members and providers of professional caregivers. Firstly, the substituting relationship in which one party can replace another one. Secondly, the complementing relationship as a cooperation between two or more parties to meet the need for support, but each person involved has an own task. Finally, the supplementing relationship in which one party gives support that somebody else is unable to provide. Wenger mentions factors such as the law, the gender of informal carers, the health of the elderly person, the character of family relationships and the views and motivation of the parties as determinants for the type of relationship that will develop. Research in which a hierarchy of these carers is established is available. Silverstein, Burholt, Wenger & Bengtson (1998) describe that family members are generally the first source of help people turn to. Afterwards neighbours and friends are asked for support. If all these sources turn out to be insufficient, people will require care from 'bureaucratic replacements for families', such as social workers and community agencies. In other words, formal care providers are only involved in care if informal sources of support are either unavailable or these people lack the necessary competencies to carry out the task. In a pilot study, the relation between frail elderly, family networks and public home help services and their perception of help and their relationships has been investigated. The researchers mention the word organisation in this context, but they do not apply views from organisation theory (Olsson, Ingvad & Bondesson, 2001).

Although the social network oriented studies described in the previous paragraph take a wider perspective than the support group based studies, the idea of a network including formal as well as informal carers has attracted the attention of some researchers. In the next paragraphs, I will focus on these - more conceptual - approaches to the support of non-institutionalised elderly. Before starting the description of these approaches, a note on their methodology is to be made, because these conceptual approaches emerged from research that combined quantitative and qualitative methods, whereas most research referred to in the previous paragraphs was based mainly on statistical analyses of large collections of survey data.

#### 1.5.5 The Convoy Model

Kahn & Antonucci (1980) developed the convoy model of social support over the life course by borrowing this concept from anthropology. A convoy can be defined as the set of people - either family, friends or others - who are related to a focal person by providing and receiving social support and surround somebody during the life course. As such, the convoy contributes to the wellbeing of the focal person. This approach shares several features with the idea of social support networks. The model, for example, also allows for the examination of structural and functional characteristics of the convoy of the focal person. An important difference with the social support networks is, however, the dynamic, lifelong, nature of the convoy. This means that the people who are part of a convoy may change over time due to changes of the properties of the person, for example age, and situational forces such as residential mobility and role changes, while other relations are maintained over a sustained period. Another difference with many social support network studies is the distinction Kahn & Antonucci (1980) make between three levels of closeness - depicted as circles - of the convoy members to the focal person. The inner circle consists of peoples who are closest to the focal person, with whom the relationship extends beyond role requirements, and are relatively stable over the life span. Members of the second circle are relatively close and relationships transcend the mere fulfilment of role requirements. The third circle consists of individuals who are close to the focal person, but in a role prescribed manner. An example of this type of relationship is the one between colleagues who have a good relationship while on the work floor, but do not meet in their leisure time or after retirement. Although most members of a convoy will be informal carers if care is needed, professionals are in the convoy model explicitly located in the outer circle (Kahn & Antonucci (1980), p. 273). Kahn & Antonucci (1980) provide a description of the social support convoys of elderly persons in particular. Moreover, differences were found regarding the convoys of different age groups among the elderly.

For example, those in the oldest age group (ages 75 through 95) report less frequent contact with their convoy members than the youngest age group (ages 50 through 64). However, an explanation of these differences was not provided because of the cross-sectional nature of the data and the lack of qualitative data to complement the quantitative data (Antonucci & Akiyama, 1987b).

#### 1.5.6 Support Network Typologies and Taxonomies

The network typology developed by Wenger and others based on the Bangor Longitudinal Ageing Study in North Wales, is the earliest and most widely dispersed typology of support networks of the elderly. This group of academics defined the supportive network as 'all those closely involved with the elderly respondent providing companionship, advice, help or care' (Wenger, 1991). Thus, network members have a direct link to the elderly person. Moreover, only part of the members of the social network of a person is also included in the support network. However, the support network is more extensive in the respect that it might also include formal carers. The Bangor study resulted in the first publications in the first half of the 1980s (especially, Wenger (1984)). These results were mainly based on descriptive statistics and related to size, content and functions of the support networks. Afterwards, the research was continued by including the collection of complementary - also qualitative - data and the addition of a longitudinal perspective (Wenger, 1991; Wenger, 1999). Another shift was the explicit approach of the network as an entity instead of the availability of various relationships to an elderly person (Wenger, 1991).

This work led, among others, to the identification of five support network types, which were named after the nature of the relationship between the elderly person and the support network. The typology is based on three criteria: the proximity of close kin; the proportions of family, friends and neighbours involved; and the levels of interaction between the old person and their family, friends, neighbours and community groups (Wenger, 1989; Wenger, 1994). Though the typology was developed using data on the situation in Wales, replications have been reported for, among others, England, Germany, Ireland, and The Netherlands (Litwin, 2001; Wenger, 1995).

The five support network types that were constructed can be named and summarised as follows. Firstly, the family dependent support network has a primary focus on nearby kin ties and close family relationship. These people often share a household with the elderly person or run a separate household nearby the elderly person. Most commonly, a daughter is the primary supporting person. Sometimes few peripheral friends and neighbours are also included in the support network. Secondly, the locally integrated support network is more diversified than the family dependent support network. In addition to local family, friends and neighbours are also included in the support network. In the third support network type - the local self-contained support network - the reliance is primarily focused on neighbours. However, most people with such a network adopt a household focused lifestyle and maintain a very low level of community involvement. Sometimes arms length relationships or infrequent contact with some relatives, such as siblings, nieces, or nephews, exist. The fourth network type is the wider community-focused support network, which is characterised by active relationships with distant relatives and the presence of important friends and some neighbours. Local kin are often absent, but community involvement of people with this fourth type of support network is often high. This characteristic is shared with the last network type - the private restricted support network - identified. However, people with a private restricted support network have minimal contact with neighbours, no local friends and wider community contacts or involvements are lacking (Wenger, 1989).

In a consequential phase, the network typology was operationalised to enable network assessment and to test hypotheses on the associations between network type and several variables. A first category of these variables is the relationship between network type and the characteristics of the person who is supported. Wenger & Shahtahmasebi (1991) found that despite indications that the personality of the focal person might affect network formation - as suggested by Wenger (1989) - the main factors determining the support network type that develops around an elderly person who is in need for support are beyond the control of this individual. Examples of these factors are the size of the family of origin, whether the individual married, whether the spouse is still alive, the size of the family of procreation, the gender of children, and the geographical setting (see also Wenger, 1994). A second category of variables which were shown to have a relationship with the support network type are those related the sources of emotional support and instrumental help available (Wenger & Shahtahmasebi, 1991), the possibilities for self-help and mutual aid (Wenger, 1993), and the prediction of elderly people prone to experience health related risks (Wenger, 1997b). The third and final category of variables concerns the linkages with the world outside the network. These variables include, for instance, the relationships between network type and the use of formal care (Wenger, 1994; Wenger & Shahtahmasebi, 1991) and the community or neighbourhood characteristics (Wenger, 1994). An overview of the network types, the variables

they are associated with, and the occurrence of these network types in urban as well as in rural regions is provided in the table in Illustration 1.4.

Moreover, the stability of support network types was investigated. Shifts in sources of help over time were reported (Wenger & Shahtahmasebi, 1991). While network type shifts occur annually in 2.5% of the networks, differences in stability between network types were found. The majority of network shifts reflected a change from a relatively robust network type to a more unstable one, which reflects increased dependency. Additionally, types of networks were related to geographical circumstances: Locally integrated networks were mainly found in nucleated villages and small towns, in small villages, hamlets and areas of dispersed settlement family dependent and local self-contained networks dominated, and wider community focused and private restricted networks were especially found in communities with higher population turnover or retirement immigration (Wenger, 1991).

Whereas the research on the network typology elaborated on in the previous paragraphs has an academic nature, the network typology was also adapted into an instrument for practitioners named Practitioner Assessment of Network Type (PANT) measurement instrument (Wenger, 1994). This measurement instrument is included in Appendix 1. An evaluation study of the introduction of the PANT instrument with social work teams shows that it allows the social workers to tailor interventions appropriately. Additionally, it made the creation of area profiles of older service users and their carers and their needs possible. The authors of the article stress the importance of the network type for the prediction of the outcomes of the care efforts (Wenger & Tucker, 2002).

In addition to the network typology developed by Wenger et al., some other classification schemes regarding the support networks of the elderly are around. Litwin (1997) applied a quick clustering procedure to a set of relational and interactional variables on elderly people in Israel to derive a taxonomy of six support network types. In these network types significant differences in gender, age, education, number of years of residence in the country, and health status of the elderly person cared for were found. In a subsequent research project, however, the same author reported five network types (Litwin, 2001). Taxonomies of networks of elderly in Finland and Canada were reported by Melkas & Jylhä (1996) and Stone & Rosenthal (1996) respectively. The last paragraphs of this subsection will be devoted to the discussion of a typology of support networks that was recently developed in the Netherlands.

A network typology developed on the basis of Dutch data was recently presented by Tonkens et al. (2008). They investigated 25 networks of people who received formal as well as informal care in Amsterdam using interviews as their main method of data gathering. These researchers did not focus on an age or disease group in particular, because their main interest was in the cooperation between the two groups of caregivers. The researchers did not find a relationship between variables such as gender, ethnicity, age, and disease and patterns of cooperation between various caregivers for this wide-ranging sample. Referring to the network classification presented in Wenger (1997b), Tonkens et al. conclude that this classification did not suit the purpose of their

Network Type	Network size	People involved in network (closeness and interaction)	Respondents are more likely to be/ have:	Client identified needs	Practitioner identified problems	Occurrence a) Urban b) Rural*
<b>Family Dependent Network</b>	1-4	Primary focus on nearby kin ties, close family relationships and few peripheral friends and neighbours	Over 80 Widowed Daughters Living with or within 5 miles from relatives Daily contact with relatives	Personal care Carer support Day care Respite care	Family or carer stress Cognitive impairment	a) 22% b) 15%
<b>Locally Integrated Network</b>	≥ 8	Close relationships with local family, friends and neighbours Many friends are also neighbours Network is usually based on long-term residence and active community involvement in the present or recent past.	Under 80 Lived in the same community since before they were 40 Frequent contact with relatives Children and/ or siblings living within 5 miles	-	Rheumatism and arthritis Cognitive impairment	a) 46% b) 45%
<b>Locally Self-contained Network</b>	Not mentioned	Has arms length relationships or infrequent contact with at least one relative - usually a sibling, niece or nephew - living in the same or an adjacent community Reliance is focused on neighbours An household focused lifestyle is adopted and community involvement is low	Single Living alone Childless; with-out living siblings Contact - often perfunctory - with relatives once a week or less than monthly	Poor health related Household tasks Accommodation	Illness other than mobility or heart related	a) 11% b) 9%
<b>Wider Community Focused Network</b>	≥ 8	Has active relationships with distant relatives, usually children and high salience of friends and few neighbours Distinction between friends and neighbours is maintained Respondents with this type of network are generally involved in community voluntary organisations Absence of local kin is common	Married Living with their spouse only Retirement migrants Living more than 50 miles from their nearest child and/ or sibling. Infrequent face-to-face contact with relatives	Poor health related Household tasks Carer support	Rheumatism and arthritis	a) 4% b) 20%
<b>Private Restricted Network</b>	1-4	Except perhaps a spouse, local kin are absent	Married Living with their spouse only Come to the community after age 40 No child or sibling within 50 miles Infrequent face-to-face contact with relatives	Personal care Carer support Respite care Accommodation	Family or carer stress Illness other than mobility or heart related	a) 12% b) 7%

**Illustration 1.4 - Overview Network Typology developed by Wenger et al.**

Based on Wenger (1991); Wenger (1994); Wenger (1995).

\* Urban is Liverpool City (n = 4,736) and rural is based on research in North Wales (n = 240). Based on the data in Wenger (1995). Different numbers were, however, reported in Wenger (1994). In both region 5% of the networks were marked unclassified.

research project.<sup>18</sup> Therefore, they developed an own network typology based on the following topics: way of cooperation in a network, risk of overburdening of network members, sources of pleasure and satisfaction for people involved, and the idea of rights and duties of formal carers, voluntary carers, informal carers, and the

<sup>18</sup> Tonkens et al. (2008) consider the typology of Wenger unsuitable for their purposes, because it does not include aspects of the ways in which formal and the informal caregivers cooperate. Although, these relationships were not the prime focus of the research of Wenger et. al. out of which the typology was developed, I think one could gain insight into at least some characteristics considering cooperation between informal and formal caregivers by combining the findings from different articles by Wenger and others involved in the Bangor Longitudinal Ageing Study.



person cared for.<sup>19</sup> The resulting network typology consists of five types: mixed network, family network, professional network, isolated central informal carer network, and disappointed central informal carer network. The main characteristics of the network types and the strengths and risks related to each type are presented in the table in Illustration 1.5.<sup>20</sup>

From the 25 networks investigated, seven networks consisted of people taking care of somebody over 65 years of age. The people cared for by these networks suffered from the following disorders: two persons had Alzheimer disease, one person suffering from dementia, one wheelchair dependent person, and three persons reported they needed help because of old age. In this sample only four networks types were found. The share of each of these network types is depicted in Illustration 1.6.<sup>21</sup>

## 1.6 Again: Organisations?

### 1.6.1 Introduction

The heading of this section already indicates that we return to the idea, which was presented in Section 1.4, that support networks of non-institutionalised elderly persons could be conceptualised as organisations. In that section, I suggested that especially the ideas from organisational design might offer opportunities to solve the problems related to coordination and cooperation (see Subsection 1.3.3). Literature research presented in the previous section demonstrated that these ideas have not yet been applied in the research into support networks of non-institutionalised elderly. As a consequence, we might reconsider the suitability of the conceptualisation of support networks of non-institutionalised elderly persons as organisations. This section has the aim to show that the support networks found around elderly fit within definitions of the phenomenon 'organisation'. The precise research question and research approach, however, are the topic of the chapter to come.

### 1.6.2 Defining Organisations

Those who turn to well-known (text)books on organisations looking for a definition of an 'organisation' might find this a disappointing experience. March and Simon seem to have established a sort of common practice by stating 'It is easier, and probably more useful, to give examples of formal organizations than to define the term' (March & Simon, 1958, p.1). Several authors indeed merely give examples to illustrate what they consider to be organisations (for example, Cummings & Worley, 2009; De Leeuw, 1990; Jaffee, 2001).

Nevertheless, not all authors opt to avoid providing a formal definition of an organization. Daft (2001), for example, defines organisations as 'social entities that are goal directed, are designed as deliberately structured and coordinated activity systems, and are linked to the external environment' (Daft, 2001, p.12 - this definition is highly comparable with the definition given by Daft, 2000, p.11).<sup>22</sup> This definition implies that organisations are made up of two or more people who cooperate to achieve some kind of outcome. The phrase 'deliberately structured' indicates that a task division has to be in place and that responsibility for their performance is assigned to members of the organisation (Daft, 2000). At first sight, these conditions seem to be fulfilled for the support networks of non-institutionalised elderly. Firstly, if a support network consisting of informal as well as formal caregivers is in place, we will by definition encounter two or more people in addition to the elderly person cared for. Secondly, it is not hard to imagine that the care giving has to serve a purpose, which we can consider

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<sup>19</sup> The latter aspect of the research by Tonkens et al. (2008) is excluded in the elaboration on their typology, because I consider it to be only indirectly linked to my research project. Moreover, Tonkens et al. (2008) themselves consider the five patterns of cooperation - each related to specific opportunities and risks - as the most important outcome of their project.

<sup>20</sup> The Disappointed Central Informal Carer Network is excluded from the table in Illustration 5, because this network type was not reported in cases where a network took care of an elderly person.

<sup>21</sup> This distribution differs from the shares of the network types in the total sample. The major difference with the total sample is the absence of disappointed central informal carer networks (17% in the sample in general). An explanation might be found in the duration of the care, because disappointed central informal carer networks were only found around people with long-term psychiatric disorders. The absence of disappointed central informal carer networks is mainly compensated by an increased share of professional and isolated central informal care networks among networks around elderly persons.

<sup>22</sup> These two books by R.L. Daft are the textbooks used in the IE&M Programme at the University Twente for subjects on organisation theory and design.

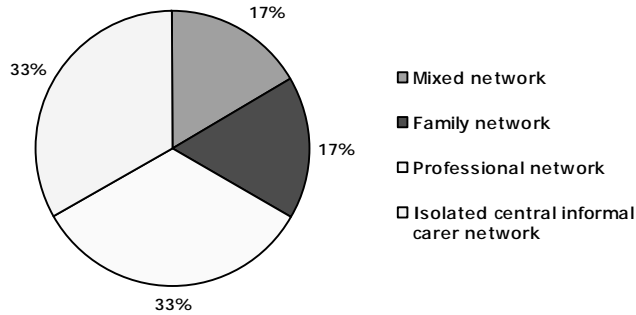
Network type <sup>23</sup>	Characteristics	Cooperation	Strengths	Risks
<b>Mixed Network</b>	Informal carers, formal carers and volunteers cooperate One central informal carer has overview, coordinates, and has the skills to cope with the formal procedures involved Room for reflected pleasure <sup>24</sup> Contrary demands on informal carer	Good cooperation Good communication Reflected pleasure	Solid network which is able to cope with unexpected changes Low risk of overburdening of network members	Competition between carers Rapid change of professional carers Informal carers who are not assertive might become overburdened Central informal carer might have difficulties combining paid employment and the informal care
<b>Family Network</b>	Several (female) informal carers involved and supported by the family Brothers or spouses often provide emotional and practical support Family is most important, formal care is addition Informal carers often have a double role	Cooperation might be good as well as poor Good cooperation is generally achieved if professional value the contribution of the family and give them the possibility to fulfil this care role Family not always interested in cooperation	Care is provided cooperatively Family provides care as long as this is tenable, but can call in professional care if needed High quality of care	Problems might occur when the person cared for or an informal care does not want professional carers to be involved, because this might lead to overburdening of informal carers
<b>Professional Network</b>	Professionals do tasks which informal carers cannot or do not want to do Professionals direct network Clear division of tasks	Behaviour of professional carers determines cooperation: if they communicate with the informal carers cooperation might be satisfying	Room for reflected pleasure Informal carers can focus on the provision of emotional support and do not need to care about practicalities or coordination Low risk of overburdening informal carers All carers carry out the tasks they feel they are able to	Volunteers might become heavily burdened If nobody is in charge, the quality of care for the elderly person might be reduced
<b>Isolated Central Informal Carer Network</b>	Central informal carer is hardly supported by formal carers, volunteers or other informal carers Often male carers who care for their spouse	Central carers provide care without support from professional carers Only GP is involved	If the care is not a too heavy burden, providing the care might be satisfying for the carer and contribute to the relationship between the carer and the elderly person Person cared for might like this network, because of the nearly continuous availability of a limited number of carers	Loneliness and overburdening of the informal carers is a serious risk and might go unnoticed by formal carers

**Illustration 1.5 - Typology of support networks by Tonkens et al.**

Based on Tonkens et al. (2008, p.33, 45, 59, 71). The authors differentiate between natives and non-natives. For the sake of conciseness, only the natives are included in this table.

<sup>23</sup> In Dutch respectively: Gemengd netwerk, Familie netwerk, Professioneel netwerk, Geïsoleerde spijzorgnetwerk, Teleurgesteld spijzorgnetwerk

<sup>24</sup> In Dutch: weerkaatst plezier. Tonkens et al. (2008) introduce this term to indicate the authentic delight and satisfaction of giving pleasure and satisfaction to somebody else.



**Illustration 1.6 - Occurrence of types of network among the elderly included in the research**  
Based on Tonkens et al. (2008).

as the outcome of the support network. Daft (2000) explicitly includes outcomes such as meeting spiritual needs and providing social satisfaction as possible outcomes of organisations. Therefore, making sure the elderly person is supported with, for example, taking a shower, providing a meal or giving a ride to an appointment with a GP can be regarded as the outcomes of the supportive network. Moreover, we can expect the people involved in the support network to have decided on a task division for practical reasons. The task divisions between informal and formal carers are defined by the tasks the elderly person is allowed to receive formal care for by official prescript. Finally, a link between the supportive network and the environment is also not difficult to assume. In Subsection 1.2.3, for instance, we saw the influence the government tries to exert on the balance between formal and informal care.

Obviously, Daft is not the sole author who provides a definition of an organisation. To list a few of these definitions:

- 'By organization we mean a social unit with some particular purposes' (Shafritz & Ott, 1996, p.1).
- 'Organizations are collectivities oriented to the pursuit of relatively specific goals and exhibiting relatively highly formalized social structures' (W. R. Scott, 2003, p.27).<sup>25</sup>
- 'Organisations are social artifacts, that is, arrangements created for specific ends, which engage in interchange with the larger society around them. Their structures are intended to coordinate the efforts of individuals. Organisation members' efforts can produce integrated outputs, provided that the environment, technology, and human resources that the organisation draws upon all interface appropriately' (Jelinek, Litterer & Miles, 1981, p.7).
- Organisations can be defined 'as technologies, social structures, cultures and physical structures that exist within and respond to an environment' (Hatch, 2006, p. 19).
- Organisations are societal structures of a more or less hierarchical character that function on the basis of a formal-rational design regarding task division, coordination, and goal defining processes (Lammers, Mijs & Van Noort, 2000, p.34).<sup>26</sup>
- Organisations are considered to be goal oriented associations for cooperation of people and resources (Krabbendam, 1988).<sup>27</sup>

<sup>25</sup> Sincerity forces me to note here that this is just one of the three definitions of organisation which are given by W.R. Scott. The definition given here is the 'rational systems definition'. This definition seems to show the best fit with the perspective of an organisation which was provided during the IE&M courses I took. The other definitions given by Scott are:

Natural systems definition: 'Organizations are collectivities whose participants are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource. The informal structure of relations that develops among participants is more influential in guiding the behaviour of participants than is the formal structure' (W. R. Scott, 2003, p.28).

Open systems definition: 'Organizations are congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resource and institutional environments' (W. R. Scott, 2003, p.29).

<sup>26</sup> In Dutch: 'Organisaties zijn samenlevingsverbanden met een min of meer hiërarchisch karakter die functioneren op basis van een formeel-rationeel ontwerp met betrekkingen tot functionalisatie, coördinatie, en finalisatieprocessen' (Lammers et al., 2000, p.34).

<sup>27</sup> In Dutch: '[In dit onderzoek zijn] organisaties beschouwd als doelgerichte samenwerkingverbanden van mensen en middlemen (Krabbendam, 1988).

These definitions show that the authors who define organisations each stress different aspects of the phenomenon organisation. Despite the absence of an unequivocal definition, a 'common denominator' seems to be available regarding the basic characteristics in the definition. Moreover, in general the various definitions seem to be of a complementary nature. If we look at the content of these definitions, we can see that comparable arguments on the applicability to the support networks of non-institutionalised elderly as presented in an earlier paragraph concerning the definition provided by Daft can be made. In conclusion, the definitions of the term organisation provided in this section illustrate that no major, intrinsic constraints exist for the conceptualisation of support networks of the non-institutionalised elderly as organisations. Naturally, the mere availability of one or more definitions of organisation does not allow an investigation of support networks of non-institutionalised elderly people to be analysed usefully as organisations. In Chapter 3, a framework for the analysis of the support networks investigated will be constructed. Nonetheless, before we can proceed to that part of the thesis, a research design has to be developed. The research approach for this project is presented in Chapter 2.

## 1.7 Structure of the Thesis

In this first chapter, the rationale for the research project has been discussed. In sum, the main idea of this chapter is that the problems that are experienced in mixed support networks of elderly people might be solved or alleviated if we conceptualise these networks as organisations and apply ideas from the field of organisation design. The research design to explore these ideas is presented in Chapter 2. A detailed framework for case analysis drawn from the field of organisational design is developed in Chapter 3. The Chapters 4, and 5 are devoted to the description and analysis of the case studies that have been carried out to investigate the possibilities for analysing and designing the support networks of non-institutionalised elderly as organisations. A cross-case analyses of the results of the individual cases is presented in Chapter 6. A formal answer to the research question will be presented in the closing section of this chapter. The final chapter consists of a discussion of the research results and directions for further research.

I do realise that reading the full thesis might be quite a time consuming job for some people. I would recommend people who are familiar with organisational theory - especially organisational design and the typology on the structure of organisations by H.M. Mintzberg - and who are not interested in the details of each case to read at least Chapter 2, 7 and 8. Depending on their interests and previous knowledge, others might decide to skip - parts of - the case analyses in Chapters 4 and 5 or not to read Chapter 3 on the construction of the framework for case analysis without missing too much of the arguments made in this thesis.

# 2

## Research Design

### 2.1 Introduction

In the previous chapter, we saw that it might be useful to conceptualise the support networks of non-institutionalised elderly consisting of informal as well as formal caregivers as organisations. Such a conceptualisation provides the opportunity to apply academic knowledge from the field of organisational theory to these support networks. The ultimate aim of the application of this knowledge is to improve the care for the non-institutionalised elderly, because we can expect that solving the cooperation and coordination problems identified in Subsection 1.3.3 may contribute to improving aspects like the quality or the efficiency of the care provided. However, before we start applying any kind of organisational theory to support networks of non-institutionalised elderly persons, we need to establish whether the vocabulary of organisation theory is actually suitable for these care networks and whether theories developed for organisations are really of use for the improvement of support networks. In other words, we need to move on from the idea that conceptualising support networks as organisations is beneficial to investigating the merits of such an approach. These are the issues I will address in this thesis.

To reach this goal a research project has been developed around a selection of the data which H.E. Weenink gathered in the context of his PhD research on the cooperation between informal and formal caregivers of the elderly. In this chapter, the research design will be presented and explained. The research question is elaborated on in Section 2.2, whereas Section 2.3 consists of a discussion of the research approach applied. Other topics in this chapter are the methods for data gathering and analysis, which are described in Section 2.4 and 2.5 respectively.

### 2.2 Research Question

The objective of this research project has been explained in the foregoing chapter and restated in the introduction of this chapter. Based on the research objective to investigate mixed support networks of non-institutionalised elderly people as organisations, I defined the following central research question:

**Which contribution to the understanding and improvement of mixed support networks of non-institutionalised elderly can be made by the field of organisation theory?<sup>28</sup>**

Some aspects of this research question require further definition. Firstly, 'mixed support networks'<sup>29</sup> refers to support networks of elderly people consisting of formal as well as informal caregivers. Although it will not be hard to find support networks including only one of these groups, the focus will be on support networks made up of a combination of formal and informal caregivers, because it was in these networks that coordination and cooperation problems were identified. Currently, a large share of support networks are already of a mixed nature (see Illustration 1.1). Moreover, given the contemporary governmental policies (see Subsection 1.2.3), mixed support networks can be expected to become of even larger importance in the future. Secondly, 'non-institutionalised' means that the elderly may live in any residential setting in which formal medical or nursing services are not provided as standard part of the housing component. Additionally, the term elderly is not defined in detail in this project. As we will see in Section 2.4, the cases were partly selected for pragmatic reasons.

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<sup>28</sup> Organisation theory is used from this point onwards to indicate that I will focus on a specific part of the theories I encountered during my IE&M study. Aspects of this study programme, such as operational research, financial engineering and supply chain management, will not receive any attention in this thesis. Though some authors might wish to define organisation theory in a narrow way, I want to seek alliance with its more general usage in the IE&M field.

<sup>29</sup> In all subsequent parts of this thesis, the term support networks will refer to mixed support networks, unless mentioned otherwise.

However, the main reason for the existence of the support network needs to be related to the substitution for the compromised functional capacity of the elderly person due to physical, age related problems over a sustained period.<sup>30</sup> The compromised functional capacity may become evident in relation to issues such as mobility, personal care, and house care (see for example, Bond & Rodriguez Cabrero, 2007). Finally, a definition of organisation theory and a further specification of the tools used from this field are included in Chapter 3.

### 2.3 Research Strategy: Case Studies

The research approach chosen for this project is the case study approach. In this section, the backgrounds of this approach will be described as well as the suitability of this approach for the investigation of the contribution of organisational theory to the understanding and design of support networks of non-institutionalised elderly.

In Chapter 1, it became clear that research on the support networks of non-institutionalised elderly from an organisational perspective has not yet been carried out. Therefore, the project reported in this thesis should be regarded a first exploration of this field. As such, we may consider this study as a pilot project to see whether further applications of organisation theory seem to be useful. However, this state of the field has implications for the research approaches that might be suitable for this project.

Yin (2003) distinguishes five main research strategies: the experiment, the survey, the archival analysis, the history, and the case study. Which strategy is suitable for a specific research project depends primarily on the type of research question to be investigated. Additional criteria to choose a fitting research strategy for a project are whether the researcher requires control over behavioural events and whether the focus is mainly on contemporary or on historical events. The combination of these criteria results in the table represented in Illustration 2.1.

Strategy	Form of Research Question	Is Control of Behavioural Events Required?	Does the Focus lie on Contemporary Events?
Experiment	How, why?	Yes	Yes
Survey	Who, what, where, how many, how much?	No	Yes
Archival analysis	Who, what, where, how many, how much?	No	Yes/ No
History	How, why?	No	No
Case Study	How, why?	No	Yes

**Illustration 2.1 - Overview of research strategy choices**  
Based on Yin (2003, p.5).

Following the criteria for the choice of a suitable research strategy in the table above, we can conclude that the case study is an acceptable strategy for the investigation of the value of organisation theory for the support networks of non-institutionalised elderly. One of the main reasons for this choice is that the case study approach allows the collection of relatively in-depth knowledge on a situation (see Van der Zwaan, 2003; Eisenhardt, 1989; Yin, 2003). Given the exploratory character of the project, the availability of this type of data is required to compensate for the lack of background literature and the possibility to generate hypothesis on the basis of this literature (Stebbins, 2001). Moreover, it cannot be exactly known beforehand which variables need to be investigated. Case studies are suitable to develop an understanding of a single setting that goes beyond the correlation between some variables.

Now the research strategy is determined, the case study design has still to be decided on. Yin (2003) argues that carrying out a single case study is appropriate when the case represents a critical case in testing a well-formulated theory, when the case represents an extreme case or a unique case, when the case is a representative or typical case representing an everyday or commonplace situation, when it is a revelatory case, or when it is a longitudinal case. None of these reasons seems to apply on the proposed research on the support networks of elderly persons. Currently, there is, for instance, not enough knowledge available in the field to determine what makes a critical or extreme case. Therefore, it appears to be wise to follow Yin's self-proclaimed first words of advice:

'The first word of advice is that although all designs can lead to successful case studies, when you have the choice (and resources), multiple-case designs may be preferred over single-case designs. Even if you can only do a 'two-case' case study, your chances of doing a good case study will be better than using a single-case design' (Yin, 2003, p.53).

<sup>30</sup> Following the classification of the elderly in young old (55-75 years), old (75-85 years), and oldest old (above 85 years), we can expect that the people included in this study will be members of the old and oldest old categories (for example, Aldous, 1987; Neugarten, 1974; Ory & Duncker, 1992).

Hence, a multiple case design was used for the research reported in this thesis for reasons of external validity.<sup>31</sup> The value of the second case lies not in statistical generalisation related to sampling logic as used in survey research, but in the replication logic, which is a form of analytical generalisation - which we also find in experimental settings. In this case, the validity of the research outcome of a first case can gain robustness by replicating the findings in a second or even more cases (for example, Braster, 2000; Eisenhardt, 1989; Van der Velde, Jansen & Telting, 2000; Yin, 2003).<sup>32</sup> Given constraints of time imposed on this thesis, conducting more than two cases is not considered a possibility. The second case will be chosen according to the same selection criteria as applied to the first case. Therefore, we can expect this second case to provide a literal replication of the first case. As such, the case study design used in this project satisfies the criteria of what Yin calls a simple multi-case design.<sup>33</sup>

## 2.4 Case Selection

In the previous section, the replication logic was introduced as the reason to opt for a multiple-case design. The unit of analysis in this research project is the support network of a non-institutionalised elderly person who receives formal as well as informal care. Consequentially, we need to select two cases which we can expect to make an interesting comparison for one reason or another. The rationale for case selection is discussed in this section.

Braster (2000) discerns four types of case selection: no case selection, pragmatic selection of cases, theoretical selection of cases, and statistic selection of cases. The case selection method applied to this research project shows characteristics of pragmatic case selection as well as theoretical case selection. On the one hand, the theoretical selection of cases is employed, because - as described in the previous paragraph - the cases are chosen, because they are expected to provide comparable results. In the case of investigating the support networks of non-institutionalised elderly, we can achieve this by selecting people who live in similar environments and have roughly comparable support networks (George & Bennett, 2005; Braster, 2000). As we will see in later chapters both cases should be classified in the same we using the criteria determined by Wenger et al en Tonkens et al. Moreover, only elderly women living without a spouse and suffering from physical impairments were included.<sup>34</sup> On the other hand, pragmatic reasons resulted in the selection of elderly living in Rijssen.<sup>35</sup>

At this point, it might be worth to note that I could have investigated the mixed support networks of, for example, the mentally disabled instead of or in addition to the study of the support networks of non-institutionalised elderly. I do not see any reason to expect these networks to be of lesser interest. To develop a feasible thesis project, however, it was necessary to impose some limits on the number of cases studied. Studying comparable cases has to be preferred in this context for the reasons mentioned before. Whether one studies networks of elderly or disabled people remains at least to a certain extent an arbitrary choice.

To obtain access to several mixed support networks of elderly people, E. Weenink collaborated with two providers of formal home care services in the region. These organisations informed the researcher of potential cases. An agreement was signed between E. Weenink and these providers of home care services to formalise the

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<sup>31</sup> External validity deals with the issue of knowing whether a study's findings are generalisable beyond the immediate case study (Yin, 2003).

<sup>32</sup> A short note of warning might be appropriate at this point. George & Bennett (2005) describe that 'generalising the results of case studies is not a simple function of the number or diversity of cases studied. A researcher may study diverse cases that prove to have no common patterns, so that only unique historical explanations of each case are possible. Alternatively, a researcher may study a few cases or even one case and uncover a new causal mechanism that proves applicable to a wide range of cases' (George & Bennett, 2005, p.123). Nevertheless, I expect the multiple-case design to be adequate given the objectives and exploratory nature of the project.

<sup>33</sup> After extensively providing references to Yin (2003), we might question whether Yin holds a monopoly on providing guidance on carrying out case studies. In this context, it might be good to know, that Yin (2003, and earlier version of the same book) is indeed dominant regarding advices on doing case studies in the field of IE&M and Business Administration (see for references to his work in these fields, for example: Biemans & Van der Meer-Kooistra, 1994; De Weerd-Nederhof, 2001; Gummesson, 2000; Van der Velde et al., 2000; Van der Zwaan, 2003).

<sup>34</sup> Since only elderly women were included, the personal pronoun she and the possessive pronoun her will be used to refer to these elderly persons.

<sup>35</sup> Currently, Rijssen is part of the municipality Rijssen-Holten. Rijssen had 28,053 inhabitants as per 1 January 2009 (Gemeente Rijssen-Holten, 2009) and lies in the eastern part of the Netherlands. It is expected that the population size of Rijssen-Holten will remain roughly stable until 2025. The share of people above 65 years of age is predicted to rise from 15.1% in 2008 to 21.3% in 2025 (Centraal Bureau voor de Statistiek, 2008).

cooperation (Snijders, Haverslag & Weenink, 2003). When a care network was considered a potential case, the elderly person who was supported was approached with the request to participate. It was stressed that participation was voluntary and could be terminated at any moment during the investigation. Several support networks were researched by E. Weenink. The cases included in this thesis are a selection of the cases he did. This selection was based on the criteria mention in the previous paragraph.

## 2.5 Data Collection Method: Interviews

The decision to carry out a multiple case study is mainly a choice of what is to be studied (Stake, 2000). Thus, a data collection method for the research project reported in this thesis is still to be specified. Yin (2003) discusses six sources of evidence which he considers appropriate for case studies: documentation, archival records, interviews, direct observation, participant observation, and physical artefacts. E. Weenink has chosen to interview the people involved in mixed support networks of elderly persons a primary research method. This decision is easily to understand if we look at the six options available. Documentation that can help us to construct a full image of the functioning of mixed care networks cannot be expected to be available. Nonetheless, we can imagine some forms of documentation, for example care plans, to provide evidence in addition to the interviews. In addition, archival records and physical artefacts will not or only scarcely be available. Direct observation and participant observation might provide possibilities to investigate mixed support networks of elderly persons, but this requires specific skills, positions and large amounts of time. Therefore, interviews seem to be a suitable option given the exploratory nature and the aims of this research project.

One of the weaknesses associated with interviews is that a bias might exist, among others, due to the perception of certain events or persons by the interviewee. Moreover, inaccuracies may occur because of poor recall or because of the interviewee giving answers he considers socially desirable (for example, Bernard, Killworth, Kronenfeld & Sailer, 1984; Brewer & Webster, 1999; Marsden, 1990). To attempt to limit the influences of these aspects on the research outcomes and to gain a richer insight in the support network, E. Weenink chose to interview several members - informal carers as well as formal carers - of each support network. These interviewees were selected using an approach named 'snowball sampling'. This is a relational strategy in which each interviewee has the possibility to nominate other people involved in the network for an interview. This process continues until few or no additional names surface during the interviews (Knoke & Yang, 2008). E. Weenink did not interview all people mentioned as potential interviewees by actual interviewees. His selection was based on his appraisal of the amount of new information he expected an additional interview to provide. Moreover, he tried to balance the number of formal and informal caregivers interviewed for each support network.

The implementation of the snowballing sample links to the issue of triangulation, which is considered an important topic in books on the case study approach. The main idea of triangulation is to gather data and information from several perspectives and viewpoints to increase the reliability of the research outcomes (Cunningham, 1997; Yin, 2003). Cunningham (1997) discerns between 'between methods' and 'within methods' triangulation, whereas Braster (2000) distinguishes the following four types of triangulation: data sources, methods, researchers and theory.<sup>36</sup> None of these forms of triangulations is directly applicable on the support networks of non-institutionalised elderly within the scope of this research project. Nevertheless, interviewing several members of the support network helps to avoid the emergence of a bias towards a certain perception of the network by one network member.

Qualitative data were gathered during the interviews. The interviews were semi-structured and included, among others, questions to get insight into the number and type of network members, the tasks the elderly person need support with, and the support provided by each network member. A general overview of the interview topics is included in Appendix 2. E. Weenink determined the questions on the basis of various books, articles and reports on social support and support networks. See Weenink (2002) and Weenink (2004) for further information on the aspects considered during the construction of the list of interview topics.

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<sup>36</sup> Cunningham (1997): Between methods triangulation = the use of different and distinct research methods.  
Within methods triangulation = the use of multiple techniques within a given method to collect and interpret data.  
Braster (2000): Data triangulation = the use of several data sources (for example, interviews as well as questionnaires).  
Methods triangulation = the use of several research methods. (for example, using observation as well as surveys).  
Researcher triangulation = the involvement of several researchers.  
Theoretical triangulation = the interpretation of the research data form several theoretical perspectives.



All interviewees signed an informed consent document after an explanation of the purpose and context of the research project and their expected roles (Weenink, 2003).<sup>37</sup> The interviewees were promised anonymity in any publication that might result from the project. Codes were used as abbreviations for specific roles and relationships which occur in the support networks to make the descriptions of the cases look as similar as possible and to allow graphical representation. All roles are defined from the perspective of the elderly person who receives support. The table in Appendix 3 provides an overview of codes used. All interviews were recorded with the agreement of the interviewees and were subsequently transcribed.

## 2.6 Data Analysis Strategy: Within-Case and Cross-Case Analyses

### 2.6.1 Introduction

The data gathered during the interviews have to be analysed to be able to reach a conclusion on the value of organisation theory for the analysis and design of mixed support networks of elderly people. At a very general level, we can say that data analysis in case studies consists of data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 1994).<sup>38</sup> Two data analysis strategies for this project will be developed in this chapter. First, within-case analysis is carried out to gain insight in each of the cases individually. Second, cross-case investigation will be used to see to which extent the patterns found in the two cases are comparable.

Yin (2003) stresses the importance of adopting a general strategy for data analysis that underlies the more specific analytical techniques that can be applied to cases for carrying out successful case studies. Yin describes three of these general strategies for data analysis. Firstly, the most preferred strategy is to rely on the theoretical propositions that led to the case study. If these theoretical propositions in their turn reflect, among others, a set of research question and hypotheses, the propositions can help the guide the case study analysis by helping the researcher to focus attention on certain data, while ignoring other findings. Secondly, a researcher can follow the general analytical strategy that tries to define and test rival explanations. If the two foregoing general strategies for data analysis fail, you can still develop a descriptive framework for organising the case studies. Although Yin deems this third strategy less preferable than the previous two strategies, it can serve as an alternative if the two other approaches do not work out. Due to the exploratory character of the research reported in this thesis, the application of theoretical propositions or the definition and testing of rival hypotheses is not achievable in this project. Therefore, a descriptive framework for the analysis of the cases will be defined in Chapter 3.<sup>39</sup>

Several interviewees were used per case to increase the reliability of the research outcomes. Such a result can be reached relatively easily when the data supplied by the interviewees converge. However, the interviewees might mention opposing facts or interpretations. To cope with these inconsistencies the following rules of thumb were applied:

- If only one interviewee mentioned an issue or person, but none of the others provided evidence to the contrary, the data were included in the case report.
- If a clear minority of the interviewees mentions an issue or person and the other interviewees provide evidence to the contrary, the information given by the majority is included in the case report.
- If seemingly equally sized groups report opposing facts, the researcher interprets the data in the context and includes a footnote with some additional information.

The foregoing are just rules of thumb and exceptions can take place. In such an instance, the choice made will be explained in a footnote.

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<sup>37</sup> In this informed consent, permission was given to use the data in the context of the research project. Access, however, was not restricted to a specific researcher.

<sup>38</sup> Reference from De Weerd-Nederhof (2001).

<sup>39</sup> Though Yin (2003) names such a framework descriptive, the framework developed in Chapter 3 does contain descriptive as well as analytical elements. Since these analytical elements do not underpin the research project as a whole, they do not deserve the same status that Yin attributes to the theoretical propositions of the first general strategy for data analysis.

## 2.6.2 Within-Case Analysis

The first step of the case analysis is formed by the within-case analysis. Yin (1981) states that building a clear conceptual framework might help to avoid the pitfall of writing a case study report that 'is a lengthy narrative that follows no predictable structure and is hard to write and hard to read' (p. 64). Such a conceptual framework is presented in Chapter 3. In this subsection, some more general notes on the within-case analysis will be made.

The specific analytic technique applied for within-case analysis comes closest to what Yin (2003) presents as the pattern matching technique.<sup>40</sup> According to this author, pattern matching is one of the most desirable specific analytic techniques. The main idea of pattern matching is that you compare an empirically based pattern with a predicted one. In this research project, the predicted pattern is not a single pattern. However, the framework developed in Chapter 3 includes configurations of organisational characteristics which can be expected to be found together. The matching of the empirical patterns found with the configurations from organisational theory is mainly a matter of interpretation and argumentation. More specific methods are not available, because 'at this point in the state of the art, the actual pattern-matching procedure involves no precise comparisons' (Yin, 2003, p.119).<sup>41</sup>

In addition to pattern matching, the comparison of the items in the framework for case analysis and the empirical findings, could also be framed as the application of the method and logic of structured, focused comparison presented by George & Bennett (2005). These authors describe this method as straightforward and simple. The main idea is that the researcher writes some general questions that reflect the research objective which are answered for each of the cases under investigation. In this way, the questions guide and standardise data collection. Thereby they enable the researcher to make systematic comparison of the findings of the cases possible. Although the elements in the framework for case analysis presented in Chapter 3 are not explicitly formulated as questions, it is not difficult to image how they could look in such a format.<sup>42</sup>

## 2.6.3 Cross-Case Comparison

Contrary to the within-case analysis, the cross-case comparison is not based on an explicit conceptual model. However, some notes on the procedures used can be made. The importance of a defined approach for cross-case analysis lays in the fact that it helps 'researcher not to stick to the initial impressions which arise from the case data. Therefore, these strategies enhance the probability that findings which may exist in the data are captured' (Eisenhardt, 1989, p.541).

Cunningham (1997) presents three general approaches for carrying out a comparative analysis of cases. Firstly, the case survey using a large number of cases, which resembles a questionnaire survey. Secondly, the case comparison approach in which the researcher constructs an explanation for one case and then replicates this process with a similar case or set of cases. The comparison supports the investigator in developing an understanding of the patterns found in the cases and reasonable interpretations for these results. Finally, the case comparison which is based on tabulations. These overviews help to look for commonalities and differences between the individual case studies.

Given the framework used for case analysis and the exploratory nature of the project, the most natural choice is for the tabulation approach - also presented as analysis by data displays (Miles & Huberman, 1994)<sup>43</sup> or word tables (Yin, 2003) - to cross-case analysis. According to Yin (2003) this approach is particularly suitable for the comparative analysis of a modest number of cases. The word tables have to be constructed using a uniform framework, which for this research project is comparable to the analytical framework for within-case analysis. These tables enable the researcher to identify similarities and differences between the outcomes of the cases and, thus, to draw cross-case conclusions. Like with pattern matching, also this analysis relies strongly on argumentative interpretation.

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<sup>40</sup> Other analytical techniques for within case analysis mentioned by Yin (2003) are: explanation building, time series analysis, and using logic models.

<sup>41</sup> Braster (2000) presents a discussion of pattern matching based on the work of Yin (2003). The pattern matching technique as presented by Yin (2003) shows resemblance to the congruence method developed by George & Bennett (2005). The latter authors, however, present their ideas more in the context of variance in independent and dependent variables.

<sup>42</sup> The term focused in the name of this method refers to the fact that it only deals with certain aspects of the cases examined (George & Bennett, 2005).

<sup>43</sup> Reference from De Weerd-Nederhof (2001).

## 2.7 Summary

In this chapter, the research design of the study reported in this thesis was discussed. The research question introduced in Section 2.2 was defined as 'Which contribution to the understanding and improvement of mixed support networks of non-institutionalised elderly can be made by the field of organisation theory?' To answer this question a quantitative multiple case study will be carried out. The replication logic explains the value of investigating at least two cases. The data on which this research project is based were collected by E. Weenink in the context of his PhD project. The cases were selected using a combination of theoretical and pragmatic case selection. E. Weenink obtained access to the support networks of non-institutionalised elderly persons through two local providers of formal home care services. Interviews were used as primary source of data. The interviewees for each support network were selected using the snowballing sample strategy. The analysis of the cases takes place at within-case as well as at cross-case level. The general strategy for data analysis applied is the use of a descriptive framework. At within-case level, the main strategy employed is pattern matching, whereas the cross-case analysis method utilised is the tabulation approach. A framework for case analysis based on organisation theory is constructed in Chapter 3.

# 3 Framework for Case Description and Analysis

## 3.1 Introduction

As stated in the introductory chapter, the aim of the project described in this thesis is to conceptualise the support network of non-institutionalised elderly persons as an organisation. To structure the cases reports in the following chapters, a framework for case description and analysis is constructed in this chapter. After presenting introductory descriptions, network images and task tables as devices to describe the cases (Section 3.2), Henry Mintzberg's work on the structuring of organisations will be summarised in Section 3.5 to provide the framework for case analysis. Readers who are familiar with Mintzberg's organisational typology may decide to skip this section and to concentrate on the other sections of this chapter. The intermediary sections between Section 3.2 and 3.5 are used to justify the choice for Mintzberg's typology as a framework for case analysis and the present the research question in a reformulated form. Mintzberg developed his typology in the late 1970s. Therefore, Section 3.6 is devoted to answering the question whether new developments in organisation theory make a revision of Mintzberg's framework necessary. An overview of the framework for case analysis is provided in Section 3.7. A note on the place of this project within the field of Industrial Engineering & Management is presented in the final section of this chapter.

## 3.2 Framework for Case Description

### 3.2.1 Introduction

In their methodology book for 'business science',<sup>44</sup> Van der Velde et al. (2000) emphasise the importance of providing a good and complete case description. These authors provide the following guidance on the issues that should be included in a case description of an organisation:

- Describe the organisation chart to get some insight in the parts that constitute the organisation and the hierarchical structure of the organisation.
- Describe the shop floor where the output of products or services is produced.
- Describe the transformation process from input to throughput to output.
- Describe the board and the way in which they ensure that the goals, mission, and long-term strategy for the organisation are achieved.
- Describe the adjustment between the organisation and its environment.
- Describe the technostructure of the organisation.<sup>45</sup>

Other aspects that might be included in a case description of an organisation according to these authors are:

- The origination and development of the organisation.
- The type of organisations regarding, for example, ownership and product.
- The size of the organisation.
- The composition of the personnel of the organisation in numbers.
- The growth or decline over the past few years.
- The expected important demographic developments in the organisation's environment.
- The degree of centralisation and formalisation in the organisation (Van der Velde et al., 2000).

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<sup>44</sup> In Dutch: Bedrijfswetenschappelijk onderzoek.

<sup>45</sup> The technostructure relates to issues such as the design of work processes and jobs, the training of the employees, and the control and evaluation mechanisms to ensure the continuation of the processes (Van der Velde et al., 2000, p.83).

It will be tried to include all these aspects into the structure for case description and analysis that is developed in this chapter. Some of the terminology used might, however, need to be translated somewhat to fit the vocabulary normally used to describe support networks of non-institutionalised elderly. In this section three parts of the framework for case analysis are introduced: the introductory description (Subsection 3.2.2), network image (Subsection 3.2.3), and the task table (Subsection 3.2.4). They are all part of the descriptive aspects of the framework for case analysis.

### 3.2.2 Introductory Description

We need to acquire some basic knowledge of the situations under investigation before we can analyse the cases in organisation theoretical terms. A first step in this process is formed by the description of several key characteristics of the support network and its members. Examples are the age of the elderly person, the residential circumstances of this person, and the religious affiliation of the elderly person and her supporters. These characteristics will be presented in a description. Other aspects included in these texts might be the ages of the children of the elderly person and their geographic dispersion, and an overview of the health status of the elderly person. Generally, we can say that all interview topics interview (see Appendix 2) which are not explicitly included in the network images or the task tables are incorporated in the introductory descriptions. The use of network images and the task table as descriptive devices is clarified in the next two subsections.

### 3.2.3 Network Images<sup>46</sup>

When we are familiar with the basic data on the elderly person and her support network, the next step is to acquire an overview of the people surrounding this elderly person. A graphical form of network analysis will be used to show the people involved in the network of the elderly person.<sup>47</sup> The lines in these graphs show which interviewee refers to which network members. Since this might result in an image that is hard to read, graphs in which per interviewee is depicted to which he or she refers are included in the appendices.

The visual representation of the networks of the elderly under investigation will be created following the conventions of social network analysis. This implies that we see each individual as a node in a network of people and the reference between them as a link represented by an arrow (Bowling, 1991; Knoke & Yang, 2008). The arrowheads depict the direction of the reference. By definition, the network members do not refer back to the elderly persons whose network is investigated. Nodes may represent individual natural persons or collectivities. In the representation of networks in this thesis, the nodes represent individual persons as well as groups of people who fulfil a comparable role, but where not indicated by name. For example, the elderly person may have 10 grandchildren, but only two were mentioned by name because they visit their grandmother often or support her with some task. In that case, the two grandchildren who were mentioned by name will each be represented by a node, while the other eight grandchildren are included in one node. The relationships between the people in the network of an elderly person are not included in the network pictures.<sup>48</sup> In social network analysis terminology this means that egocentric graphs with the dyadic relationship between the elderly person - named ego - and the people in her social and support networks - called alters - will be drawn. Thus, only the first zone of ego is included and relations among alters are not included.

Some authors use network analysis methods in which the placement of nodes in the network represents, for example, the probability of a relation between the individuals (for example, Brandes & Wagner, 2003; Brandes, Raab & Wagner, 2001; Hoff, Raftery & Handcock, 2002). The placement of the nodes in the networks in this thesis, however, is at random. The main reason for positioning a node is to create an as orderly as possible representation of the network. All network images are drawn in Microsoft Visio.

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<sup>46</sup> Those interested in more detailed information on social network analysis, might wish to turn to, for example, Bernard, Johnsen, Killworth, McCarty, Shelley & Robinson (1990); Carrington, Scott & Wasserman (2005); L. C. Freeman (2000); Hanneman & Riddle (2005); Knoke & Yang (2005); Marsden (1990); J. Scott (2000); M. E. Walker, Wasserman & Wellman (1994).

<sup>47</sup> The representation of networks as graphs is but one method of depicting a social network. Matrices are a second commonly used method. Moreover, de matrices lend themselves to the calculation of several network measures (see for example, Knoke & Yang, 2008; J. Scott, 2000). Matrices could be applied in this thesis, but because I do not plan to perform mathematical operations, graphs seem to be the more suitable option to give an overview of networks of the elderly under investigation.

<sup>48</sup> As a consequence, we must conclude that the network graph does not present a comprehensive image of the total social network.

In conclusion, the network of the elderly will be represented by a relatively informal concept of social network studies that allows for qualitative data exploration. More sophistication is simply not needed for the descriptive purpose of this part of the study. Moreover, the relatively small size of the networks investigated does not force the use of advanced mathematical methods to construct an overview of the network.

### 3.2.4 Task Table

An early idea during the construction of this research project was to develop process analyses of the tasks being carried out in the support network (see for example, Biazzo (2000); Damelio (1996); Terhürne & Ter Welle (2007)<sup>49</sup> for approaches to business process analysis). During a preliminary investigation of one of the cases, however, this turned out not to be a possibility for several reasons. Firstly, it became apparent that the tasks being done by the members of the support network were not subsequent stages of a larger process, but they were all processes on their own. Secondly, the data were not collected at such a detailed level to allow the description of each task as a process. Additionally, it is debatable whether low-level description of these processes would add to answering the research question. Moreover, some interview questions, for example those on emotional support, were not suitable to include in a process analysis.

Nonetheless, an overview of the tasks carried out and the persons who do each task could contribute to the understanding of the cases. Therefore, I developed what I call a 'Task Table' as a descriptive device. The first column of this table comprises the tasks to be done. Four categories of tasks are distinguished: personal care, household tasks, administrative tasks and decision-making and social contacts. The subsequent columns represent the various caregivers. If a specific caregiver is involved in a specific task, a cross is placed in the corresponding cell in the Task Table. The final column is reserved for comments.

This table is complemented by a description of the social contacts, support by informal carers and support by formal carers received by the elderly person. The boundary between social contacts and support by informal carers might be somewhat vague. Additionally, some support has a two-fold function. The home care assistants, for example, primarily come to do the tasks they were hired for, such as cleaning and providing physical care. However, the importance of the chat they might have with the elderly people is not to be neglected.

## 3.3 In Search for a Model for Case Analysis

### 3.3.1 Introduction

We can expect to have a rather complete view of the support networks of the non-institutionalised elderly included in this study at the moment that all three descriptive devices are presented. However, to answer the research question, we need to analyse the cases from the perspective of organisation theory. The framework for that part of the analysis is presented in Section 3.4, whereas in the following subsections will be explained how I derived at the choice for the typology of Mintzberg's typology of the structure of organisations as analytical framework. In Subsection 3.3.2, organisation design will be identified as a branch of organisational theory particularly suitable for the research project reported in this thesis. The decision to apply the framework developed by Mintzberg instead of another theory from organisational design is elucidated in Subsection 3.3.3.

### 3.3.2 Opting for Organisational Design as Approach

The umbrella term for all types of academic investigations of organisations is organisation studies. Organisation theory is a sub discipline of this field, which also includes sub disciplines such as organisational sociology, and industrial psychology (Heugens, 2008). However, even the field of organisation theory is too wide to serve as the focus for this research project. W. R. Scott (2003) defines three main levels of analysis at which researchers may investigate organisations. First, the social psychological level, at which is dealt with the behaviour of individuals and interpersonal relationships within the organisation. Second, the organisational structure level, at which is

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<sup>49</sup> Terhürne & Ter Welle (2007) provide a short Dutch book on process mapping, while Damelio (1996) provides an English one. Several parts on the basics of process mapping in Terhürne & Ter Welle (2007) seem to draw from Damelio (1996) so heavily that these texts seem to be mere translations - without proper reference...

focused on the structural features or processes that characterise organisations. Third, the ecological level, which is concerned with the characteristics or action of the organisation as a collectivity operating in a larger system of external relations.<sup>50</sup> Although, discriminating between these levels of analysis is sometimes a bit arbitrary, it helps to make clear at which level the problems in support networks of the non-institutionalised elderly (see Subsection 1.3.3) are located. Scott's classification clarifies that the level of organisation theory to be applied to these support networks needs to relate to the organisational structural level.

Given the problems identified in Subsection 1.3.3, I consider concepts related to organisational design<sup>51</sup> to be most promising to contribute to the understanding and improvement of the functioning of support networks of non-institutionalised elderly persons. According to Visscher (2001) organisational design has always been a focal issue of academic management literature since its emergence at the end of the nineteenth century. Moreover, design of organisations has been strongly linked to the structural characteristics of the organisation (for example, Jelinek et al., 1981; De Leeuw, 1990; Visscher, 2001a). Examples of definitions of organisation design are:

- 'Organisation design is 'the planning of structures to deal adequately with the central issues of fit, coordination, commitment, and control' ... 'In its broadest sense, organisation design is the specification of the basic alignment or fit of the organisation with its environment, its technology, and its human resources, and the basic internal arrangements needed to support the chosen alignments' (Jelinek et al., 1981, p.7 & 8).<sup>52</sup>
- 'Organization design involves bringing about coherence or fit among organizational choices about strategy, organizing mode, and mechanisms for integrating people into the organization. The greater the fit among these organizational dimensions, the greater will be the organizational effectiveness' (Cummings & Worley, 2009, p.752).
- 'Organisation design is choosing a structure for an organisation taking into account its environment and its objectives' (De Leeuw, 1990, p. 244).<sup>53</sup>

Designing organisations can be described as 'a situation-specific and multifaceted activity' (Yokoyama, 1992). The purpose of this research project, however, is not to design a support network for a non-institutionalised elderly person, but to investigate whether the tools used for organisational design prove useful in the context of support networks of non-institutionalised elderly.

### 3.3.3 Opting for Mintzberg's Typology on the Structure of Organisations as Framework

Even if we have identified organisational design as a branch of organisational theory that suits the purposes of this research project, a particular framework for case analysis has to be chosen. Some prerequisites for the model to adopt can be written down. The framework, for example, has to comply with a wide definition of the phenomenon organisation, has to pay attention to coordination and cooperation, and has to comprise a wide range of organisational aspects. The latter two, however, can be expected to be satisfied by most theories from the field of organisation design. Moreover, the theory has to be widely regarded in the field of organisational theory and has to be internationally acknowledged.

Based on these criteria, the typology of Henry Mintzberg on the structure of organisations was selected to serve as a framework for case analysis. The initial publication of this typology was in the book *The Structuring of Organizations. A Synthesis of the Research* (Mintzberg, 1979b), which he wrote as a first book in a series on management policy (Mintzberg, 1977; Mintzberg, 1983a). He defines management policy as 'a field of study -

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<sup>50</sup> A similar classification of levels of organisational systems is presented by Cummings & Worley (2009), who discern the organisation level, the group level, and the individual level as the levels of organisational analysis.

<sup>51</sup> Unless mentioned otherwise, organisation design refers in this thesis only to the content of the design, which is elaborated in design-oriented organisation theory. As clarified by Visscher (2001a), the term organisation design is also used to indicate to the process of designing an organisation. The latter meaning of organisation design is the topic of design methodology.

<sup>52</sup> Jelinek et al. give the following definitions of the elements of this definition. 'Fit concerns the broadscale orientation of the organisation toward its environment and its internal components - the appropriateness of structure to: strategy, technology, members of the organisation as individual and as a social system, and to environment. Coordination concerns the internal reintegration of the multiple activities typically required for task completion. Control looks to the monitoring of task performance from detailed individual activities to overall organisational progress toward goals. Commitment deals with the motivation and involvement of people in the organisation and the overall impact of structure' (Jelinek et al., 1981, p.7).

<sup>53</sup> In Dutch: 'Een aanvaardbare omschrijving van organisatieontwerp is: het kiezen van een structuur voor een organisatie, rekening houdend met de omgeving en de doelstellingen' (De Leeuw, 1990, p. 244).

that concerned with the management of the total organization, with particular emphasis on its decisional behaviour' (Mintzberg, 1979b, p.vi). *The Structuring of Organisations. A Synthesis of the Research* can be regarded as the original and most elaborate account of Mintzberg's work on the structuring of organisations. Examples of shorter texts based on this book are Mintzberg (1980), Mintzberg (1981), Mintzberg (1984b), and Mintzberg, Ahlstrand & Lampel (2009, p. 322-327). The book *Structure in Fives. Designing Effective Organizations* (Mintzberg, 1983b) and Part II of *Mintzberg on Management. Inside Our Strange World of Organizations* (Mintzberg, 1989, chapter 6 to 14) present a condensed form of Mintzberg's theory on the structure of organisations. The conciseness of these texts comes at the expense of a loss of the depth of the description of the scholarly argument. Moreover, these texts are largely free of terminology. Mintzberg, however, added some relevant aspects in the last publications. Given the abundance of publications of various magnitudes on his typology by Mintzberg, the description of his framework in Section 3.5 will be relatively brief and schematic.

The approach to organisational design taken by Mintzberg is rooted in previous developments in organisational theory. Van den Berg (1990), for instance, makes a distinction between three phases in the development of organisation theory. The period from roughly 1850 to 1950 is described as the normative phase in which the rules for organisational design were claimed to be applicable to all organisations regardless of their size, primary process or the environment in which it operates. The following period runs from approximately 1950 to 1980 and is named the empirical phase, because empirical research led to descriptive theories in this phase. An important idea guiding this research was that universal rules for organisation design were a fiction. As a consequence of this idea, the so-called contingency theories were developed. The main idea of these theories is that the design of an organisation has to fit with aspects, such as, the characteristics of the environment the organisation operates in and the technical processes being applied. A drawback of the contingency theories in the context of organisational design is that these theories lack clear guidance on designing organisations. In other words, these theories provide insights into the relationships between several aspects of the organisation, but a coherent view of the organisation is lacking.<sup>54</sup> However, from the 1980s, a new approach was developed during a stage which Van den Berg (1990) names the typological phase. Mintzberg's construct of organisational configurations was seen as a significant contribution during this phase, because it links description of organisational characteristics to prescriptions of specific organisational structures in particular circumstances (indicated as contingencies). Moreover, Mintzberg's synthesis overcame the lack of further progress in the field of contingency studies which had become stymied due to the contradictory outcomes that resulted from the contingency studies (Miller & Friesen, 1980).<sup>55</sup>

A basic tenet of the configurational theory is that a certain degree of order exists in the world. Some organisational attributes or relationships are claimed to occur in clusters. These combinations are called configurations (Mintzberg, 1979b), Gestalts (Miller, 1981)<sup>56</sup> or archetypes (Miller & Mintzberg, 1984). Configurations are by definition multidimensional and have to characterise numerous aspects of many organisations (Miller & Friesen, 1984). The number of these configurations to exist is argued to be relatively limited,<sup>57</sup> while each configuration differs clearly from the other configurations. A 'predictive utility' is attributed

<sup>54</sup> In Mintzberg's words: 'what it lacks, however, is synthesis - the drawing together of the various findings into comprehensive theory' (Mintzberg, 1979b, p. 12). It was exactly this synthesis which Mintzberg attempted to develop in his work on the structuring of organisations (see also Mintzberg, 1979a). In his 1984 book chapter, he describes the successive stages of organisational design as: 'the 'one best way' approach towards the 'it all depends' approach (= contingency approach) to his own 'getting it all together' approach (= configuration approach (Mintzberg, 1984, p. 68).

<sup>55</sup> Miller & Friesen (1980) give as possible explanations for this lack of progress the fact that contingency researchers often research a limited number of variables at once, which might result in exclusion of critical intervening variables. Moreover, contingency studies favour cross sectional studies instead of longitudinal studies. Finally, samples of contingency theorists often include a wide variety of organisations, while conclusions are generally drawn sample-wide (see also, Miller & Friesen (1984)).

<sup>56</sup> The word Gestalt is written with a capital G, because the word is borrowed from the German language.

<sup>57</sup> Meyer, Tsui & Hinings (1993) reviewed the literature and identified the following suggestions for pressures capable of causing organisational configurations:

- Environmental selection for competitive fitness within ecological niches
- Mimetic, coercive, and normative diffusion of strategies and structures arising from the demands of powerful institutional actors
- Functional relationships among organisational components
- Replication of time-honoured practices through social construction
- Cognitive and sociocognitive processes

Based on Miller & Mintzberg (1984b), we can add the two forces below as - tentative - arguments for the existence of configurations:

- Darwinian forces may encourage only relatively few organisation forms to survive in a specific setting.



to configurational theory, because of the relatively small number of configurations or types that are 'believed' to encompass 'quite a large fraction of the population of organizations'. Discovering the relations between the nature, behaviour, and performance consequences of the most common configuration, should lead to 'a great deal of descriptive and prescriptive knowledge concerning many organizations' (Miller & Friesen, 1984, p.1). Thus, if we classify an organisation into a configuration on the basis of a few distinguishing attributes, this permits the prediction of several aspects of the organisation (Miller, 1981; Miller & Friesen, 1984). Therefore, an effective structure should be internally consistent and fit the contingency factors closely.

A theory that satisfies the criteria summed up in the first paragraph of this subsection is Henry Mintzberg's typology on the structure of organisations. Firstly, his typology is meant to be applicable to a variety of organisations. This becomes apparent when he writes in the preface of his book: 'I use the word 'management', instead of the more common 'business' as the adjective for policy to indicate that this series is about all kinds of organizations' (Mintzberg, 1979b, p. vi & vii). Secondly, coordination and cooperation are central themes in Mintzberg's work on the structuring of organisations. This aspect can also be illustrated with a quote: 'Every organized human activity gives rise to two fundamental and opposing requirements: the division of labor into various tasks to be performed and the coordination of these tasks to accomplish the activity. The structure of an organization can be defined simply as the sum total of the ways in which it divides its labor into distinct tasks and then achieves coordination among them' (Mintzberg, 1979b, p.2). Thirdly, Mintzberg's typology takes into account a wide range of organisational aspects. Lammers et al. (2000) commend on Mintzberg's typology because it covers a relatively large number of contingency factors, whereas Miller & Friesen (1984) explain that Mintzberg used a large number and wide range of variables to characterise each configuration he identified. Also when the variables of Mintzberg's typology are compared to the dimensions covered in other frameworks, it can be concluded that Mintzberg includes most of the dimensions commonly used (compared to, for example, Fulop, Hayward & Lilley, 2006; Hatch, 2006). Some authors even found the typology by Mintzberg even more comprehensive in its covering of various aspects of the organisations than other frameworks for organisational analysis (Rogier & Singels, 1997). Moreover, Mintzberg's typology is well regarded at the international stage and included in several anthologies on organisation studies (for example, Pugh & Hickson, 1996; Shafritz & Ott, 1996). To mention just some of the qualifications that can be found in the literature:

- *The Structuring of Organisations* is a classic in the field. Mintzberg has a wide knowledge of organisational theory and developed an elaborate theoretical construct. His typology is sophisticated (Lammers et al., 2000, p. 487- 488).
- Shafritz & Ott (1996) classify the theories they included in their anthology - among which Mintzberg's ideas on the structuring of organisations - as 'the most important works in organisation theory, written by the most influential authors in the field... These are theories that have withstood the test of time - the critically acclaimed masterworks in the field' (Shafritz & Ott, 1996, p.vii).
- 'Mintzberg's theory is not only useful for typifying organisations, but has also value for diagnosing shortcomings' (De Leeuw, 1990, p. 267).<sup>58</sup>
- Mintzberg's *Structuring of Organisations* is said to belong almost certainly to the list of ten most influential scholarly books on management ever published by Heugens (2008).<sup>59</sup>
- Grinyer (1984) claims Mintzberg's theory to be 'a key volume on the subject of organization', which is - especially in the case of the 1983 book *Structure in Fives* - 'of likely practical interest to the planner'.
- According to Miller (1990), Mintzberg's typology is among the more prominent of typologies. Moreover, he claims that Mintzberg's differentiation between types of organisations has furthered organisation theory and has had important implications for organisational outcomes.

Understandably, Mintzberg is not the only author who developed a rather comprehensive typology of configurations of organisational characteristics. For instance, the 'ATMOC quintet'<sup>60</sup> of organisational types developed by Lammers et al. (2000) shows significant resemblance to the typology developed by Mintzberg. Due to its sole publication in Dutch, however, this typology did not travel beyond the Dutch borders. Another

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- Organisations might need to adopt a configuration to achieve consistency between its internal characteristics, synergy or mutual complementarity in its processes, and fit with its environment.

<sup>58</sup> In Dutch: 'Mintzberg's theorie is niet alleen aardig om organisaties te typeren maar ook om gebreken te diagnostiseren' (De Leeuw, 1990, p. 267).

<sup>59</sup> The other books, this author expects to be included, in this list are Cyert and March's *Behavioral Theory of the Firm* (1963); Lawrence and Lorsch's *Organization and Environment* (1967); March and Simon's *Organizations* (1958); Morgan's *Images of Organization* (1986); Pfeffer and Salancik's *External Control of Organizations* (1978); and Thompson's *Organizations in Action* (1967) (Heugens, 2008).

<sup>60</sup> ATMOC stands for: action organisation, traditional organisation, mechanistic regime, and cooperation (In Dutch: actie-organisatie, traditionele organisatie, mechanische organisatie, coöperatie).

example of a publication that might provide a useful framework for the analysis of support networks of the non-institutionalised elderly is *Theories of Organizations. Form, Process, and Transformation* (Hage, 1980). Despite its comprehensiveness, this book did not become a standard work in the field. Some authors consider the lack of resonance of this publication to be undeserved (Lammers et al., 2000, p.592). Deserved or undeserved, the lack of recognition of Hage's book is a reason to prefer Mintzberg's typology as a framework for case analysis in this research project.

Mintzberg first published his ideas on the structure of organisations in 1979. Therefore, we might question whether other theories were developed more recently that might be more suitable to investigate the support networks of non-institutionalised elderly. My answer to this question would be that I was not familiarised with such theories during the Industrial Engineering & Management programme. Moreover, I did not come across a more appropriate theory during the extensive literature research, which I did for this research project. Furthermore, the ideas of Mintzberg are still widely cited in textbooks on organisational theory and design. Daft (2001), for examples, refers to the typology on the structure of organisations by Mintzberg approvingly and adopts his ideas on the five parts of an organisation.<sup>61</sup> In spite of all these reasons to opt for Mintzberg's typology of organisations as analytical framework for case analysis, I feel the issue whether it needs to be updated requires some more consideration. This, however, is best done after the elaboration of Mintzberg's typology and is, therefore, the topic of Section 3.6.

### 3.4 Reformulated Research Question

The research question to be answered in this thesis was formulated in Section 2.2 as:

**Which contribution to the understanding and improvement of mixed support networks of the non-institutionalised elderly can be made by the field of organisation theory?**

Given the decisions elaborated on in the previous section, the research question can be refined. The adapted research question reads:

**Which contribution to the understanding and improvement of mixed support networks of the non-institutionalised elderly can be made if we apply Mintzberg's typology on the structure of organisations as a tool?**

For the readers unfamiliar with this typology a schematic overview is provided in the section to come. At this point, it might be worth to mention that it is not the application of Mintzberg's typology as such which is the purpose of the research reported in this thesis. Mintzberg's typology serves as a specimen of an organisational theory which is used to investigate the value of organisation theory for the understanding and improvement of mixed support networks of non-institutionalised elderly persons. Although Mintzberg's typology proved rather comprehensive and is widely regarded in the field (see previous section), this approach implies that on the basis of the application of Mintzberg's framework we cannot reach a judgement on the usefulness of organisational theory in general that is beyond any doubt.

### 3.5 Mintzberg's Typology as Framework for Case Analysis

#### 3.5.1 Introduction

In this section, Mintzberg's typology on the structure of organisations is described with the purpose to serve as a conceptual framework for the case analyses in the Chapters 4 and 5. As mentioned in the foregoing section,

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<sup>61</sup> Although this is not the proper place to develop a full explanation for the sustained popularity of Mintzberg's typology, some clues can be found in the literature. According to W. R. Scott (2003), for example, major paradigmatic shifts did not occur in organisational theory since circa 1970. Hatch (2006), however, explains the enduring popularity of contingency and contingency related theory by their form of recipes for success. Another explanation, which is however only based on my own impression, might be that the attention of researchers in Industrial Engineering & Management - and maybe also organisational theory more in general - shifted in the direction of other topics, such as innovation studies and the application of information and communication technology, over the past few decades.

Mintzberg's typology on the structure of organisations is, among others, selected because it provides an integrative account of theories on the structure of organisations. This section provides an overview of Mintzberg's argument and establishes a framework for the analysis of the support networks of non-institutionalised elderly. Unless mentioned otherwise, the representation of Mintzberg's ideas about organisational configurations is based on the representation in *The Structuring of Organisations* (Mintzberg, 1979b) and the Chapters 6 to 14 of the book *Mintzberg on Management* (Mintzberg, 1989).

Mintzberg's typology is an example of a conceptually derived configuration on the basis of a synthesis of the existing literature on the structure of organisations (Meyer et al., 1993; Miller & Friesen, 1984). He identifies several issues which cluster into seven configurations. These issues are the basic parts of the organisation, coordinating mechanisms, systems of flows, design parameters, and contingency factors. They will be described in the following five subsections. In Subsection 3.7, the configurations which Mintzberg constructed based on these five elements are presented.

### 3.5.2 Basic Parts of Organisations

According to Mintzberg, five - in his later work six - basic parts may be distinguished in an organisation. These are the operating core, the strategic apex, the middle line, the technostructure, the support staff, and the ideology.<sup>62</sup>

The operating core consists of all people who perform tasks related to the production of products or services. Mintzberg refers to them as the operators. The tasks of these operators are related to four prime functions: securing the inputs for the production, transforming inputs into outputs, distributing these outputs, and providing direct support to the input, transformation, and output functions. As such, the operating core produces the outputs inevitable for the survival of the organisation.

The overall responsibility for the organisation rests with the people who form the apex of the organisation. These top managers - and those who provide direct support to them - have to ensure that the organisation serves its mission effectively. To ensure this, three types of duties have to be done. Firstly, together with the middle line, the top managers have to provide direct supervision to the members of the organisation to make certain that the whole organisation functions smoothly as a single integrated unit. Tasks within this group of duties are, for example, designing the organisation structure, assigning people and resources to tasks, finding resolutions to conflicts, and reviewing the employees' activities. Secondly, the members of the strategic apex have to manage the relationship of the organisation with its environment, which Mintzberg names the boundary conditions. An example of a task in this category is the role of spokesperson. Finally, the people in the strategic apex have to develop the strategy of the organisation. Developing a strategy means interpreting the environment and developing a stream of decisions in the organisation to cope with the outside world.

The middle-line, which consists of several hierarchical layers of managers with formal authority, establishes a link between the strategic apex and the operating core. Middle-line managers are especially needed when organisations apply direct supervision as a coordinating mechanism, because of the personal interaction needed between the supervisor and operators. The tasks of the middle-line manager as a link between strategic apex and operating core consist of collecting data on the performance of the unit and passing this information up to the higher hierarchical levels and intervening in the - upward as well as downward - flow of decisions. Additionally, middle-line managers manage the boundary conditions of their own unit and formulate a strategy for this part of the organisation.

The fourth organisational part to be discussed is the technostructure. The analysts - and their supporting and clerical staff - who make up the technostructure contribute to the organisation by affecting the work of others. Instead of carrying out an aspect of the primary process, they, for example, design the operating work or train the operators. Given that organisational environments normally are in a state of continually change, the task of the technostructure employees is to adapt the internal process to meet environmental change. Mintzberg's focus is on the control analysts of the technostructure, who design the standardisation in the organisation. The technostructure may perform at all levels of the hierarchy.

The final part of the organisation to be introduced is the support staff. The support staff consists of specialised units that contribute to the organisation, but are not involved in the operating work. In return for

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<sup>62</sup> Mintzberg uses the following terminology to refer to groups of these parts:  
Middle management (also middle level): middle-line and technostructure and support staff  
Management: strategic apex and middle line  
Staff: technostructure and support staff  
Line: strategic apex and middle line and operating core (Mintzberg, 1979b).

organisational resources, the support unit provides services to the organisation as a whole. Support units can be found at various levels of the hierarchy and are generally self-contained. Examples of support units are the legal counsel, the refectory, and the PR office.

In his later work, Mintzberg introduced a sixth part, which should be recognisable in every active organisation. This organisational part is ideology. Mintzberg defines ideology as encompassing 'the traditions and beliefs of an organisation that distinguish it from other organizations and infuse a certain life into the skeleton of its structure' (Mintzberg, 1989, p.98). Other authors also use the term organisational culture to refer to this phenomenon.

Based on these six basic parts of the organisation, Mintzberg constructs a general picture of the organisation (see Illustration 3.1). Centrally we find the small strategic apex, the flaring middle line and the large operating core drawn as one block to indicate the single chain of formal authority. The technostructure and support staff are depicted as ellipses separated from the line to indicate that they only indirectly influence the operating core and that their actual form in organisations is highly irregular. The kind of halo around the five other parts of the organisation represents the ideology. The information in this subsection is summarised in Illustration 3.1.

Part	Description	Graphical Representation
Ideology	The traditions and beliefs of the organisation that makes it different from other organisations.	
Strategic apex	The top manager or managers, who oversee the whole organisation.	
Middle line	The hierarchy of authority between the operating core and the strategic apex.	
Technostructure	The analysts outside the line hierarchy who perform the administrative duty of planning and controlling the work of others.	
Support staff	Units of the organisation that provide various internal services.	
Operating core	The operators are the persons who perform the basic work of producing products and delivering services.	

**Illustration 3.1 - The six basic parts of the organisation**

The graphical representation of the organisation is a copy from Mintzberg (1989, p.99).

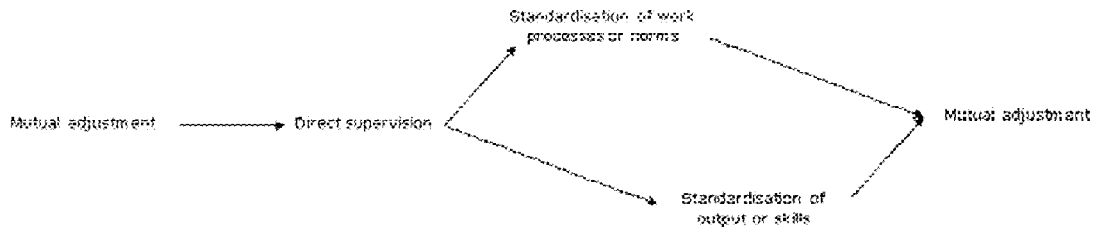
### 3.5.3 Coordinating Mechanisms in Organisations

Mintzberg defines the structure of an organisation as 'the sum total of the ways in which it divides its labour into distinct tasks and then achieves coordination among them' (Mintzberg, 1979b, p.2). As a result of this central position of coordination in the organisation structure, Mintzberg uses it as starting point for building his theory of organisational configurations. Coordination can be realised applying various means, which all fit into one of five categories. These coordinating mechanisms explain the fundamental ways in which organisations coordinate their work.

The first coordinating mechanism introduced is mutual adjustment. Using mutual adjustment means using informal communication to coordinate the tasks at hand. Consequently, the people performing the tasks ensure that coordination is achieved. If the coordinating mechanism of direct supervision is applied, one individual takes responsibility for the work of others. The person supervising issues instructions to member at a hierarchically lower level of the organisation and monitors their actions. The other four coordinating mechanisms all standardise some aspect of organisational life. Which form is suitable in a specific case depends on the characteristics of the work. Standardisation of work processes achieves coordination by specifying or programming the contents of the work to be done. It can be applied to relatively simple and routine tasks. However, if more complex work is done, standardisation of the output by specifying the results of the work, for example by using performance criteria or by establishing product dimensions, but leaving the decision on the means to reach this result to the employee, might be necessary. Standardisation of skills and knowledge is applied to complex work for which neither the work itself nor its outputs can be standardised. This coordinating mechanism requires some kind of training need to be specified to perform the work. The final coordinating mechanism, the standardisation of norms, was added to the spectrum of coordinating mechanisms by Mintzberg

(1989). In organisations using this coordinating mechanism a set of beliefs that infuses the majority of the work being done by the members of the organisation is controlled. Mintzberg mentions a religious order as an example of an organisation in which coordination is achieved by the standardisation of norms.

The application of these coordinating mechanisms roughly follows a pattern. Because of its simplicity, mutual adjustment is generally used in the very simplest of organisations, such as start-ups. As organisational work grows more complex, the favoured means of coordination seem to shift from mutual adjustment to direct supervision to standardisation of work processes to standardisation of outputs to standardisation of skills. Though it might seem surprising, mutual adjustment is - in addition to its application in simple situations - the coordinating mechanism used in the most complex circumstances. The adaptability of this mechanism is what it makes usable for situations in which standardisation of work outputs or skills, proves impossible. This continuum of coordinating mechanisms is depicted in Illustration 3.2.



**Illustration 3.2 - A rough continuum of complexity of coordinating mechanisms**

Adapted from Mintzberg (1979, p.7).

Despite the elegance of the continuum presented in the foregoing paragraph, practice seems to be somewhat more complicated. Though organisations will favour a specific coordinating mechanism under certain conditions, the mechanisms are substitutable in that organisations can replace one with another. Moreover, most organisations do not rely on a single coordinating mechanism, but they combine several mechanisms instead. Especially the application of direct supervision and mutual adjustment seems to be inevitable in any organisation. To conclude this subsection, the table in Illustration 3.3 provides a summary of the characteristics of each of the coordinating mechanisms.

Coordinating mechanism	Description
<b>Mutual adjustment</b>	Coordination is achieved by the process of informal communication.
<b>Direct supervision</b>	Coordination is achieved by having one person who tells several others what they have to do and in what way.
<b>Standardisation of work processes</b>	Coordination is achieved by providing specifications of work processes of people carrying out interrelated tasks.
<b>Standardisation of outputs</b>	Coordination is achieved by specifying the outcomes of the work to be done.
<b>Standardisation of skills</b>	Coordination is achieved by the virtue of the related training that the workers have received. Relates to standardisation of skills as well as knowledge.
<b>Standardisation of norms</b>	Coordination is achieved by control of the norms infusing the work for the entire organisation.

**Illustration 3.3 - Overview of the coordinating mechanisms**

### 3.5.4 Systems of Flows in Organisations<sup>63</sup>

The parts of an organisation do not function independently of each other. On the contrary, the linkages between the parts of the organisation are multiple and complex. According to Mintzberg, the parts of the organisation are joined together by four flows: authority, work material, information, and decision processes. Based on these flows, Mintzberg creates a typology of five systems of flows. These systems of flows are certainly not mutually exclusive and, in general, all five are to be found in any organisation. Separating them for analytical purposes leaves us with incomplete images of the functioning of real organisations. Each system of flows, however, explains an aspect of organisational life relevant for understanding the structuring of organisations.

The system of formal authority might represent the best-known and most traditional view of the functioning of organisations. This organisational aspect also received attention from early management theorists.

<sup>63</sup> The exposé on systems of flows is excluded in Mintzberg (1989).

Formal authority relates to the hierarchical levels in an organisation, which have the possibility to use direct supervision. Therefore, the system of formal authority is one of the characteristics of an organisation, which is depicted in the organisational chart.

Similar to the system of formal authority, the system of regulated flows derives also from a relatively early view of organisational functioning. It was developed by branches of organisational theory such as scientific management and control system theorists. This view of the organisation shows flows of work materials, information and decision processes as far as they are systematically and explicitly controlled. According to Mintzberg, three distinct flows can be identified in the regulated system. Firstly, the operating work flow, which involves the movements of materials and information for the primary process in the operating core. Although regulated workflow relationships are defined as relating to the operating core, they may also take place at other levels in the hierarchy. The regulation of these flows varies from one organisation to another. Secondly, the regulated control flows structure the vertical - upward as well as downward - flows of information and decision making between the operating core, the middle line and the strategic apex. Lastly, the communication flow between line and staff is the third aspect of the regulation system. This flow ensures that the staff receives the information needed for their work, while the advices they produce are communicated to the line.

The idea that not everything happening in an organisation can be caught in terms of formal systems of authority and regulated flows, made behavioural scientists stress the importance of informal communication between members of the organisation. Mintzberg includes the system of informal communication as the third system of flows. Compared to the two flows described in the previous paragraphs, the flow of informal communication is less structured and less fixed, because it is multichanneled and varied. The regulated flows in organisations are supplemented with rich networks of informal communication, which might even circumvent the more formal flows of communication. Informal communication in organisations takes place for work-related as well as social reasons. Even the execution of the most standardised tasks by operators requires a certain degree of mutual adjustment, for example, if an unexpected change occurs. Also at the higher hierarchical levels, however, informal communication is desirable. Managers, for example, might prefer verbal communication on the performance of the organisation to the reports from the management information system, because of the value added by the possibility to read, for instance, facial expressions, gestures, and tones of voice.

Whereas the three foregoing systems of flows are relatively well developed in the literature and separate formal and informal flows within the organisations, the fourth and fifth systems of flows are of a more integrative and more innovative - at least at the time of writing of *The Structuring of Organisations* - nature. The fourth system of flows is the system of work constellations. This system of flows suggests that the informal communication network follows specific paths and is related to the formal authority system. Central to the system of work constellations is the idea that organisational members tend to work in smaller peer groups. These groups may be based on horizontal as well as vertical relationships. Usually these groups are formed by functional specialisation or work flow at the lower levels of the organisation, while they cross the boundaries of specialities or functions at the managerial levels. This distinction implies that organisational members - in contrast to what the regulated systems view suggests - deal with information of different kinds according to their hierarchical level in the organisation. The quasi-independent groups of individuals that can be identified on these grounds are named work constellations. These work constellations are not necessarily formal or informal. Actually, the degree of formality seems to depend on the part of the organisation. The work constellations in the operating core and the support staff will generally have a formal character, while the technostructure and middle line will form informal work constellations that cut across departmental lines.

The system of ad hoc decision processes is the final system of flows to discuss. This system of flows is comparable to the system of work constellations in that it blends formal and informal aspects of organisational life. Defining a decision as 'a commitment to action' (Mintzberg, 1979, p.58), Mintzberg presents ad hoc decision processes as a flexible flow system that combines aspects of formal authority, the regulated flow of information, and the flow of informal communication to explain certain organisational behaviour. Despite the availability of some rather general conceptual typologies on types of decisions, such as the classification of decision as operating, administrative and strategic, thorough empirical research on the flow of decision processes in the organisation was lacking when Mintzberg developed his work on the structuring of organisations. Therefore, Mintzberg reached some rather tentative conclusions based on a case description. This example showed the complex intermingling of formal and informal flows of authority, communication, and decision processes. Mintzberg concludes that 'only by focussing on these real flows - of authority, work materials, information, and decision processes - can we begin to see how the organisation really functions. Such an understanding is an important prerequisite for a thorough understanding of organisational structure' (Mintzberg, 1979b, p.63). Illustration 3.4 on the next page shows a summary of the systems of flows and a visual representation of each of them. As stated before, each system of flows can be expected in any organisation. A combined overlay of the

images of the systems of flows on the organisational logo is presented in Illustration 3.5. This image helps us to get an idea of the complexity of the functioning of organisations.

### 3.5.5 Design Parameters

Mintzberg compares designing organisations to turning knobs to adjust the functioning of a machine. For organisations, Mintzberg identifies a set of nine manipulable parameters that determine the division of labour and the achievement of coordination. These design parameters can be classified in four categories: design of positions, design of a superstructure,<sup>64</sup> design of lateral linkages, and design of a decision making system. The information in the table in Illustration 3.6 provides a summary of each of the nine design parameters.

### 3.5.6 Contingency Factors

All organisations exist in an environment. Some situational characteristics - named contingency factors in Mintzberg's framework - influence the choice of the design parameters presented in the preceding subsection. However, this relationship is reciprocal, because the design parameters might also influence the choice for certain situational factors. For example, when an organisation creates the opportunity to enter a new market. The contingency factors are classified in four groups: age and size, technical system, environment, and power. Mintzberg formulates the contingency factors as the hypotheses included in Illustration 3.7.

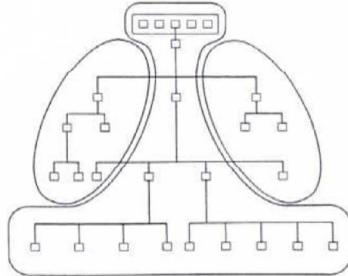
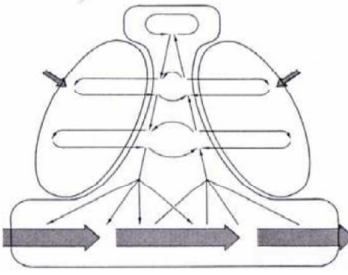
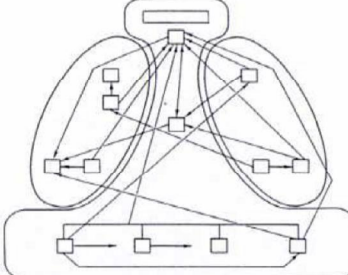
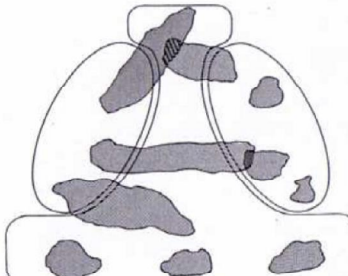
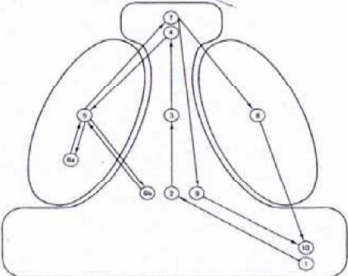
### 3.5.7 Configurations

In the previous sections, the six basic parts of the organisation, the six coordinating mechanisms, the five systems of flows, the nine design parameters, and the fourteen contingency factors were introduced. In Mintzberg's typology on the structure of organisation, all these elements cluster together in seven configurations. Mintzberg named them the entrepreneurial organisation, the machine organisation, the professional organisation, the diversified organisation, the innovative organisation, the missionary organisation, and the political organisation.<sup>65</sup> The relationship between the pulling part, the direction of the pull exercised, and the resulting configuration with its prime coordinating mechanism and type of decentralisation applied, is exemplified in Illustration 3.8, whereas the Illustrations 3.9a to 3.9g show us the logos for each of the configurations.

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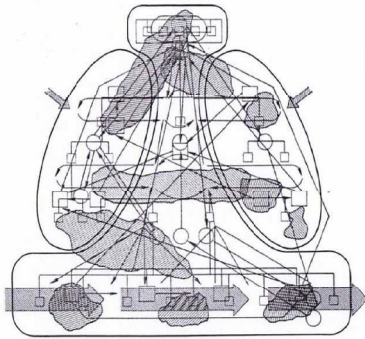
<sup>64</sup> Mintzberg used the term superstructure to 'refer to the overall network of subunits reflected in the organisational chart' (Mintzberg, 1989, p.103).

<sup>65</sup> In Mintzberg's earlier publications (among others, 1979; 1983), he called these configurations respectively: the simple structure, the machine bureaucracy, the professional bureaucracy, the divisionalised form, and the adhocracy. The sixth and seventh configuration - the missionary and the political organisation - had not been identified as proper configurations at that time.

System of flows	Description	Logo with overlay
<b>Formal authority</b>	The flow of formal power down the hierarchy. Generally, the formal authority is depicted in the organisation chart.	 A hierarchical organizational chart with a top-level box containing four smaller boxes. Below it are two columns of three boxes each, and a bottom row of six boxes. Lines connect the top level to the two columns, and the two columns to the bottom row.
<b>Regulated activity</b>	The flow of production work through the operating core, the commands and instructions down the administrative hierarchy to control the operating core, of feedback information on results back up, and of staff information and advice feeding into decision making from the sides.	 A diagram showing a central vertical flow of three boxes. On either side, there are two boxes each, connected to the central flow by horizontal lines. At the bottom, there are three large horizontal arrows pointing to the right.
<b>Informal communication</b>	This flow describes an organisation as a system of informal communication. The image represents a map of which organisation members communicate with each other informally. This flow puts emphasis on the role of mutual adjustment in coordination.	 A diagram showing a central vertical flow of three boxes. On either side, there are two boxes each, connected to the central flow by multiple lines, indicating a complex network of informal communication.
<b>Set of work constellations</b>	Work constellations are the clusters of peer groups - which might span the boundaries of parts of the organisations - that people form to get their work done. Constellations are only loosely coupled to each other. Each of them deals with distinct decision appropriate to the hierarchical level at which the work constellation operates.	 A diagram showing a central vertical flow of three boxes. On either side, there are two boxes each, connected to the central flow by multiple lines. The diagram is overlaid with several dark, irregular shapes representing work constellations.
<b>Ad hoc decision processes</b>	This image shows the simplified flow of one strategic decision from the beginning to the end.	 A diagram showing a central vertical flow of three boxes. On either side, there are two boxes each, connected to the central flow by multiple lines. The diagram is overlaid with several dark, irregular shapes representing ad hoc decision processes.

**Illustration 3.4 - Summary of the systems of flows in organisations**  
All images are copies from Mintzberg (1983b, p. 20).





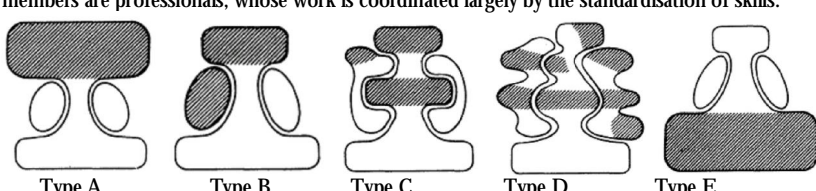
**Illustration 3.5 - Combined picture of all systems of flow in an organisation**  
 The image is a copy from Mintzberg (1983b, p. 22).

In the table presented in Illustration 3.10, a summary is given of the associations between the configurations, the design parameters, the functioning of the organisation, and the contingency factors. The missionary organisation and the political organisation are excluded from this overview. These configurations were introduced by Mintzberg in his book on power in organisations (Mintzberg, 1983a). However, the main reason is that these configurations do hardly exist as independent configurations. More often, the missionary and political configuration can be identified as an overlay on one of the other five organisation types.<sup>66</sup>

The ideology is the key part of the missionary organisation that makes sure that the organisation is pulled together. A rich system of values and beliefs is what distinguishes missionary organisations from other organisations. These values and beliefs are generally rooted in a sense of mission associated with charismatic leadership that is developed through traditions and reinforced over time by identification of new organisation members with the values and beliefs of the organisation. Coordination takes place through the standardisation of norms, which are reinforced by selection, socialisation, and indoctrination of the - prospective - members of the organisation. The units of a missionary organisation are relatively small and are loosely coupled for cooperative purposes. Missionary organisations are highly decentralised, while powerful normative controls are in place. As an overlay on one of the five basic configurations, the missionary organisation is most often associated with the entrepreneurial organisation, followed by the innovative organisation, the professional organisation, and then the machine organisation.

Whereas the missionary organisation was characterised by a key part of the organisation and a coordinating mechanism in Illustration 3.8, the absence of such characteristics seems to be the main feature of the political organisation. The political organisation is also deviant in the sense that it is the only organisation type that does not aim to achieve coordination. Mintzberg indeed regards politics as a force that fosters disorder and disintegration and has to do with informal power instead of coordination. Politics in itself is neither negative nor positive. On the one hand, politics can undermine the normal processes in an organisation by infiltration and destruction. On the other hand, if it functions as a warning signal or as a strategy to bring about necessary change, politics may strengthen an organisation. The means of power applied in the political configuration are technically illegitimate, often serve the self-interest of the person using politics, and may result in conflicts that pull individuals or units apart. Politics may capture an organisation by dominating its processes, but more often, it will be found as an overlay on the five organisation types summarised in the table of Illustration 3.10.

<sup>66</sup> Moreover, Mintzberg does not specify these two configurations using the same characteristics in terms of design parameters, functioning, and contingency factors as he did for the other five configurations (Mintzberg, 1979b; Mintzberg, 1989).

Group	Design parameter	Explanation of design parameter
Design of positions	Job specialisation <sup>67</sup>	Job specialisation in the horizontal dimension - the predominant form of division of labour - is an inherent part of every organisation. Vertical job specialisation separates the performance of the work from the administration of it.
	Behaviour formalisation	Behaviour formalisation represents the organisation's way of proscribing the discretion of its members, essentially of standardising their work processes. Behaviour may be formalised in three basic ways: by position (specifications being attached to the job itself), by the workflow, (specifications being attached to the work), and by rules (specifications being issued in general).
	Training and indoctrination	Training refers to the process by which job-related skills and knowledge are taught. Indoctrination is the process by which organisational norms are acquired.
Design of superstructure	Unit grouping	Grouping is a fundamental means to coordinate work in the organisation. Grouping can have at least four important effects: establishing a system of common supervision among positions and units, sharing of common resources among positions and units, creating common measures of performance, and encouraging mutual adjustment. Six bases for grouping: grouping by knowledge and skill, grouping by work process and function, grouping by time, grouping by output, grouping by client, grouping by place. Four basic criteria to select the bases for grouping: interdependencies related to the workflow, the work process, the scale of the work, and the social relationships around the work.
	Unit size	Unit size is driven up by 1) standardisation of all three types, 2) similarity in the tasks performed in a given unit, 3) the employees' needs for autonomy and self-actualisation, and 4) the need to reduce distortion in the flow of information up the hierarchy; and it is driven down by 1) the need for close direct supervision, 2) the need for mutual adjustment among complex interdependent tasks, 3) the extent to which the manager of a unit has non-supervisory duties to perform, and 4) the need for members of the unit to have frequent access to the manager for consultation or advice.
Design of lateral linkages	Planning and control systems	The purpose of a plan is to specify a desired output at some future time. The purpose of control is to assess whether or not that output has been achieved.
	Liaison devices	Organisations have developed a whole set of devices to encourage liaison contacts - e.g., liaison positions, task forces and standing committees, and integrating managers - between individuals, devices that can be incorporated into the formal structure.
Design of decision making system	Vertical decentralisation	Vertical decentralisation is concerned with the delegation of decision-making power down the chain of authority, from the strategic apex into the middle line. Horizontal decentralisation is the shift of power from line managers to staff managers, analysts, support specialists, and operators. Five distinct types of vertical and horizontal decentralisation exist and can be placed along a continuum, from centralisation in both dimensions to decentralisation in both dimensions. Vertical and horizontal centralisation (A): Decisional power is concentrated in the hands of a single individual, the manager at the top of the line hierarchy. Limited selective horizontal decentralisation (B): Formal power is concentrated in the upper reaches of the line hierarchy, notably at the strategic apex. Because of their role in formalising behaviour, the analysts are able to gain some informal power. Limited parallel vertical decentralisation (C): Here we find the organisation that is divided into market units, or divisions, to whose managers are delegated (in parallel) a good deal of formal power to make the decisions concerning their markets. Selective vertical and horizontal decentralisation (D): Here we see our findings about selective decentralisation in the two dimensions coming together. In the vertical dimension, power for different types of decisions is delegated to work constellations at various levels of the hierarchy. In the horizontal dimension, these constellations make selective use of the staff experts, according to how technical the decisions are that they must make. Vertical and horizontal decentralisation (E): Decision power here is concentrated largely in the operating core, because its members are professionals, whose work is coordinated largely by the standardisation of skills.
	Horizontal decentralisation	 <p style="text-align: center;">Type A      Type B      Type C      Type D      Type E</p>

### Illustration 3.6 - The design parameters

The explanations of the design parameters are (near) quotes from Mintzberg (1983b, p.26, 28, 33, 34, 38, 39, 47, 49, 50, 54, 70, 73, 81, 82, 101, 105, 114, 115, 116). The images of the five types of decentralisations are copies from Mintzberg (1980, p. 326). These pictures are also available on page 115 of Mintzberg (1983b). The inflated size of a shaded part in these images represents its special decision-making power, not its size in number of organisation members.

<sup>67</sup> Job enlargement is the antonym of job specialisation used by Mintzberg. 'In horizontal job enlargement, the worker engages in a wide variety of the tasks associated with producing products and services.... When a job is enlarged vertically, or 'enriched,' not only does the worker carry out more tasks, but he also gains more control over them (Mintzberg, 1983b, p.30).

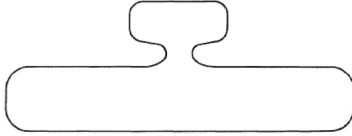
Category	Number	Hypothesis
<b>Age and size</b>	1	The older the organization, the more formalised its behaviour
	2	The larger the organization, the more formalised its behaviour
	3	The larger the organization, the more elaborate its structure, that is, the more specialized its tasks, the more differentiated its units, and the more developed its administrative components
	4	Structure reflects the age of the industry from its founding
<b>Technical system</b>	1	The more regulating the technical system that is, the more it controls the work of the operators - the more formalised the operating work, and the more bureaucratic the structure of the operating core
	2	The more complex the technical system, the more elaborate and professional the support staff
	3	The automation of the operating core transforms a bureaucratic administrative structure into an organic one
<b>Environment</b>	1	The more dynamic an organization's environment, the more organic its structure
	2	The more complex an organization's environment, the more decentralised its structure
	3	The more diversified the organisation's markets, the greater the propensity to split it into market-based units, or divisions, given favourable economies of scale
	4	Extreme hostility in its environment drives any organisation to centralise its structure temporarily
<b>Power</b>	1	The greater the external control of an organisation, the more centralised and formalised its structure
	2	A divided external coalition will tend to give rise to a politicised internal coalition, and vice versa
	3	Fashion favours the structure of the day (and of the culture), sometimes even when inappropriate

Illustration 3.7 - The contingency factors<sup>68</sup>

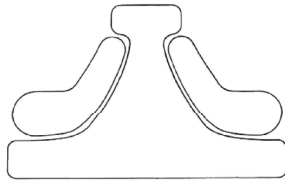
Pulling part and key part of the organisation	Pull	Resulting configuration	Prime coordinating mechanism	Type of decentralisation
<b>Strategic apex</b>	to lead	Entrepreneurial organisation	Direct supervision	Vertical and horizontal centralisation
<b>Technostructure</b>	to rationalise	Machine organisation	Standardisation of work processes	Limited horizontal decentralisation
<b>Middle line</b>	to balkanise	Diversified organisation	Standardisation of outputs	Limited vertical decentralisation
<b>Operating core</b>	to professionalise	Professional organisation	Standardisation of skills	Horizontal decentralisation
<b>Support staff</b>	to collaborate	Innovative organisation	Mutual adjustment	Selected decentralisation
<b>Ideology</b>	together	Missionary organisation	Standardisation of norms	Decentralisation
<b>None</b>	apart	Political organisation	none	Varies

Illustration 3.8 - Relations between parts of the organisation, pulls exercised and resulting configurations

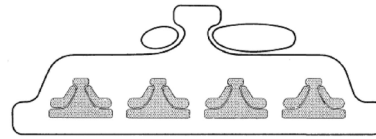
<sup>68</sup> These hypotheses and their formulations are borrowed Mintzberg (1989, p.106 to 109).



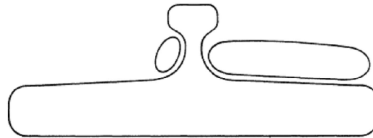
**Illustration 3.9a - The entrepreneurial organisation**  
Copy from Mintzberg (1989, p.112).



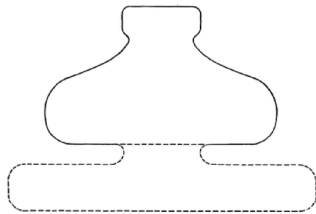
**Illustration 3.9b - The machine organisation**  
Copy from Mintzberg (1989, p.112).



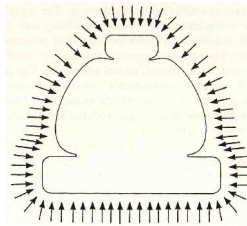
**Illustration 3.9c - The diversified organisation**  
Copy from Mintzberg (1989, p.113).



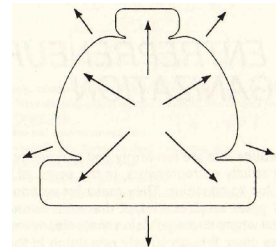
**Illustration 3.9d - The professional organisation**  
Copy from Mintzberg (1989, p.113).



**Illustration 3.9e - The innovative organisation**  
Copy from Mintzberg (1989, p.114).



**Illustration 3.9f - The missionary organisation**  
Copy from Mintzberg (1989, p.114).



**Illustration 3.9g - The political organisation**  
Copy from Mintzberg (1989, p.115).

	<b>Entrepreneurial organisation</b>	<b>Machine organisation</b>	<b>Professional organisation</b>	<b>Diversified organisation</b>	<b>Innovative organisation</b>
<b>Key coordinating mechanism</b>	Direct supervision	Standardization of work processes	Standardization of skills	Standardisation of outputs	Mutual adjustment
<b>Key part of organisation</b>	Strategic apex	Technostructure	Operation core	Middle line	Support staff
<b>Design parameters</b>					
<b>Specialisation of jobs</b>	Little specialisation	<i>Much horizontal and vertical specialisation</i>	<i>Much horizontal specialisation</i>	Some horizontal and vertical specialisation	<i>Much horizontal specialisation</i>
<b>Training and indoctrination</b>	Little training and indoctrination	Little training and indoctrination	<i>Much training and indoctrination</i>	Some training and indoctrination	Much training
<b>Formalisation of behaviour/bureaucratic or organic</b>	Little formalisation <i>Organic</i>	<i>Much formalisation Bureaucratic</i>	Little formalisation <i>Bureaucratic</i>	Much formalisation Bureaucratic	Little formalisation <i>Organic</i>
<b>Grouping</b>	Usually functional	<i>Usually functional</i>	Functional and market	<i>Market</i>	<i>Functional and market</i>
<b>Unit size</b>	Wide	Wide at bottom, narrow elsewhere	Wide at bottom, narrow elsewhere	Wide (at top)	<i>Narrow throughout</i>
<b>Planning and control systems</b>	Little planning and control	Action planning	Little planning and control	<i>Much performance control</i>	Limited action planning
<b>Liaison devices</b>	Few liaison devices	Few liaison devices	Liaison devices in administration	Few liaison devices	<i>Many liaison devices throughout</i>
<b>Decentralisation</b>	<i>Centralisation</i>	<i>Limited horizontal decentralisation</i>	<i>Horizontal and vertical decentralisation</i>	<i>Limited vertical decentralisation</i>	<i>Selective decentralisation</i>
<b>Functioning</b>					
<b>Strategic apex</b>	All administrative work	Fine tuning, coordination of functions, conflict resolution	External liaison, conflict resolution	Strategic portfolio, performance control	External liaison, conflict resolution, work balancing, project monitoring
<b>Operating core</b>	Informal work with little discretion	Routine, formalised work with little discretion	Skilled, standardised work with much individual autonomy	Tendency to formalise due to divisionalisation	Truncated or merged with administration to do informal project work
<b>Middle line</b>	Insignificant	Elaborated and differentiated; conflict resolution, staff liaison, support of vertical flows	Controlled by professionals; much mutual adjustment	Formulation of division strategy, managing operations	Extensive but blurred with staff; involved in project work
<b>Technostructure</b>	None	Elaborated to formalise work	Little	Elaborated at head quarters for performance control	Small and blurred within middle in project work
<b>Support staff</b>	Small	Often elaborated to reduce uncertainty	Elaborated to support professionals; Machine Bureaucracy structure	Split between head quarters and divisions	Highly elaborated but blurred within middle in project work

	Entrepreneurial organisation	Machine organisation	Professional organisation	Diversified organisation	Innovative organisation
<b>Functioning (continued)</b>					
Flow of authority	Significant from top	Significant throughout	Insignificant (except in support staff)	Significant throughout	Insignificant
Flow of regulated activity	Insignificant	Significant throughout	Insignificant (except in support staff)	Significant throughout	Insignificant
Flow of informal communication	Significant	Discouraged	Significant in administration	Some between head quarters and divisions	Significant throughout
Work constellations	None	Insignificant, especially at lower levels	Some in administration	Insignificant	Significant throughout
Flow of decision making	Top down	Top down	Bottom up	Differentiated between head quarters and divisions	Mixed, all levels
<b>Contingency factors</b>					
Age and size	Typically young and small (first stage)	Typically old and large (second stage)	Varies	Typically old and very large (third stage)	Typically young
Technical system	Simple, not regulating	Regulating but not automated, not very sophisticated	Not regulating or sophisticated	Divisible, otherwise typically like Machine Organisation	Very sophisticated, often automated; not regulating or sophisticated
Environment	Simple and dynamic; sometimes hostile	Simple and stable	Complex and stable	Relatively simple and stable: diversified markets (especially products and services)	Complex and dynamic; sometimes disparate
Power	Chief executive control; often owner-managed; not fashionable	Technocratic and external control; not fashionable	Professional operator control; fashionable	Middle-line control; fashionable (especially in industry)	Expert control; very fashionable

**Illustration 3.10 - Dimensions of the five main structural configurations**

*Italic type designates key design parameter.*  
Copy from Mintzberg (1979, p.466 and 467).

From the perspective of the ideas on organisational configurations presented in the previous subsections, effectiveness can be expected to be achieved in organisations that present a consistent configuration. In other words, an effective organisation has achieved consistency in its internal characteristics, harmony in its processes, and fit with its context. The portfolio of configurations makes clear which organisational forms are the suitable under which circumstances. In this view, designing an organisation is like doing a jigsaw puzzle based on the portfolio of organisational forms determined.<sup>69</sup>

<sup>69</sup> In this context, it has to be noted that Mintzberg himself aimed to move beyond configurations in Chapter 14 of *Mintzberg on Management*, among others, because some organisations turned out not to fit the typology neatly. In that chapter, Mintzberg reconceptualises organisational configurations as organisation forms which each pull the organisation in a certain direction. To visualise this, Mintzberg constructed a pentagon with at each node one of the five structural configurations. The rare existence of purely missionary organisation and purely political organisation made Mintzberg decide to show them only as forces in the centre of the pentagon.

From this perspective, we see the appearance of one of the five organisational forms - or a similar form which falls close to one of the nodes of the pentagon - if one force dominates the others. The practices in such an organisation can be expected to reflect that dominant force. In this situation, an organisation runs the risk of going out of control by overly emphasising one aspect of the organisation, while neglecting others.

In other situations, however, none of the force logically dominates and two or more forces may exist in a rough balance. According to Mintzberg, a check by all other forces is necessary to contain the dominant force. He even claims that successful configurations do not take on pure forms. If the dominant force is tempered by the secondary and the configuration operates in its preferred context, each configuration has the potential of being highly effective. However, organisations in which none of the forces clearly dominates may experience contamination. Another problem which might arise in a setting with several forces pulling at an organisation is that opposing forces conflict with each other. A

### 3.6 Some Additional Words on Informal Organisations

As noted in Subsection 3.3.3, we might question whether newer theories or typologies that could replace Mintzberg's typology on the structure of organisations are available nowadays. In that section, I argued that I did not come across a more suitable<sup>70</sup> theory to include in a framework for case analysis. If we take into account the fact that the support networks under investigation are composed of informal carers as well as formal carers, we might, however, question whether Mintzberg did pay enough attention to the informal organisation to make his typology suitable for the study of organisations of a hybrid nature. Although three of the systems of flows elaborated on in Subsection 3.5.4 bear at least to a certain extent an aspect of informal organisation in them, I tend to think that this aspect may benefit from some further elaboration.<sup>71</sup> Since Mintzberg states that the systems of flows related to the informal organisation are 'not yet well developed in the literature' (Mintzberg, 1979b, p.35), this seems to point at a topic that might have been developed further in literature over the past decades. Indeed, evidence of the development of further insights into the informal organisation can be found in relatively contemporary literature.<sup>72</sup>

Before paying attention to this strand of literature, it might be good note that interests in less mechanistic views of the organisation date back to the interbellum period. Some authors mention the Hawthorne Studies of the 1920s and the development of the Human relations school of thought afterwards as a starting point of these interest (for example, Farris (1979); Lammers et al. (2000); Waldstrom (2001)), while others refer to the publication of *The Functions of the Executive* by Bernard in 1939 (for example, Conway, 2000; Gulati & Puranam, 2009). From this perspective, we might consider Mintzberg's statement on the lack of development of knowledge on the informal organisation as surprising. Nevertheless, also in comparatively recent publications, several indications of limited knowledge on this topic can be found. Waldstrom (2001, p.37), for example, concludes: 'As shown by this paper, there is a large array of different ways which can describe social networks and their place in formal organizational settings. Much of this is still on an exploratory level and much more research is needed in this area'. Another example, Conway (2000, p.3) cites C. Freeman (1991, p.500-502), who argues that 'although rarely measured systematically... informal networks are extremely important, but very hard to classify and measure'. A final example, Krackhardt & Stern (1988, p.123) note that 'Despite this recognition of the importance of the informal organisation by organisation scientists, recommendations for the design of organizations have been limited, for the most part, to formal organizations'<sup>73</sup> Krackhardt & Stern continue by stating that the researchers who paid attention to the design of the informal organisation, often did not move beyond making some normative statements, which were not specific enough to support decision making on the structure of an organisation.

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phenomenon which Mintzberg calls cleavage. To manage the contradiction imposed on the organisation when cleavage occurs to two forces in the centre of the pentagon are of value.

From the perspective of the pentagon with the forces that pull the organisation in a certain direction, effective organisations transcend the ideas of convergence, congruence, configuration, and contradiction as tenets for designing a successful organisation. Instead, they build creatively on these approaches to achieve something more. The jigsaw puzzle of the configuration theory is in this approach replaced by playing with Lego building blocks. Mintzberg claims that the forces and forms in the pentagon 'appear to constitute a powerful diagnostic framework by which to understand what goes on in organisations and to prescribe effective change in them' (Mintzberg, 1989, p.258). Despite this rather strong claims the way in which this reasoning might be applied to mixed support networks of the non-institutionalised elderly remains somewhat vague to me. Moreover, no actual applications of the pentagon for organisational analysis have been reported despite Mintzberg inviting 'anyone who has been able to play organizational LEGO constructively with these forces to write' to him at McGill University. I writes to hope to collect these experiences of his readers to use in a subsequent book (Mintzberg, 1989, p. 281). Such a book, however has currently - no less than 20 years after the publication of *Mintzberg on Management* - not been published. Moreover, in the book published by Mintzberg most recently, the idea of a pentagon of forces is not included in the overview of the 'configuration school' (Mintzberg et al., 2009). Therefore, I have chosen to exclude these ideas from the framework for case analysis.

<sup>70</sup> More suitable measured against the criteria described in Subsection 3.3.3.

<sup>71</sup> These systems of flows are the flow of informal communication, the sets of work constellation, and the flow of ad hoc decision processes.

<sup>72</sup> In the literature the dichotomy formal/informal structures in organisations has been referred to by various terms. Examples are official/unofficial and prescribed/emergent. Though these terms may be used interchangeably, I will only use the terms formal/ informal organisation and formal/ informal network in this thesis.

<sup>73</sup> As an illustration, Krackhardt & Stern (1988) refer to an earlier version of Daft (2001). Although I did not compare the 1983 version of Daft's book systematically with the version published in 2001, the lack of attention for the informal organisation in the latter might indicate that this argument still holds.

Despite all remarks cited in the previous paragraph, several authors supply definitions of the phenomenon informal organisation. Farris (1979, p.38) as well as Waldstrom (2001, p.26) base their definition on Simon (1976). They come up with the following definition: 'Informal organizations affect decisions within the formal organizations but either are omitted from the formal scheme or are not consistent with it. They consist of interpersonal relationships that are not mandated by the rules of the formal organization but arise spontaneously in order to satisfy individual members' need'. Another author presents the following definition of the informal organisation, which does not seem to contradict the previous one. 'The informal organisation encompasses all of the channels of interaction and all of the relationships which exist in an organisation outside the narrow formal relationships designed into the organisation's management structure. It includes all that is associated with 'networking' and the 'office grapevine', and much of what people regard as the organisation's distinctive character and culture' (Groat, 1997).

The table in Illustration 3.11 consists of a compilation from the literature of the characteristics of the formal as well as the informal organisation. If we look at the properties described in this table, we may conclude that formal networks in organisation are of a normative nature, because these networks are determined by the formal organisation structure. Informal networks, on the contrary, develop more spontaneous and thus are more of a descriptive character. We may describe how the informal network looks like. However, some authors develop strategies to cope with the informal organisation to make it instrumental to the goals one aims to reach (see for example, Gulati & Puranam (2009); Morton, Brookes, Smart, Backhouse & Burns (2004)).

Element	Formal organisation	Informal organisation
<b>Structure</b> - Units - Group leadership - Type of hierarchy - Origin - Rationale - Stability	Departments and positions Explicit Vertical Prescribed Rational Stable	Individuals (only those deemed 'acceptable') Implicit Lateral Emergent Emotional Dynamic
<b>Communication</b> - Basis for communication  - Channels - Basis for interaction	Formally related departments  Formal channels Prescribed by functional duties and position	Proximity (related to measures such as physical distance, professional, task, social, and formal aspects) 'Grapevine' Spontaneous and personal characteristics
<b>Influence</b> - Base - Type - Flow	Position Authority Top-down	Personality Power Bottom-up
<b>Control mechanisms</b>	Rules	Norms
<b>Salient goals</b>	Those of the organisation	Those of the individuals
<b>Changes over time</b>	Shifts	Incremental

**Illustration 3.11 - Contrasts between formal and informal organisations**  
 Compiled from Conway (2000, p.9); Farris (1979, p.40); Waldstrom (2001, p. 23).

At this point, it might be good to pay attention to the fact that the informal organisation is neither intrinsically good nor bad. Morton et al. (2004) describe that the informal organisation may be a helpful partner to the formal organisation in neutral conditions and can be a major source of strength and added value in favourable conditions. However, if the conditions are unfavourable, the informal organisation may become a facilitator of resistance and result in corruption of the legitimate activities of the organisation's management. Krackhardt & Hansen (1993) use the central nervous system of a living organism as a metaphor to illustrate the role of the informal organisation. To complete this metaphor they compare the formal organisation with the skeleton of an organism. Both cannot do without each other (see for example also, Groat (1997)), but they fulfil distinct functions. The skeleton is, for example, relatively easily visible, whereas the nervous system is more a unstructured entity without definite subdivision. Moreover, the skeleton is strong and rigid, while the nervous system is flexible but relatively fragile.

Some clues can be found on the development of the informal organisation in a specific environment. These propositions and their rationales are summarised in Illustration 3.12.



	Proposition	Explanation
1	<b>A large and complex formal organisation results in the development of sophisticated informal structures</b>	Since the formal network is the primary initiator of relations between individuals, it is not unlikely that the informal networks will develop where there is a formal one to partner. At the intuitive level, it is probable that larger organizations provide a greater opportunity for larger and more complex informal structures to develop.
2	<b>A weak formal structure leads to the development of an informal structure to fill the gap</b>	In the opposite situation, where the organization is not highly formalised and the channels of communication are not clearly defined, informal networks will develop as essential and necessary means of communication within the organisation.
3	<b>Well-developed and formalised communication structures which encourage links across and around conventional formal channels lead to partly usurped and tamed informal communication</b>	Whether a conscious measure to influence the informal communication in the organisation or not, managers might have the power to influence and partly control the flow of informal communication in order to attempt to align it to the goals of the formal organisation.
4	<b>Discouraging links around formal structures leads to informal links with minds of their own</b>	By actively working to counteract the informal networks is to take on some very strong opposition by the individuals in the organisation, since these social relations are not planned or initiated for rational reasons but to satisfy the personal needs of the individuals. It is very likely that these networks will form nonetheless - with an inherent illicit nature - and outside of the management's span of control.
5	<b>If emergent networks are left to themselves without the aid of conscious design, they will form in ways that are suboptimal and sometimes even dysfunctional for the organisation</b>	Linked to this proposition is the question of the extent of the alignment of the goals of the individuals or subgroups and the formal organisation. The larger the difference, the higher the expected potential harm in letting the informal organisation develop autonomously.
6	<b>Informal organisations are more valuable when the needs of the individuals in the organisation are to be satisfied</b>	Since informal networks develop partially from the need of the individuals, it should follow naturally that those networks are most successful in satisfying the needs of the individual.

**Illustration 3.12 - Propositions on the development of the informal network under certain circumstances**

Compiled from the information provided by Waldstrom (2001). The table consists partly of summarising quotes and paraphrases from pages 34 to 37 from Waldstrom's work.

According to Groat (1997) research on the relationship between the informal and the formal organization is still in its infancy if we compare it to other areas of management study. Nevertheless, in the most recent article on the informal organisation I encountered during the literature research, an interesting observation is made on the connection between the formal and the informal organisation. Gulati & Puranam (2009) point at the inter-temporal relationships between the formal and informal organisation. These authors state that given the limits in the adjustment of the informal organisation to the formal organisation, the informal organisation always lags somewhat behind the formal organisation. Therefore, 'the optimal formal organization capitalizes on yesterday's informal organisation and lays the ground for tomorrow's' (Gulati & Puranam, 2009, p.435).

A short overview of the characteristics of the informal organisation was given in the previous paragraphs. At this point, the question is justified how I suggest to cope with this aspect, which is only partially covered by the elements of Mintzberg's typology on the structure of organisations, during the case analysis. Given the facts that the Industrial Engineering & Management programme primarily focuses on the design of the formal organisation and that the analysis of the informal organisation is related to several difficulties,<sup>74</sup> I want to consider the aspects of the informal organisation as presented in the Illustrations 3.11 and 3.12 as an adjunct to the framework for case analysis as developed on the basis of Mintzberg's typology of the structure of organisations. This means that these aspects will be discussed briefly after the case analysis following the items included in Mintzberg's typology if - and only if - the aspects of the informal organisation, which he included in the systems of flows, prove to be of particular importance.

<sup>74</sup> These difficulties are mainly related to the absence of a widely recognised instrument to characterise and analyse informal organisations. This might be explained by the wide ranging nature of the term informal organisation. Lammers et al. (2000, p.109), for example, state that they regard the informal organisation as an umbrella term that covers several phenomena.

### 3.7 Overview of the Framework for Case Analysis

In the preceding section of this chapter, the framework for the analysis of the empirical cases in this research project has been unfolded. The framework for case analysis consists of the following parts:

- An introductory description to acquaint the reader with the basic data on the situation studied.
- A network image to gain insight into the support network.
- A task table complemented with some descriptions to show which network member carries out which tasks.
- An analysis of the support network using Mintzberg typology on the structure of organisations. This part of the analysis comprises the following components:
  - Basic parts of the organisation
  - Coordinating mechanisms
  - Systems of flows
  - Design parameters
  - Contingency factors

These descriptions of the case situations are followed by the more analytical part of the analysis of the cases using Mintzberg's typology. This analytical part has the aim to answer the question whether the support networks of elderly persons can be characterised as one of the types of configurations identified by Mintzberg.<sup>75</sup> Issues such as internal and external fit will also be elaborated at that stage. Moreover, if the analysis using Mintzberg's typology as a framework shows that the informal organisation is of special importance in the support network, the information in Section 3.6 will be used to gain some further insight in the informal organisation.

Given this overview of the framework for case analysis and the research strategy determined in Chapter 2, a question that is still not answered in some detail, is the 'translation' between the empirical data and the theoretical framework. As already shortly mentioned in Section 2.6, this translation relies strongly on the interpretation of the researcher. In the academic literature, we can find that this aspect is to a certain extent inevitable. Sanchez (1993) states that the way in which typologies are constructed has implications for the way in which they can be applied in empirical research projects. This author uses Mintzberg's typology on the structure of organisations as an example of a typology that considers a relatively large number of characteristics, but that 'these dimensions are assumed to be of an all-or-nothing nature' (Sanchez, 1993, p.75). Making a comparable argument, another author has pointed to the nominal measurement of the characteristics included in typologies (Jansen, 1994). A consequence of this nature is that assigning concrete organisations to one or the other of the types included in the typology is based on the judgement of the researcher instead of on an established measure of the degree of presence of the characteristic under investigation. In other words, an empirical cut-off point in the dimensions included in the typology is lacking (Sanchez, 1993). Meyer et al. (1993) make a comparable argument when they write about the a priori nature and frequent lack of specified empirical referent and cut-off points of the characteristics that are included in typologies. In spite of these characteristics, it is not needed that the way in which the conclusions are arrived at is slightly mysterious. By establishing a chain of evidence from the one research step to the other, it is possible to legitimise the research conclusions (Yin, 1981).

### 3.8 A Reflective Note Before Moving to the Empirical Part

After a problem setting discussion in Chapter 1, the research design for this study was introduced in Chapter 2. With the overview of the framework for case analysis in Section 3.7, all building blocks of the foundation of this

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<sup>75</sup> Mintzberg gives the following questions as examples of questions that might be asked to gain inside into the organisational configuration:

- 'What are the main groups of operators?
- For each, is their work unskilled or does it require considerable training?
- Do they work alone or must they interact in groups?
- Are their outputs standardised or customised?
- Other obvious factors that might be considered in categorising an organisation are the size of its support staff compared with its operators, the clarity of definition between line and staff, the lack of staff altogether and so on. One must, of course, also look for evidence of a preferred mechanism of coordination and clear indications of a centre of power' (Mintzberg, 1989, p. 262).

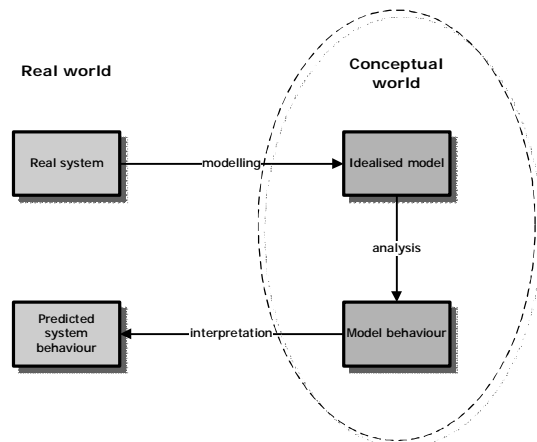
research project have been discussed. Before proceeding to the empirical chapters of this thesis, however, I would like to spend a few paragraphs on an elaboration of the answer to the question whether this research is to be classified as an 'Industrial Engineering & Management' project. This question is relevant, because students writing theses for this programme normally attempt to solve a real life problem situation, whereas the research project reported in this thesis seems to serve a different purpose.

Van Engelen & Van der Zwaan (1994) distinguish two strands of methodology for Industrial Engineering & Management and Business Science research. On the one hand, the empirical cycle, which results in the development of theory, might be applied. On the other hand, these authors identify the design cycle<sup>76</sup> that leads to theory application. During the Industrial Engineering & Management programme at the University of Twente, the students are mainly trained in the use of the latter strand of methodology (Visscher, 2001b). To this end, they study the 'General Problem Solving Strategy for Industrial Engineering & Management' (ABP) as a strategy to designing solutions.<sup>77</sup> The ABP consists of seven stages:

- 1) Problem identification
- 2) Formulation of a problem solving strategy
- 3) Problem analysis
- 4) Searching for several solutions
- 5) Opting for a solution
- 6) Implementation
- 7) Evaluation (Heerkens, 2001).<sup>78</sup>

From this perspective, it seems reasonable to conclude that the project described in this thesis is not a typical Industrial Engineering & Management project. Indeed, this research project does not follow the main methodological strategy learned to the students of the Industrial Engineering & Management programme. However, the approach developed for the investigation of the value of Mintzberg's typology on the structure of organisations shares an important characteristic with the engineering field in general.

A - very schematic - picture of the use of models for engineering purposes is included in Illustration 3.13. In that image, we see that a model - defined as an abstraction of reality - is made of a real world system that the engineer wishes to understand. The model can be analysed to make predictions of the behaviour of the model system under a range of circumstances. The results of this analysis can be used to infer the properties of the real world systems. Of course, a good model is an essential requirement if one aims to make valid predictions of real-world behaviour (D. Walker, Leonard, Metcalfe & Lambert, 2009).



**Illustration 3.13 - The engineering approach**

Copy from D. Walker et al. (2009, p. 1)

Whereas, the problem solving research projects in the Industrial Engineering & Management field will roughly follow this approach to solve the particular problem under investigation, this approach does also resonate with the research project described in this thesis. Instead of beginning with a concrete problem situation, this project starts with a class of situations - mixed support networks - which might be studied using a

<sup>76</sup> In Dutch: Ontwerp onderzoekscyclus.

<sup>77</sup> In Dutch: Algemene Bedrijfskundige Probleemaanpak (ABP).

<sup>78</sup> Although this approach is presented in the reader as something explicitly developed for the Industrial Engineering & Management students at the University of Twente, the approach turns out not to be too different from other strategies for solving business problems (compare to, for example, the strategies reviewed by Visscher, 2001a).

particular model - in this case Mintzberg's typology. Thus, we can typify this project as an investigation of the applicability of organisation theory to mixed support networks of non-institutionalised elderly. In Chapter 1 was elaborated why the results of such a study might be academically interesting and societal relevant. In sum, instead of solving a concrete problem, the aim of the research reported in this thesis is to determine the suitability of a particular analytical framework for the study of a class of organisations, being mixed support networks of the non-institutionalised elderly. Despite its deviation from the approach applied in 'problem solving Industrial Engineering & Management projects', the project reported in this thesis does no less belong to the field of Industrial Engineering & Management as problem solving assignments.<sup>79</sup>

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<sup>79</sup> This statement holds as long as we do not adopt a narrow definition of IE&M as a field solely interested in technical organisations. Given the content of my Health Care Technology & Management specialisation within the IE&M programme, I deem such an interpretation to be reasonable.

# 4

## Case A

E: 'I have good neighbours. The lady next door drops by every morning; she often takes a cup of coffee with here. She always comes to look shortly whether I am fine.'<sup>80</sup>

D<sub>3</sub>: 'Mother is really easy to get along with. Maybe this is the reason that the home care works out that well. And she does not have complaints about what the family does.'<sup>81</sup>

Gd<sub>1</sub> [on how she came to go to the supermarket with E]: 'That is not a question. My mother did that [taking E to the supermarket] before, but she went back to school. Thus, she could not do this anymore. Then, my grandmother told me that she had to prepare a list for the neighbour, but that she forgot half of the things. And then I thought that it is not normal that she does not go anywhere anymore, and then I suggested to continue following the pattern, to pick her up to go shopping every Thursday afternoon. Otherwise, she would merely visit family members.'<sup>82</sup>

Gd<sub>1</sub>: The visits on Sunday are a fixed pattern. When we were younger, we went there every Sunday. My sister pays visits to her parents-in-law the one week and the other week she goes to my grandmother. I do not want to go every week, because it is very busy when we are there together. My grandmother really is the type to ask 'do you want this, do you need that' and then she is walking around each time, and I do not want that. I know she is no longer a good walker, so... If I go there once in two weeks to socialise...<sup>83</sup>

N<sub>1,w</sub> [on the meetings with E's children in the period after E's fall]: 'That did happen at that time, because when I visited E, I met them by chance. In that period, they did also come to me to ask: 'have you been to mother and how do you think she is doing?' We did that kind of things then. If I see that one of her children is with her, I think: 'you have somebody, so I do not need to go now.' I do see that kind of things a bit.'<sup>84</sup>

H<sub>1</sub>: Last week E went out a day with her son, and another time one of the other children takes her out. In fact, she is never a day at home alone. Around dinnertime, she is often with one of her children too. So, they do quite a lot for her.<sup>85</sup>

### 4.1 Introduction

The case descriptions and analyses, which are included in this and the next chapter, follow a fixed pattern: background data to characterise the situation are provided (Section 4.2), the network members are introduced using a network image (Section 4.3), and a description is given of the tasks done by each of the network members (Section 4.4.) Section 4.5 consists of an analysis of the structure of the support network applying Mintzberg's typology on the structure of organisations.

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<sup>80</sup> In Dutch: 'Ik heb goede burens. Buurvrouw komt iedere morgen even, brengt vaak een kopje koffie mee. Komt altijd even kijken of het goed is.'

<sup>81</sup> In Dutch: 'Moeder is heel gemakkelijk in omgang. Mogelijk daardoor gaat het zo goed met de thuiszorg. En ze heeft geen klachten over hoe de familie het doet.'

<sup>82</sup> In Dutch: 'Dat is geen vraag. Mijn moeder deed dat daarvoor, maar die ging naar school en kon dus niet meer. En toen vertelde mijn oma dat ze voor de buurvrouw een lijstje klaar moest maken, maar dat ze de helft dan vergat. En toen dacht ik zelf dat het niet normaal is dat ze nergens meer komt, en toen heb ik voorgesteld om hetzelfde patroon vast te houden, om elke donderdagmiddag haar op te halen en boodschappen doen. Anders komt ze alleen nog maar bij familie.'

<sup>83</sup> In Dutch: 'De zondag is al jaren vaste prik dat we daar naar toe gingen. Toen we kleiner waren gingen we elke zondag mee. Mijn zus gaat de ene week naar haar schoonouders op zondagmorgen, en de andere week naar mijn oma. En ik wil het niet elke week doen, want het is zo druk, als je daar met z'n allen zit. Mijn oma is echt zo van: "moet je dit, moet je dat", en dan loopt ze zelf elke keer heen en weer, en dat wil ik niet. Ik weet dat ze niet goed ter been is, dus... Als ik daar één keer in de twee weken even gezellig ga zitten...'

<sup>84</sup> In Dutch: 'Dan gebeurt het wel wat meer, want dan kwam ik er en dan was er toevallig iemand. Zij kwamen dan ook nog wel eens vragen: ben jij vandaag nog bij moeder geweest, hoe vond jij haar. Dat hebben we toen wel gedaan. Als ik zie dat één van haar kinderen er is, dan denk ik: jij hebt iemand, dus ik hoef nu niet. Ik zie dat ook wel een beetje.'

<sup>85</sup> In Dutch: 'Ze is vorige week nog een dag weggeweest met haar zoon, en dan neemt een ander haar weer een dag mee, ze zit eigenlijk geen dag thuis. 's Avonds met eten is ze vaak ook bij één van de kinderen. Zij doen dus best veel.'

Interviews were held with the elderly person herself (E at 23/4/2004), E's youngest daughter (D<sub>3</sub> at 25/6/2004), a granddaughter of E (Gd<sub>1</sub> at 9/7/2004), E's opposite neighbour (woman) (N<sub>1,W</sub> at 2/7/2004), and two formal carers who deliver care to E (H<sub>1</sub> at 4/8/2004 and H<sub>2</sub> at 21/7/2004). All interviewees hold rather positive opinion on the care provided to E. They regard the care provided to E as suitable for her situation. Moreover, none of the interviewees mentioned problems related to the care for E and the interaction with E or other members of E's support network.

## 4.2 Some Background Data

A lady of 80 years old at the time of the interview is the elderly person whose support network is investigated in Case A. She suffers from rheumatism and her knees and back are worn out. More generally, she says her body to feel stiff. Due to these defects, she is, for example, no longer able to wash her back and legs and all cleaning more intensive than dusting at a medium height proves to be difficult. E is able to walk relatively small distances in house without an aid, although she regularly clings to the furniture for support. To assist her with walking outside her house, E uses a rollator.

During the year before the interview, she felt down in her kitchen, which resulted in a serious contusion. This fall caused a period of decreased functional capacity. At the time of the interview, however, she had convalesced from this setback in her health situation. Currently, her situation is stable and future developments and their timing can hardly be predicted. However, the general expectation is that E's demand for care will only increase in the time to come.

This woman grew up in Rijssen in a family of nine children.<sup>86</sup> After finishing primary school, she was employed as a needlewoman in a jute sewing company for several years. Subsequent to the relatively young death of her mother, she took care of her younger brothers and sisters, which was followed by the care for her own household containing five children. At the time of the interview, E still lives in the house in which she lived with her whole family. Since the death of her husband, eleven years ago, she occupies this four-bedroom house alone. E belongs to the lower income groups, because she only receives a state pension (AOW).<sup>87</sup> The incomes of the people in her support network, as far as mentioned during the interviews, are slightly higher, but can still be classified as low to medium incomes.<sup>88</sup> E enjoys reading, but no other hobbies were mentioned during the interviews. E is member of the protestant church.

## 4.3 The Network

E has a rather large social network, which mainly consists of family members. Approximately 40 people, being her children, grandchildren, great - grandchildren, neighbours, and acquaintances visit her when she celebrates her birthday. Moreover, E also visits all these people when they give a birthday party.

Since the death of her husband, E has been living alone. Three of her children - one daughter (D<sub>3</sub>) and two sons (S<sub>1</sub> and S<sub>2</sub>) - live in Rijssen, whereas one daughter (D<sub>1</sub>) lives in a small village nearby. These four children visit their mother regularly. E has one more daughter (D<sub>2</sub>), but she visits her mother not oftentimes, because she lives on Malta. These five children range in age from 46 to 59 years. All children have partners, who are also in touch with E.<sup>89</sup> Three of E's grandchildren, who are in this thesis referred to as Gs<sub>1</sub>, Gd<sub>1</sub> and Gd<sub>2</sub> - the daughters of S<sub>2</sub> -, were explicitly mentioned during the interviews. These three included, E has around 20 grandchildren (Gd and Gs) and 10 great-grandchildren (G-G). One of E's brothers (B<sub>1</sub>) is still alive. He lives, together with his wife (Sbil<sub>1</sub>), in a neighbouring town. Sbil<sub>k</sub> represent one or more brothers-in-law by marriage. H<sub>1</sub> is the only interviewee who refers to these people and she does not know for sure the number of E's brothers-in-law by marriage. C<sub>1</sub> is a niece or cousin of E,<sup>90</sup> who was only mentioned as a member of the network by N<sub>1,W</sub>.

E has several acquaintances. She mentioned the neighbours from across the street as people who do quite a lot of for her (N<sub>1,W</sub> and N<sub>1,M</sub>). N<sub>1,W</sub> is 54 years old and considers being a housewife as her occupation. She

<sup>86</sup> Two sisters died before they reached adulthood (one as a baby and one as a teenager).

<sup>87</sup> For a single person this allowance equals approximately €1.200 a month before taxes (2004 level).

<sup>88</sup> This means that their incomes, generally, are up to circa €18,500 to € 25,000 after taxes a year.

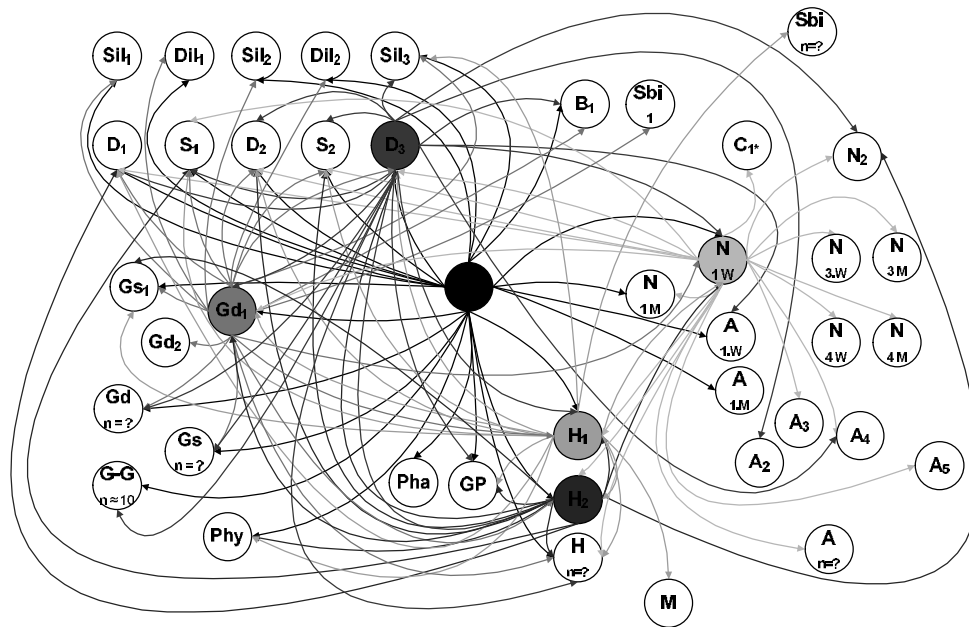
<sup>89</sup> In the network image (Illustration 4.1), the position of these daughters-in-law and sons-in-law, is a bit unclear. Arrows were only included if one or more interviewees explicitly mentioned these persons. Several tasks, however, were said to be done by the 'children'. Given the context, we might expect that some of the interviewees did not make a distinction between the own children of E and her children-in-law.

<sup>90</sup> From the interview, it is not clear whether C<sub>1</sub> is a niece or cousin of E (both are named a 'nicht' in Dutch).

knows E already for a long time, because she had lived in her current house during her youth. She bought the house from her family after having stayed somewhere else for a while. As we will see in the next section, some of the family members of N<sub>1,W</sub> belong also to the support network of E. A<sub>4</sub> represents the mother of N<sub>1,W</sub>, whereas A<sub>5</sub> depicts her brother. E is also in contact with N<sub>2</sub>, who is a woman who lives in close proximity of E. Moreover, E has also some contact with the neighbours who live at both sides of her house (N<sub>3,W</sub>, N<sub>3,M</sub>, N<sub>4,W</sub>, N<sub>4,M</sub>), though this interaction is rather limited in frequency and certainly not at an intimate level. Additionally, E is still in touch with her former neighbours (A<sub>1,W</sub> and A<sub>1,M</sub>). However, she does not see these people often, because they are also of an advanced age and are no longer capable of paying visits easily. A<sub>2</sub> was a friend of the husband of E, who knew each other from the homing pigeon society. Moreover, A<sub>3</sub> is an acquaintance of E who she knows through the church. In addition to these contacts, N<sub>1,W</sub> stated that some people who live somewhat further on in the street are acquaintances of E (A<sub>n=?</sub> - because the number of them was not specified during the interview).<sup>91</sup>

The majority of the formal care received by E is provided by two home care assistants. At the time of the interview, H<sub>1</sub> has been a home care assistant to E for approximately 3.5 years. H<sub>2</sub> claimed to be involved in the care for E already quite a while either, but she does not provide support to E on a regular basis. H<sub>n=?</sub> represents the other home care assistants, who sometimes provide support to E, but were not mentioned by name. Other professionals in the support network of E are the general physician (GP), the physiotherapist (Phy), and the pharmacist (Pha). Moreover, a minister (M) from the church pays regular visits to E.

Combining the information in the previous paragraphs in a graphical representation results in Illustration 4.1. The arrows in this picture show to who the interviewees refer as members of E's network. Since this image does not excel in clarity, images per interviewee and a coloured version are included in Appendix 4, Section 1.



**Illustration 4.1 - E's network**  
The shaded nodes represent the interviewed network members.

<sup>91</sup> The other interviewees, however, do not refer to these people explicitly.

## 4.4 The Tasks

### 4.4.1 Introduction

Before paying attention to E's social contacts and the support she receives from informal and formal caregivers, it might be useful to note that she is still able to carry out several tasks herself. For example, she does not require support to perform the relatively basic personal care tasks. Moreover, she does not require support to get in and out of her bed, to go to the toilet, or to dress herself. Planning and taking her medication is also something E is capable to do without help. Moreover, E prepares her own meals and waters the plants.

Some other tasks are carried out as a coproduction between E and a - generally informal - caregiver. Financial and administrative issues provide an example of such a coproduction. Most financial matters are organised by E herself. Using a debit card, however, causes her some problems. Therefore, Gd<sub>1</sub> helps her to withdraw cash from an ATM when they go to the supermarket or her children provide this support. Sometimes D<sub>3</sub> helps her with financial matters, such as paying a bill or withdrawing additional money, but this only happens when E asks her to do this.

### 4.4.2 Social Contacts

E claims not to feel lonely. In this context, she especially mentions the daily visits by her neighbour - N<sub>1,W</sub> - who brings her the newspaper and often has a chat with her over a cup of coffee. H<sub>2</sub> notices that these short visits of this neighbour do not only serve a social purpose. According to this interviewee, the visits of the neighbour provide a check of the condition of E as well. Other interviewees referred to the fact that E's children developed a routine in which three of the children - D<sub>1</sub>, S<sub>2</sub> and D<sub>3</sub> - collect their mother to share dinner from Tuesday to Thursday. Each of these children is responsible for carrying out this task on a specific day of the week. In addition to social purposes, these visits also reduce the number of days of the weeks during which E has to prepare her own dinner. In addition to these meals with her children, E meets them several days a week, because they come to visit her. Especially on Sundays, many of the children and grandchildren gather at E's house. On the remaining days the children just drop by shortly. In combination with the visits of her neighbour, the time the formal carers spend with her and all birthdays she visits, E is not often alone. According to D<sub>3</sub>, this situation has been constructed deliberately, because E does not enjoy being at home alone. Nevertheless, she prefers to continue living in her own property.

Despite E meeting all these people frequently, not all of them seem to be in a truly close relationship with E. She, for example, says to discuss personal problems with D<sub>3</sub> and does not mention anybody else with whom she talks about this type of issues. Nevertheless, some other interviewees, for example D<sub>3</sub> and Gd<sub>1</sub>, think that E has this type of an intimate relationship with all her children. Although some interviewees mentioned N<sub>1,W</sub> as a confidante of E, this neighbour herself claimed not to have in-depth discussions with E.<sup>92</sup>

Though the frequency of the contacts is highest with her children<sup>93</sup> and N<sub>1,W</sub>, E meets several other people almost weekly. Among these people are A<sub>2</sub> and Gd<sub>1</sub>. The former is the homing pigeon friend of E's husband, who after the death of this man continued his visits to E. Normally, he visits E every Saturday. This regularity already existed before E's husband deceased. As we will see in the next subsection, the latter takes E to the supermarket weekly. This can be regarded as an event of a strongly social nature, because they both enjoy this routine, even though simply delivering the required product to E could be expected to be less time consuming.

E meets other family members and acquaintances less regularly. Examples are the other neighbours, her brother, and the people from the church. Moreover, some grandchildren do not visit E that often. According to Gd<sub>1</sub>, however, all grandchildren pay a visit to E at least once a month.<sup>94</sup> E welcomes all guests mentioned in this and the previous paragraphs herself.

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<sup>92</sup> As we might already conclude from the discussion in these sentences, the interviewees seem to interpret this question differently. This becomes especially clear from the answer of H<sub>2</sub> to this question, who responds that E discusses personal problems with the home care assistants and N<sub>1,W</sub>, but does not mention E's children as people with whom E might discuss such issues.

<sup>93</sup> With the exception of D<sub>2</sub>, because this daughter lives on Malta.

<sup>94</sup> Here we can again assume that the Maltese family members are excluded.



In the context of E's social contacts, it is noteworthy that she has gone on holiday with N<sub>1,W</sub>, N<sub>1,M</sub>, A<sub>4</sub> (N<sub>1,W</sub>'s mother), A<sub>5</sub> (N<sub>1,W</sub>'s brother), and various other family members of N<sub>1,W</sub> several times. N<sub>1,W</sub> and her family were already used to spending their summer holiday together in a large house in Germany. At some point, the family decided to invite E to join them, because it would be nice for A<sub>4</sub> to have somebody of her own age around her during the holiday. Moreover, during the summer most neighbours were on holiday, which made that the neighbourhood was somewhat desolate. As a result, the summer was a dull period for E. Therefore, she did like the idea of joining her neighbours for a holiday. A<sub>4</sub> and E occupied a small apartment in the large house that was rented for the holiday of N<sub>1,W</sub> and her family. A<sub>4</sub>, however, is no longer able to go on holiday, which made N<sub>1,W</sub>'s brothers decide no longer to opt for a holiday with all the family members in the German house. As a consequence, the chance of E going for a holiday with N<sub>1,W</sub> and her family in the future became neglectable.

From the previous description of the social contacts of E, we can conclude that it is difficult to distinguish between the social contacts that E would have had anyway and the social contacts that are established because she became old and lost some of her functional capacity. However, it is plausible to expect that E's social network would have been different if she had not suffered from old age related disorders. We could, for example expect that N<sub>1,W</sub> would not drop by each day and that D<sub>1</sub>, S<sub>2</sub>, and D<sub>3</sub> would not collect E for dinner once a week if she had been in perfect health and did not care about being at home alone or was able to establish new social contacts.<sup>95</sup>

#### 4.4.3 Support by Informal Carers

H<sub>1</sub> and H<sub>2</sub> regard E as a person who in comparison to their other clients receives pretty much support from her family. During the interview, D<sub>3</sub> told that she provides several forms of support to E. She would, for example, take care of the house and plants if E would leave her home for a longer period. In practice, however, this only occurs occasionally.<sup>96</sup> If E needs support in filling out forms, she asks D<sub>3</sub> to help her. The same holds for more general issues related to administration. However, A<sub>5</sub> - a brother of N<sub>1,W</sub> - fills out E's tax forms. Taking turns with D<sub>1</sub>, D<sub>3</sub> is also the person who usually accompanies E when she wants to buy new clothes or wants to go shopping more generally.

In addition to the regular visits with a social character as described in the previous subsection, N<sub>1,W</sub> also provides some support to E. For example, N<sub>1,W</sub> fetches books from the library and gets some articles from the shop for E. Sometimes N<sub>1,W</sub> and her family take E with them to go to some stores E would not visit normally. Moreover, E has a personal alarm device in the form of a small box. If she presses the button on this box, the neighbours are warned.

Also two of E's grandchildren are involved in providing support to her. Firstly, Gd<sub>1</sub> takes E weekly to the supermarket. This routine started after Gd<sub>1</sub>'s mother - Dil<sub>2</sub> - decided to continue her education by going back to school. Therefore, Dil<sub>2</sub> was no longer able to take E to the supermarket during her weekly dinner visit to her son and daughter in law. Gd<sub>1</sub> felt sorry for her grandmother, because this implied that E no longer went into the supermarket, which was actually one of only place outside of her house and the houses of her children she regularly visited. Therefore, Gd<sub>1</sub> offered to take over this weekly obligation. This offer was accepted by E, who makes clear that she enjoys these trips to the supermarket. Secondly, Gs<sub>1</sub> - one of E's grandsons - does the gardening for E. The neighbours (N<sub>3,M</sub> and N<sub>4,M</sub>), however, trim E's hedges, when they clip their own hedgerows.

E does not pay the informal carers, though she tries to give the grandchildren sometimes some pocket money. For other people, such as N<sub>1,W</sub>, she sometimes bakes a cake. The informal carers interviewed all mentioned that they do not want to be paid for the support they provide to E. They use statements such as 'it is a normal thing to do' to indicate that they provide the support to E, because she needs this because of the deterioration of her health. D<sub>3</sub> and Gd<sub>1</sub> also referred to a 'quid pro quo' mechanism: they feel they need to support E, because she helped them in the past.<sup>97</sup> Gd<sub>1</sub> also mentioned a lack of financial resources of E as a

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<sup>95</sup> This reason excludes the identification of the people who might have been part of E's network if she was still perfectly healthy, but are now not or no longer member of E's network. However, this deficiency cannot be remedied with the research data available. Thus, any attempt to identify people in such a category without gathering additional data would be mere speculation.

<sup>96</sup> The only interviewee who undoubtedly expresses a different opinion is N<sub>1,W</sub>. She said that E does not often go away for a long time, but that she would take care of the house and the plants if this would occur.

<sup>97</sup> It is remarkable that Gd<sub>1</sub> does not refer to support she benefitted directly from, but to the fact that she says that E baby-sitted when she was a child. Many people would consider baby-sitting more as a favour to the parent of the child than to the child herself. Gd<sub>1</sub> mentions that love for E is her main motivation to go to the supermarket with her.

reason for the support. According to this interviewee, E cannot afford to pay, for instance, for a painter to paint the house. Therefore, the children or children-in-law carry out this type of tasks.

#### 4.4.4 Support by Formal Carers

The home care organisation aims to provide the care to E with as few carers as possible. This is attempted to be achieved by only sending home carers from one team to E. Supporting E with taking a shower is a task that is generally done by two or three different people, though it might be necessary to deploy other personnel members during holidays. E receives assistance to take a shower twice a week on fixed days. Moreover, E benefits from five hours of household support a week. These five hours are enough to get all the regular household tasks done. Generally, this help is provided by two different people - of whom one is the same as the one who helps E with taking a shower - a week. Thus, one person -  $H_1$  - takes care of showering E and provides two hours of household care a week. The remaining three hours of household care are provided by different persons.  $H_2$  is one of these people who sometimes deliver a morning or afternoon of household support.

The home care assistants carry out several household tasks. Basically, they do all regular work that takes some effort. They, for example, clean the kitchen and the bathroom; vacuum the house, and chamois the windows. The interviewees disagree on the answer to the question who does the laundry. E said that she does this herself, though hanging out the washing is a bit difficult,  $D_3$ ,  $N_{1,W}$ , and  $H_1$  gave comparable answers,  $G_{d1}$  does not know this for sure, but she thinks that either  $D_1$  or  $D_3$  helps E with this, and  $H_2$  reported that the home care assistants do this work and E supports them in doing this.

When E's husband was still a live, they received home care support for some time. When her husband died, this support stopped, but later this care recommenced. The support with showering started after her fall last year. During that period, the home care assistants provided care to E on a daily basis. At the moment of the interview, however, this was no longer necessary and the home care supporters provided assistance with personal care only twice a week.

E does not have frequent contact with the general practitioner or medical specialists. She only consults this type of formal carers if there is a clear need to do so. Also, E's contacts with the pharmacist are rather limited, because she orders drugs over the phone. The required medication is delivered to the door afterwards. A physiotherapist, however, tapes the knees and massages the back of E on a regular basis. The therapy sessions take place once in two or three weeks at E's place.

#### 4.4.5 Task Table

To summarise the data in the previous subsections, Illustration 4.2 on the next page contains the Task Table for Case A.

All interviewees are unanimous on the goal of the care they provide: enabling E to continue living in her own house. E herself sets great store by staying at her place, because she is afraid that she would lose her freedom if she had to live in a home for the elderly or nursing home. The other interviewees, however, mention more specific reasons for this desire of E. These grounds range from having enough place to accommodate the family from Malta (see Section 4.3) during their visits to being able to spend her income according to her wishes instead of receiving 'pocket money' in an intramural setting. The support network members respect the choice of E to continue living at home and try to make an effort to make this possible. The persons interviewed - including E - are, however, realistic in that this situation is only tenable as long as the demand for support and care by E does not rise too strongly.

All interviewees are rather satisfied with the current support provided to E. No possibilities to improve the functioning of the support network were identified. One of the interviewees mentioned that the only possibility for improvement she could think of was the introduction of additional aids, such as a small elevator to diminish the need for E to climb the stairs. All interviewed network members mentioned the attitude of E as a reason for the harmonious situation. She was described as a very kind person, who is grateful for the support provided.

The interviewees are divided regarding the question whether a higher support and care demand could be met by E's current support network. E thinks that the children would not be able to provide more support, because they have their jobs and their own families.  $N_{1,W}$  distinguishes the possibilities according to time span. On the one hand, she thinks that an increased care demand over a relatively short period could be coped with. She mentions the period of several months after the fall of E as an example, because E's children came, for instance, to prepare meals for E - something they do not do normally. Moreover,  $N_{1,W}$  increased the frequency

of her visits from once a day to several times a day. On the other hand, she expects that it is impossible to maintain such a high level of support over a sustained period. It is noteworthy that H<sub>1</sub> mentioned that the amount of formal care provided to E could be increased easily, because the amount of home care currently provided is lower than the maximum care provision that was granted to E by the organisation that provides formal indications.

## 4.5 Organisational Analysis

### 4.5.1 Parts of the Organisation

When we try to distinguish the six parts of the organisation determined by Mintzberg in the support network of E, we encounter some difficulties. Most support network members, for example, seem to perform tasks that contribute to the umbrella service 'supporting E'. As mentioned in Subsection 4.4.2, some of the social contacts with E are maintained with a relatively high frequency, because of her age related disabilities and the fact that she does not appreciate being at home alone. Also all informal and formal carers providing one or another kind of support to E are members of the operating core. If we refer to the four prime functions of operators defined by Mintzberg, we can see that these do not resonate well with the tasks performed by the members of E's support network. This may be explained by the fact that Mintzberg seems - though maybe implicitly given the wide definition of organisation he adheres to - to have a rather traditional manufacturing company in mind when he writes about inputs, transformation, output, and distribution of output. The support provided to E may share more characteristics with the production of a service.

In this support network, we can identify two members of the strategic apex. The first - in this case self-evident - member is E. Although she reported to consult her children when she has to make an important decision, she makes the final decision herself. Moreover, the children respect these decisions of E. D<sub>3</sub>, for example, mentioned that she thinks it might be a good idea if E would move to a form of sheltered housing, but she provides support to enable E to continue living at her current place. As a second member of the strategic apex, I identified D<sub>3</sub>. Although the interviewees need to give the question some thought, they identify D<sub>3</sub> as central informal carer. N<sub>1,w</sub>, for example, is not sure who is the central informal carer in E's network, because she is not often in touch with the children and, therefore, does not know in what way they organise the support for E. However, she thinks that D<sub>3</sub> fulfils this role, because she knows that this daughter carries out quite some tasks. G<sub>d1</sub> is also somewhat ambivalent in her answer to the question who is the central informal carer. On the one hand, she says that she has the feeling that D<sub>3</sub> arranges most practicalities for E. On the other hand, G<sub>d1</sub> states that D<sub>1</sub> does rather much for E too, but G<sub>d1</sub> is not sure which tasks D<sub>1</sub> carries out exactly.<sup>98</sup> Nevertheless, the behaviour of E's other children affirms this role of D<sub>3</sub>, because they contact D<sub>3</sub> if something regarding E has to be organised or discussed. Although the other children of E do organise some tasks themselves, they expect D<sub>3</sub> to phone to, for example, the home care organisation. During the interview, D<sub>3</sub> mentioned to stimulate her brothers and sister to contact the home care organisation directly. Given this relationship between D<sub>3</sub> and E's other children, it seems to be justified to conclude that D<sub>3</sub> has an overall responsibility for the functioning of the support network of E - or at least for its informal branch.

Although D<sub>3</sub> appears to have a function that exceeds a mere operating role, it is hard to recognise the three duties that the members of the strategic apex have to do according to Mintzberg in her tasks. For example, she does not provide direct supervision to either formal or other informal carers and she does hardly need to manage the relationship of the support network with its environment. Moreover, she does not develop a strategy for the support network. Since most decisions are made by E, we could say that she performs this typically managerial task. As the development of E's weekly schedule of dinner visits to her children shows, however, some support tasks were split up and assigned by the children to each of them. In such circumstances, the children cooperate at an equal level to find a solution to an issue related to E.<sup>99</sup> The role of E in making this type of decisions might be best described as a right of veto. She would reject the plan only if she seriously dislikes the plan proposed by the children. Returning to the first and second duty described by Mintzberg, we can say that E

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<sup>98</sup> H<sub>2</sub> does not know who is the central informal carer, because she is not familiar enough with E's support network. The hesitation of the other interviewees in answering this question, might have been caused by unfamiliarity with the concepts of 'central informal carer'.

<sup>99</sup> This equality of the children is what was told to the interviewer. It cannot be excluded that one or two of the children will always play a decisive role if this type of decisions are made.

Task	E	D <sub>1</sub>	S <sub>1</sub>	D <sub>2</sub>	S <sub>2</sub>	D <sub>3</sub>	N <sub>1,W</sub>	G <sub>d1</sub>	G <sub>s1</sub>	H <sub>1</sub>	H <sub>2</sub>	A <sub>5</sub>	Others	Comments
<b>Personal Care</b>														
In and out of bed	x													
Bathing or taking shower	x									x	x			Home care assistants support E with taking a shower twice a week.
Dressing (Support in)	x									x	x			
Using the toilet	x													
Matching day, time and type of drug	x													
Taking drugs	x													
<b>Household Tasks</b>														
Cleaning the home	x					x				x	x			E only does some easy household tasks. Incidentally, D <sub>3</sub> does some cleaning to prepare for a visit of the family from Malta
Watering the plants and gardening	x												x	E waters the plants, whereas G <sub>s1</sub> does the gardening. The neighbours trim the hedge
Investigate shopping needs	x								x					G <sub>d1</sub> does not properly investigate the shopping needs of E, but knows what she approximately needs. Therefore, she may remind E when she seems to forget something while in the supermarket
Shopping	x													
Preparing meals	x	x			x	x								The dinner visits to the children are mainly for social reasons.
Laundry	x													
Small maintenance			x		x								x	The sons-in-law are the others who do this task. H <sub>1</sub> explicitly mentioned S <sub>1</sub> as the one who does the chores.
<b>Administrative Tasks and Decision Making</b>														
Paying bills/ financial matters	x									x				
Completing forms/ administration	x					x						x		
(Advise regarding) making important decision	x	x	x	x	x	x				x	x			
<b>Social Contacts</b>														
Welcoming guests/ social contacts	x									x				
Accompany to appointments with, e.g., GP	x					x	x							D <sub>3</sub> stated that she normally accompanies E to this kind of obligations. If she is unable, she asks one of the other children to take over this task. N <sub>1,W</sub> responded that she sometimes accompanies E and D <sub>1</sub> also carries out this task.

Illustration 4.2 - Task Table Case A

provides direct supervision to the home care assistants. Especially when they help her to take a shower, such a situation is inevitable. Regarding to the household support this argument, however, seems to hold less easily. Although E keeps an eye on them, she does not directly monitor the home care assistants when they perform their tasks or issues instructions to them. To illustrate this, E leaves the choice of the work to be done to the home care assistants and will only make suggestions on which work is to be done if she thinks this is required. Finally, E might manage the relations between her support network and her environment. The contacts E maintains with several formal institutions, such as banks and the home care organisation, were explicitly mentioned during the interviews. No evidence, however, was found of E managing external relations on a more personal level. From the interviews, an image arises of somebody being satisfied by being at home and meeting the people she already knows.

According to Mintzberg, the middle-line is formed by managers with formal authority who establish a link between the strategic apex and the operating core. In the support network of E, H<sub>1</sub> appears to be the only person who takes up such a role. Because of her role as primary responsible carer (EVZ)<sup>100</sup> of E, she connects E to H<sub>2</sub> and H<sub>n=?</sub> and herself in the role of provider of home care. It should be noted, however, that the relationship between H<sub>1</sub> on the one hand and H<sub>2</sub> and H<sub>n=?</sub> on the other hand is not hierarchical formally, because H<sub>1</sub> merely has some additional responsibilities regarding the care for E. H<sub>2</sub> and H<sub>n=?</sub> fulfil a comparable role for other clients. Moreover, H<sub>1</sub> cannot force H<sub>2</sub> and H<sub>n=?</sub> to change, for example, the way in which they provide support to E. In sum, the relation between the EVZ and the other home care supporters is not based on power or hierarchy, but on cooperation and mutual consultation. In relation to Mintzberg's framework, it is noteworthy that H<sub>1</sub> does not literally carry out the tasks Mintzberg ascribes to a middle-line manager. For instance, she does not directly supervise her colleague home carers or collects performance data that she supplies to the strategic apex.

The fourth part of the organisation identified by Mintzberg is the technostaff. Analysts who contribute to the organisation by organising the work of other members of the organisation, seem to be absent in E's support network. None of the network members, for example, trains the other members of the network or designs the work of the operators. This observation is in line with the fact that standardisation, which members of the technostaff aim at according to Mintzberg, is hardly present in the support network. Indeed, each member is allowed to carry out the tasks he or she has agreed to do in a way this person expects to be suitable. The only exception is formed by the home care assistants, who seem to operate using a relatively fixed routine. Nevertheless, these guidelines are not established by a technostaff member who is part of the support network of E. The routines of the home care assistants develop mainly through the education - either during their training at school or during refresher courses during their working life - they followed.

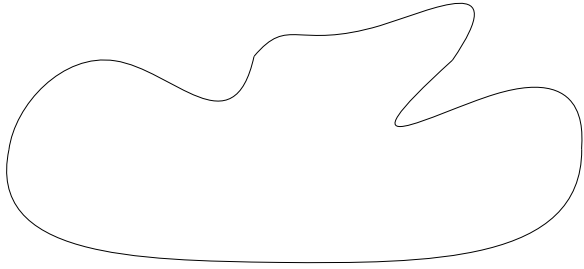
The support staff is the final basic part of the organisation introduced by Mintzberg. We could say that E forms the support staff of the network, because she provides all members with coffee and biscuits when they visit her. In one way or the other, this comes across to me as somewhat odd. Maybe this can be explained by the fact that - in contrast to a catering department - the goal in life of E cannot be expected to be preparing coffee. Moreover, Mintzberg speaks about support units, whereas E serves coffee at her own. Other people carrying out support tasks - in the Mintzbergian definition - in the support network of E could not be identified, because nobody seemed to be providing services to the support network as a whole. Explanations for the absence of proper support units might be found in the fact that E's support network is rather small compared to the average organisation. Moreover, the members of E's network are not tied to an office or plant and they are never available at the same time.

If we want to draw an organisational logo a la Mintzberg of E's support network, two problems arise. Firstly, since functions are not separated in individual units, we cannot draw, for example, the support staff as a separate shape. Thus, a more organic form, like Mintzberg uses for the innovative organisation seems to be appropriate for this support network.<sup>101</sup> An example of how we could conceptualise the support network as organisation from this perspective is included in Illustration 4.3.

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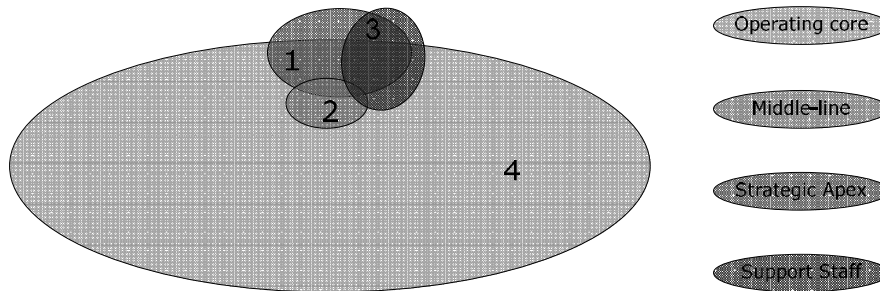
<sup>100</sup> In Dutch: Eerst Verantwoordelijke Ziekenverzorgende (EVZ), also Eerst Verantwoordelijk Verzorgende (EVV).

<sup>101</sup> When I was thinking about a solution to cope with this difficulty, I thought about the support network as a highly organic form. In architecture such forms are known as blobs - also BLOBs - which stands for bilinear objects. This architectural style uses organic, bulging, often irregular forms to design buildings.



**Illustration 4.3 - Organisational logo of the support network of E**

Secondly, though related to the foregoing problem, we have seen in the previous paragraphs that it is rather usual for people to fulfil roles that belong to several parts of the organisation. Contrary to the situation in E's support network, the abundant availability of this type of double roles is uncommon in the organisations described by Mintzberg.<sup>102</sup> To visualise this aspect of the support network, a Venn diagram type image turned out to be most suitable. This diagram and the corresponding explanation of the numbers are shown in Illustration 4.4. The sizes of the ellipses resemble the number of people in each part of the support network as close as possible. Limitations were imposed on this aim, however, by the prerequisites of a graphical representation covering all possible combinations of functions.<sup>103</sup>



Position	Explanation	Support network members*
1	Member of strategic apex as well as operating core	D <sub>3</sub>
2	Member of middle-line as well as operating core	H <sub>1</sub>
3	Member of strategic apex as well as support staff	E
4	Member of operating core	D <sub>1</sub> , S <sub>1</sub> , S <sub>2</sub> , Sil <sub>1</sub> , Dil <sub>1</sub> , Sil <sub>2</sub> , Dil <sub>2</sub> , Sil <sub>3</sub> , Gd <sub>1</sub> , Gs <sub>1</sub> , N <sub>1.W</sub> , N <sub>1.M</sub> H <sub>2</sub> , H <sub>n=?</sub> , GP, Pha, Phy

**Illustration 4.4 - E's support network in Venn diagram style organisation logo**

\* The members of E's support network who only serve a social purpose - which we can expect them to have done before E got old aged - are excluded from this overview.

Please note that the support network members may carry out more tasks, even if they are only a member of the operating core.

#### 4.5.2 Coordinating Mechanisms

During the interviews, three different situations in which coordinating mechanisms are applied were identified. Firstly, the coordinating mechanisms used to gear the activities of the informal carers to one another are a group that can be discerned. Secondly, we can recognise the coordinating mechanisms used by formal carers to ensure

<sup>102</sup> However, it is not difficult to imagine that this type of double roles may exist in, for example, companies. Nevertheless, Mintzberg does hardly pay explicit attention to these double roles. Moreover, my appraisal is that these double roles will not be as ubiquitous in companies as in the support networks. This justifies the development of a new type of graphical representation.

<sup>103</sup> A drawback of the image, presented in Illustration 4.4, however, is that nobody can be a member of the middle-line as well as the strategic apex, without being also member of the operating core. Since this situation was not found in this case, this need not be considered to be a problem.

their cooperation runs smoothly. The interface between the informal and the formal carers is the final category of coordinating mechanisms that will be investigated in this subsection.

At first sight, coordinating mechanisms hardly seem to play a role in the relationships between E's informal carers. For instance, the weekly schedule of the dinner visits to E's children is fixed and these children do not have contacts about this with each other anymore. If something has to be changed, they would contact E to discuss this. To take another example, G<sub>d1</sub> claims not to speak to others about the support she provides to E except with E herself. However, when we step back and investigate how this structure came about, the interviewees explain that the children developed this scheme as a solution to the problem of E being at home alone frequently after the death of her husband. In Mintzbergian terms, this form of coordination comes closest to mutual adjustment.<sup>104</sup> Another habit of the family is to gather at E's place every Sunday. G<sub>d1</sub> refers to these meetings as the moment at which coordination is achieved. Normally, the children of E discuss issues regarding to E, whereas the grandchildren are hardly involved in these discussions. Moreover, E and her children will not easily ask the grandchildren to take on support tasks for E. Usually, E does even not directly ask somebody to do a specific task. She uses indirect statements like, 'I would like to...' hoping that the other person offers to do this or that. During these Sunday gatherings, E phones D<sub>2</sub> who lives on the Isle of Malta. D<sub>2</sub> expects this weekly phone call and all family members who wish to speak to her get an opportunity to do so. Also for the coordination fostered during these encounters, mutual adjustment seems to be the most suitable term. The same holds for the coordination which is achieved by E's children phoning D<sub>3</sub> if something has to be arranged for E (see the previous subsection).

Among the coordinating mechanisms used among informal carers, we might also expect to find a mechanism used to coordinate the activities of N<sub>1,W</sub> and E's other informal carers. However, N<sub>1,W</sub> reported not to discuss the support of E with E's children. Moreover, D<sub>3</sub> claims to speak to N<sub>1,W</sub> only incidentally. This is in line with the fact that N<sub>1,W</sub> reports that she does not meet E's children often. N<sub>1,W</sub> creates this situation deliberately, because 'if I see that the children are there, I will not go to her, because in that case she has already somebody visiting her'.<sup>105</sup> However, after the fall of E, the contacts between N<sub>1,W</sub> and E's children intensified. This was because they met each other more often at E's place, but also because E's children contacted N<sub>1,W</sub> to ask how she thought E was doing. If E would like to have something done, she asks her children or N<sub>1,W</sub> to do this. From this description, we can conclude that E's children and N<sub>1,W</sub> hardly interact and that coordinating mechanisms are absent most of the time. An explanation for the fact that coordinating mechanisms are hardly used to coordinate the support provided by E's children and N<sub>1,W</sub> might be that E functions as an intermediary. By guiding the support supplied by her children as well as N<sub>1,W</sub>, she ensures that, for example, the tasks done by these two groups of informal carers do not overlap. This interpretation is supported by the fact that E's children and N<sub>1,W</sub> entered into direct contact when E became incapable to do so because of her injury. The way in which coordination was achieved at that time was of a rather informal nature and may, thus, be best classified as mutual adjustment.

When we turn to the coordinating mechanisms applied among formal carers, we can see a rather different structure emerging. The home care assistants operate using a plan of activity, which is included in the care dossier. All providers of formal care may write in this document. In practice, however, only H<sub>1</sub>, H<sub>2</sub>, and H<sub>n=?</sub> write in this dossier. The home care assistant team - including H<sub>1</sub> as well as H<sub>2</sub> and H<sub>n=?</sub> - has a meeting once a week on which they make the planning for the next week and briefly discuss each client.<sup>106</sup> During these meetings, they mainly speak about changes and difficulties regarding the clients that need to be known by the other team members to make sure they are able to act as a substitute for the people who normally care for a certain client. Serious issues are also noted in the client's file at the home care organisation's office. This file contains largely the same information as the care dossier at the client's place. However, this file is mainly meant to provide the necessary information for somebody who is a new caregiver to a client. If significant changes or problems arise during the week, while several home care assistants are involved, these carers phone each other to discuss these matters. In the patterns of coordination of the home care assistants, we can recognise three of the coordinating mechanisms named by Mintzberg. Mutual adjustment takes, for instance, place when they phone each other to discuss changes that are relevant in the short term. Additionally, standardisation of output takes place, because coordination is achieved by the specification of the tasks to be done for E. The home care assistants are, for example, only told to help E with taking a shower or to provide household support. Since the managers of the home care organisation do not directly prescribe how the home care assistants have to support their clients, this can be classified as standardisation of output. The fact that it is possible to have several people

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<sup>104</sup> In my opinion, the informal nature of this act of coordination is debatable. However, Mintzberg's description of mutual adjustment comes closer to what was going on between E's children than any of the other coordinating mechanisms identified by Mintzberg.

<sup>105</sup> In Dutch: Als ik zie dat de kinderen er zijn, dan ga ik niet, want dan heeft ze al iemand.

<sup>106</sup> The team supports approximately 25 clients.

providing care to E, with mutual adjustment taking place mainly in case of exceptional events and applying only a non-detailed form of the specification of outcomes, is allowed by the uniform education of the home care supporters. In other words, the standardisation of skills of the home care assistants sets the conditions for the relatively limited use of mutual adjustment and standardisation of output. The standardisation of skills of the home care assistants by education has also another effect. Due to their education, the home care assistants know relatively precise which tasks they are allowed to carry out themselves and which tasks they should leave to, for example, a home care nurse. If we compare the circumstances under which the standardisation of skills is applied in E's support network to the characteristics of the situations in which standardisation of skills and knowledge is applied according to Mintzberg, we find an important difference between these two. Whereas Mintzberg claims that standardisation of skills and knowledge is applied to complex work for which neither the work nor its outputs can be standardised (see Subsection 3.5.3), the standardisation of skills and knowledge of the home care assistants in E's support network increases the exchangeability of the home care supporters.

Coordinating mechanisms between the home care assistants and other formal carers of E have rarely developed. H<sub>1</sub>, for example, stated sometimes to contact the general physician of the clients of whom she is the EVZ. She does not have a regular contact moment with the general physicians and does only contact these people if serious issues regarding the client arise. It does occur seldom that H<sub>1</sub> needs to contact E's GP. H<sub>1</sub> does not discuss issues related to E with the physiotherapist, but she knows that he visits E sometimes.<sup>107</sup>

The final category of coordination can be expected to be found on the interface between the formal and the informal care for E. For each client, one of the home care assistants is appointed as EVZ. If needed, this person contacts the informal carers to discuss issues regarding E. Normally, one of the family members is registered with the home care organisation as contact for a client. H<sub>1</sub> fulfils the EVZ role in E's support network. Normally, a family appoints one of its members as liaison for contact with the home care assistants. In E's support network, this function is likely to be fulfilled by D<sub>3</sub>, though this is unclear for some of the interviewees. H<sub>2</sub>, for example, does not know which family members takes charge of this role. Also D<sub>3</sub> herself is not aware of having taken on this duty, but she assumes that her mother filled in her name on some of the query sheets of the home care organisation. In addition to this formal coordinating mechanism being vaguely defined in the E's case, also the encounters between the formal and informal carers are rather limited in frequency. An illustration of the relatively weak linkages between formal and informal care is that H<sub>2</sub> states to have 'no idea at all' who supports E in buying clothes. Moreover, H<sub>2</sub> reports that she does not encounter E's children., she knows of the existence of these people through her conversations with E. D<sub>3</sub> knows some of the home care assistants, but does hardly speak to them. This is due to the fact that they are under normal circumstances not at the same time at E's house. D<sub>3</sub> mainly knows about the home care assistants from what she has heard from E. She agreed with the interviewer when he stated that E is the link between the formal and the informal carers. This view is contradictory to the information provided by H<sub>1</sub>, because this home care assistant declared to meet E's children regularly during her work. However, H<sub>1</sub> does not discuss the support for E with E's children. E is capable to organise all this type of obligations. H<sub>1</sub> and E generally speak about the care informally. Therefore, written communication - which could also be read by other caregivers - is not involved.

Furthermore, H<sub>1</sub> said to encounter N<sub>1,w</sub> circa once a week. This is in line with the information provided by N<sub>1,w</sub>, who says to see the home care assistants if they are at E's place when she comes to bring the newspaper. She estimates that she meets H<sub>1</sub> approximately once a week. In spite of this, no arrangement for mutual contact was established. H<sub>2</sub>, however, mentioned that N<sub>1,w</sub> normally visits E when the home care assistants are gone. According to N<sub>1,w</sub>, hardly any consultation between the formal and the informal carers on the support for E takes place. She knows that the home care assistants have a paper file at E's place, but all informal carers interviewed said not to write or read in this document.

The relatively low number of interactions between the formal and the informal carers of E is not considered a problem, because E is able to organise most aspects of the formal care herself. D<sub>3</sub>, for example, reported that E arranged that she needed less care from the home care assistants after she convalesced from her fall and if E has a last minute appointment and is, therefore, not able to receive the home care assistants, she phones the home care organisation herself to make another appointment or to cancel the appointment. If E knows in advance that she will not be at home at the time the home care assistants normally provide care to her, she organises another appointment with the home care assistant without the mediation of anybody else. According to H<sub>1</sub>, she confers with E on the support given to her. The care the home care assistants are allowed to provide is described in regulations issued by the home care organisation. E never asks the home care assistants to deliver more or different care than allowed according to these rules.

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<sup>107</sup> A rather small difference exists between what E and H<sub>1</sub> told the interviewer on the physiotherapist. According to E, he visits her once in two or three weeks and tapes her knee and massages her back, whereas H<sub>1</sub> states that E sees the physiotherapist only once a month for her knee.



In the previous paragraphs, we saw that the members of E's support network apply various coordinating mechanisms. Moreover, we found that different patterns of coordination were found among the informal carers, the formal carers and the interface between informal and formal care. The relationship, which Mintzberg observed between the growth of complexity of the organisations and the form of coordinating mechanism applied (see continuum in Illustration 3.2), is not cogently supported by the data from this case. An explanation for this might be found in the fact that E's support network does not easily conform to Mintzberg's idea of growing complexity in an organisation. Additionally, no evidence was found for a succession of the dominating coordinating mechanism in the support network. From this case, the impression emerges that the coordinating mechanism applied is linked to the combination of types of care providers instead of being determined by the degree of complexity of the organisation.

#### 4.5.3 Systems of Flows

The elaboration of the five systems of flows in this subsection can be rather short, because just two of them can be properly recognised in E's support network. In the two following paragraphs is explained which systems of flow can be identified in the support network, while possible reasons for the absence of two of the other systems of flows are described in the subsequent paragraph. In the final paragraph, it is illustrated that the system of flows of the sets of work constellations might be useful for the interpretation of a support network if we take a slightly different view on the way in which these constellations develop.

The first system of flows present in the E's support network is the flow of informal communication. Given the emphasis put on mutual adjustment as coordinating mechanism by this flow, this need not surprise the reader. Although the case data do not allow drawing an actual map of the organisation members who communicate with each other - because no detailed interview questions were included on this topic -, some anecdotal evidence suggests that it would be a feasible thing to do. We could for example draw the communication among E's children and between the home care assistants. From the discussion of the coordinating mechanisms in Subsection 4.5.2, we could conclude, for example, that the informal communication between E's children and the home care assistants is rather limited and that  $N_{1.w}$  does hardly communicate informally with other members of the support network.

The ad hoc decision processes system of flows is the second system of flows that could clearly be recognised in the case data. We can even expect this flow to be of a comparatively high importance in support networks of elderly people if we compare them to companies, because the impression arose from the interviews that many decisions are made on an ad hoc basis. A reason for the frequent use of ad hoc decisions in this support network may lie in the fact that most organisational members operate at a comparable level. Moreover, the support need of E might vary from day to day and often requires action within a short time span. Additionally, the relatively low level of formality and fixed procedures and routines in the support network might contribute to this effect. In other words, the members of this support network have a strong focus on solving problems when they crop up.

Two other systems of flows - formal authority and regulated activity - could not be identified in the case data. Since Mintzberg thought all five systems of flow to represent just another aspect of the organisation, we need to consider why these systems of flows are missing in E's support network. Firstly, the flow of formal authority is hardly available, because most organisational members function at an equal level. Even if a hierarchical relationship might exist between organisational members if we purely look at their position in the organisational logo, this relationship does not properly exist in practice. For example, though  $H_1$  can be regarded as a middle manager, because she is the EVZ of E,  $H_1$  is not in the position to force  $H_2$  and  $H_{n=2}$  to change their work habits. Secondly, a likely reason for the absence of the system of flows of regulated activity is that the organisational members do not cooperate to produce one product or service. Although all their activities could be summarised as providing support to E, each organisational member carries out a task that can be regarded as the delivery of a service on its own. From this perspective, a continuous stream of production or service delivery does not exist in E's support network. Moreover, the hierarchical organisation structure that seems to be required to create a flow of commands and instructions down the administrative hierarchy to the operating care is - as discussed before - not available.

As mentioned in the introduction to this subsection, the sets of work constellations occupy a special position among the systems of flows. On first sight, we might argue that these work constellations can not be identified, due to the rather small tasks that each support network member carries out. Therefore, it might not be necessary to create clusters of peers that span the boundaries of the parts of the organisation. Moreover, as we saw in Illustrations 4.3 and 4.4, the boundaries between these parts of the organisation are blurred anyway. Nevertheless, it might be useful for analytical purposes to consider the various support needs of E as the basis

for sets of work constellations. If we look at E's support network from such an angle, we see that different groups of people cooperate to solve various categories of problems. Physical care, for example, is delivered by the home care assistants, who will cooperate with the GP and the physiotherapist if this is required. The desire for companionship, however, is primarily coped with by E's informal supporters, such as E's family and N<sub>1,W</sub>.

#### 4.5.4 Design Parameters

An overview of the findings in Case A in connection with the design parameters determined by Mintzberg is given in Illustration 4.5.


Group	Design parameter	Explanation of design parameter
Design of positions	Job specialisation	Job specialisation in the horizontal dimension could be said to be high in the support network, because everybody carries out one or more relatively small tasks. However, this division of labour is not necessarily fixed. The vertical job specialisation in E's support network is very limited, because the performance of the work is not separated from the administration of it. It should, however be noted that not much administration related to the support tasks has to be done.
	Behaviour formalisation	The behaviour of the members of E's support network is hardly formalised. We may say that the work of the formal carers is formalised at least to a certain extent. However, this formalisation is not imposed on these support network members by the support network, but by the care organisation they are employed by or by their profession.
	Training and indoctrination	Training is only relevant for the formal caregivers. Although the home care assistants interviewed stated the E's family members could support her with, for example, taking a shower if they wish to do this. Indoctrination plays a role in E's support network. This role, however, is an indirect one, because it is not as much the support network that imposes organisational norms on its members as the upbringing of the support network members that determines their stance towards providing care to E.
Design of superstructure	Unit grouping	Unit grouping in the support network does not seem to be necessary for the four effects identified by Mintzberg. The only real exception to this statement is formed by the home care assistants. They are all part of the same team of the home care organisation. For that reason, it seems to be logical to regard them as one unit in the support network of E as well. All other members of E's support network, however, could be mapped as individuals. Nevertheless, an equally reasonable way of depicting the situation seems to be to consider the families of E's children as units. Within these units, the members might substitute each other. An example of a family member standing in for another member of the same family is provided by Gd <sub>1</sub> . She took over the duty to go shopping with E when Dil <sub>2</sub> decided to return to education.
	Unit size	Given the elaboration of units grouping in the cell above, we can conclude that all units in E's support network are relatively small. The sizes of the families of E's children are not known precisely. When we only look at those family members actively involved in supporting E, the maximum unit size seems to be three. The unit of the home care assistants is slightly larger, but this number is not known exactly. The grounds for these small groups do not match really well with the reasons Mintzberg mentions for a small unit size.
Design of lateral linkages	Planning and control systems	Planning and control systems are largely absent in E's support network. The care dossier of the home care assistants is the only document that certainly fulfils such a function. This document, however, is only written in and read by the formal caregivers (especially the home care assistants).
	Liaison devices	Although the EVZ and the contact of the family for the formal home carers could be classified as integrating managers, they do hardly fulfil this role in practice. E herself, however, carries out the tasks of a liaison officer in her own support network.
Design of decision making system	Vertical decentralisation  and  Horizontal decentralisation	<p>Since E, in the end, makes all important decisions, the vertical decentralisation in the support network is low. However, E takes a lenient stance when other people do things for her. Therefore, these people experience still a rather large autonomy in their own work. Due to the absence of proper staff functions in E's network, horizontal decentralisation is not an issue in E's support network. Consequentially, the support network of E is best characterised as the type A determined by Mintzberg (see the picture below).</p>  <p style="text-align: center;">Type A</p>

Illustration 4.5 - Mintzberg's design parameters in Case A

#### 4.5.5 Contingency factors

The findings in this case study related to the contingency factors are summarised in the following illustration.

Category	Number	Hypothesis	Findings Case A
<b>Age and size</b>	1	The older the organisation, the more formalised its behaviour	No evidence for an ongoing formalisation of E's support network was found in this case study.
	2	The larger the organisation, the more formalised its behaviour	No evidence of an increasing level of formalisation of the behaviour was found with the growth of the organisation. However, only a very small number of people entered the support network of E during the last few years. The main instance of such an event was the introduction of home care assistants in E's network.
	3	The larger the organisation, the more elaborate its structure, that is, the more specialised its tasks, the more differentiated its units, and the more developed its administrative components	Does not seem to hold for E's support network, because new entrants in the support network occupy positions in the operating core and sometimes the middle-line, without causing changes in other characteristics of the support network.
	4	Structure reflects the age of the industry from its founding	Not applicable.
<b>Technical system</b>	1	The more regulating the technical system that is, the more it controls the work of the operators - the more formalised the operating work, and the more bureaucratic the structure of the operating core	Not applicable.
	2	The more complex the technical system, the more elaborate and professional the support staff	Not applicable.
	3	The automation of the operating core transforms a bureaucratic administrative structure into an organic one	Not applicable.
<b>Environment</b>	1	The more dynamic an organisation's environment, the more organic its structure	The linkage between E's support network and its environment was not discussed during the interviews. However, a more plausible explanation for the organic structure of the support network seems to be the possible changes in E's need for support.
	2	The more complex an organisation's environment, the more decentralised its structure	Does not seem to hold. See elaboration on contingency factor 'Environment 1' for the reason behind this finding.
	3	The more diversified the organisation's markets, the greater the propensity to split it into market-based units, or divisions, given favourable economies of scale	Seems to hold - at least in the opposite direction of reasoning, because E's support network serves an undiversified market and did not split into market-based units.
	4	Extreme hostility in its environment drives any organisation to centralise its structure temporarily	Not applicable. See contingency factor 'Environment 1' for explanation.
<b>Power</b>	1	The greater the external control of an organisation, the more centralised and formalised its structure	Does not seem to hold, because external control of E's support network is hardly imposed, while the structure is rather centralised - though not formalised.
	2	A divided external coalition will tend to give rise to a politicised internal coalition, and vice versa	Not applicable, because an external coalition was not identified.
	3	Fashion favours the structure of the day (and of the culture), sometimes even when inappropriate	Does not seem to hold, because none of the interviewees showed to be aware of having created an organisational structure.

Illustration 4.6 - Mintzberg's contingency factors as identified in Case A

#### 4.5.6 Configuration?

In this subsection on the organisational analysis of Case A, the question will be answered whether the structures described in the subsections 4.5.1 to 4.5.5 do match one of the configurations identified by Mintzberg.

If we look at the overview of the configurations and their main characteristics presented in Illustration 3.10, we can conclude that E's support network does not resemble any of the configurations closely. The whole support network is strongly E centred. We could even call her the sole customer of this organisation as well as

the director. From this perspective, we might expect an entrepreneurial organisation form. Contrary to what we would expect in such a configuration, mutual adjustment was identified as prime coordinating mechanism instead of direct supervision. Given the large number of organisational members who carry out tasks that belong to the operating core, the professional organisation is a configuration that may be a candidate for explaining the structure of E's support network. However, also this coordinating mechanism does not seem to match the characteristics of E's support network. The standardisation of skills, for example, is only applied on the work of the home care assistants. Horizontal decentralisation even appears to be non-existent in E's support network. Following the same logic, the machine organisation with its rationalising technostructure, the diversified organisation with its balkanising middle-line, and the innovative organisation with its collaborating support staff, can not be named as configurations which we can clearly recognise in E's support network. The final two configurations to be discussed are the missionary organisation and the political organisation. Since the interviewees did not reported experiences controversy or interpersonal problems between the members of E's network, we can conclude that the political organisation does not show similarity to this support network. The pull together, which Mintzberg ascribes to the missionary organisation, can be clearly recognised in E's support network. All interviewees report a strong internal motivation for providing support to E, even when they carry out these tasks to make a living. Thus, the members of E's support network seem to be united by their wish to provide the most suitable support for E. Nevertheless, the standardisation of norms and decentralisation are characteristics which Mintzberg associates with the missionary organisation, but which were not found in E's network.

Whereas the conclusion from the previous paragraph is that E's support network does not neatly match the main characteristics of the configurations described by Mintzberg, this conclusion is even strengthened when we turn to Illustration 3.10 and focus our investigation on the key design parameters. A copy of this table, in which the organisational characteristics of the support network in Case A are marked, is included in Appendix 5. Two important conclusions can be drawn from this table. Firstly, none of the descriptions of the characteristics in several categories of Mintzberg's configurations does match the situation in E's support network. This effect is particularly relevant for the functioning of the parts of the organisation and the contingency factors. Secondly, the best descriptors of E's support network are rather divided over the five configurations. Hence, it is a reasonable conclusion that configuration as well as internal and external fit is not achieved in E's support network.

#### 4.5.7 The Informal Organisation

In Section 4.5.3, we saw that the systems of flows which Mintzberg related to the informal organisation were of particular importance in E's support network. In addition, the frequent application of mutual adjustment as coordinating mechanism points at the importance of the informal organisation in this case. Therefore, some additional elaboration of this phenomenon in the support network studied in Case A, will be provided in this subsection.

If we compare the findings of the previous subsections with the characteristics of the formal and informal organisation as summarised in Illustration 3.11, we can conclude that E's support network shares some crucial characteristics with the informal organisation as well as the formal organisation. Moreover, on certain elements E's support network shows characteristics of both at the same time. An overview of organisational characteristics and whether their presence in Case A shows most resemblance to the characteristics ascribed to the formal or the informal organisation is included in Illustration 4.7. The term ambidextrous is used to indicate that neither the characteristics of the formal nor those of the informal organisation dominate in E's support network for a certain element.

In Section 3.6, six contingencies for the development of the informal organisation were discussed. A table containing information about their applicability on E's support network is included in Illustration 4.8. From this table becomes clear that not all these propositions hold for the support network studied in this case study. Though several explanations varying from proposition to proposition are possible for this finding, we might on a more general note conclude that this may indicate that the logic behind the propositions does not fully apply to mixed support networks for the non-institutionalised elderly. The findings of Case B in the next chapter can be expected to clarify this issue further.

Element	Classification of E's support network	Explanation
<b>Structure</b>		
- Units	Informal	Individuals - though sometimes related to each other by family or employer ties - are the basis of the support network.
Group leadership	Ambidextrous	This term is ambiguous in this context, because it could be argued that E is the leader (so, explicit group leadership) as well as a plea in favour of implicit group leadership by D <sub>3</sub> could be made.
- Type of hierarchy	Ambidextrous	Lateral linkages govern most interactions, but in the end, it is E who has vertical authority.
- Origin	Informal	The support network emerged when E started to require support. Hardly any prescriptions by the network.
- Rationale	Ambidextrous	The rationale varies between the formal and the informal carers. The former have mainly a rational rationale, while the latter's behaviour depends on an emotional rationale.
- Stability	Ambidextrous	On the one hand, the network is currently relatively stable. On the other hand, in case of emergency, flexible behaviour is permitted by the structure of the support network.
<b>Communication</b>		
- Basis for communication	Informal	Proximity - based on tasks - governs most communication.
- Channels	Ambidextrous	In practice, the network members know to contact either E or D <sub>3</sub> . However, this has never been established deliberately as a communication channel.
- Basis for interaction	Ambidextrous	Spontaneity and personal characteristics as well as role requirements come into play.
<b>Influence</b>		
- Base	Formal	All these aspects are classified as formal, because E has in the end the power to decide what should happen. She receives this power because of her position in the network.
- Type	Formal	
- Flow	Formal	
<b>Control mechanisms</b>	Ambidextrous	As far as control mechanisms are applied, the formal carers are controlled by a combination of rules and professional norms, while the informal carers base their behaviour on their norms and values.
<b>Salient goals</b>	Ambidextrous	The goals of the support network as a whole and the individual support networks members were reported to align.
<b>Changes over time</b>	Ambidextrous	Shifts may occur if, for example, E's health situation deteriorates suddenly, while incremental changes may take place at other times.

**Illustration 4.7 - Informal and formal organisational aspects of E's support network<sup>108</sup>**

<sup>108</sup> This table suffers from a comparable problem as the one noted in Section 3.7 for Mintzberg's typology on the structure of organisations and typologies more in general. Also in this table the 'all-or-nothing nature' of the categories and the resulting requirement for the judgement of the researcher to classify an organisation can be seen as a drawback of the approach chosen.

	Proposition	Case A
1	A large and complex formal organisation results in the development of sophisticated informal structures	No evidence found. I would not classify the formal organisation in this case large and complex. Nevertheless, sophisticated informal structures appear to be in place.
2	A weak formal structure leads to the development of an informal structure to fill the gap	This proposition might explain why E's support network shares several characteristics with an informal organisation. Nevertheless, the causal link that is suggested by the proposition can not be established beyond doubt.
3	Well-developed and formalised communication structures which encourage links across and around conventional formal channels lead to partly usurped and tamed informal communication	Does not seem to be applicable, because formalised communication structures are hardly in place.
4	Discouraging links around formal structures leads to informal links with minds of their own	No evidence found, because links around formal structures are not discouraged in E's support network
5	If emergent networks are left to themselves without the aid of conscious design, they will form in ways that are suboptimal and sometimes even dysfunctional for the organisation	The evidence in the case study does not support this proposition, because no conscious design of the informal organisation is applied. Nevertheless, the support network seems to function smoothly. Moreover, no suggestions for improvement related to the cooperation of the network members or the organisation of the care were made.
6	Informal organisations are more valuable when the needs of the individuals in the organisation are to be satisfied	Since we may say that the reason for existence of the whole organisation is to satisfy the needs of E, we might conclude that this proposition holds. However, no evidence of the satisfaction of the needs of other network members through the informal organisation was found.

**Illustration 4.8 - The propositions on the development of the informal organisation and their applicability in the case of E's support network<sup>109</sup>**

#### 4.6 Conclusion

The interpretation of E's support as an organisation using Mintzberg's typology of the structure of organisations as a framework for analysis has a rather mixed result. Some components of the typology help us to shed light on issues relating to the support network, which might otherwise have remained unexplored. Such a function is fulfilled particularly by the coordinating mechanisms. Sometimes, however, it is the absence of a certain aspect from Mintzberg's typology that is characteristic for the support network under investigation. An example is the absence of a chain of authority that flows from the strategic apex through the middle line to the operating core. Another valuable finding in this case study is that the boundaries of the parts of the organisations are blurred, because several people occupy positions at different parts of the organisation. D<sub>3</sub>, for example, is member of the strategic apex as well as performs tasks in the operating core. This type of characteristics has been said to be typical for the informal organisation of an organisation. In subsection 4.5.6, it was argued that the support network of E does not consistently resemble one of the configurations identified by Mintzberg.

Against the background of the limited application of coordinating mechanisms and the fact that E's support network does not achieve configuration, we might wonder how it is possible that the interviewees consider the support network to be operating without problems.<sup>110</sup> During the interviews, various statements were made which might explain this. To start with, all interviewees - except E - mention the friendly and non-demanding character of E. To provide an illustration: N<sub>1,W</sub> said that her family tried to provide comparable support to another ageing neighbour. However, this did not work out as well as with E. N<sub>1,W</sub> explains this difference by the fact that E is a kind person, with whom she gets along very well. Moreover, the informal caregivers - especially those who provide relatively much support - seem to have a strong intrinsic motivation to carry out these tasks. N<sub>1,W</sub>, for example, does not feel forced to provide the support to E, but she considers it as something that felt on her way and she decided to take up. This choice, however, is not a deliberate one, but it is a matter of course that she provides this support. She thinks this might be rooted in her upbringing. This is also a reason why N<sub>1,W</sub> thinks that it is obvious that E does not give her a financial reward for the support she offers. Another explanation might lie in the benevolence and the flexibility of the people involved in E's support

<sup>109</sup> This table suffers from a comparable problem as the one noted in Section 3.7 for Mintzberg's typology on the structure of organisations and typologies more in general. Also in this table the 'all-or-nothing nature' of the categories and the resulting requirement for the judgement of the researcher to classify an organisation can be seen as a drawback of the approach chosen.

<sup>110</sup> In the following discussion, the possibility that all interviewees have covered the problems in the network by giving socially desirable answers is excluded.

network. H<sub>2</sub> explained during the interview that most members of the home care team that she belongs to are very flexible. It is, for example always possible to receive your home care at another day if the person cared for has other obligations. Moreover, E, D<sub>3</sub> and N<sub>1,W</sub>, for instance, speak really well of the home care assistants included in the support network under scrutiny.

# 5

## Case B

E [on the question why she requires support]: 'To do everything I cannot do'.<sup>111</sup>

D<sub>1</sub> [on the question who provides E with advice if she has to make an important decision]: 'Firstly D<sub>2</sub> and then my brother S<sub>2</sub>. He is very social-minded. He is always there for us, whatever field it concerns. He organises and tries to find solutions. He is very calm and sensible'.<sup>112</sup>

S<sub>2</sub>: 'I would like to say beforehand that I have hardly anything to do with the operational side of the care provision, but I take an interest in it. I pay visits regularly, but I am not acquainted with specificities, like times and persons'.<sup>113</sup>

H<sub>1</sub>: 'E indicates if something is wrong or she asks 'can you do this in that way?' She makes that kind of things clear. For example, she just asks, to use some conditioner when we wash her hairs. Sometimes she does not ask us, but she tells D<sub>2</sub>, who then reports to us. However, at the moment, she asks this kind of things directly, because I support her already pretty long. So, she trusts me'.<sup>114</sup>

H<sub>2</sub> [on the question whether she can imagine improvements]: 'No. I quite like it that if you write a note for the family, they get or do it [the request in the note] straight away'.<sup>115</sup>

Dil<sub>3</sub>: D<sub>3</sub> is simply the central carer. It is all about her. If something is going on, for example if a present has to be bought, I phone D<sub>3</sub> and say 'what shall we do?'.<sup>116</sup>

### 5.1 Introduction

The discussion of Case B follows roughly the same structure as the description of Case A in the previous chapter. As explained in Section 2.3, the purpose of this case is not the reach statistical generalisability. However, this case is of value to determine whether the relatively limited value of the application of Mintzberg's framework on the structure of organisations for the design of support networks of elderly persons, which was noticed in the previous chapter, was just found by accident. If this second case, which was selected according to the same criteria as the first case, leads to comparable conclusion on the applicability of Mintzberg's framework to the support networks of elderly people, the findings gain robustness. However, if this second case does not result in a replication of the first case, because outcomes of two case studies differ significantly, further investigation may be necessary to reach a conclusion about the applicability of Mintzberg's framework to support networks of non-institutionalised elderly people.

Interviews were held with the elderly person who receives support (E on 1-10-2003). Four of her five children: her eldest daughter (D<sub>1</sub> on 25-2-2004), her second son (S<sub>2</sub> on 22-12-2003), her youngest son and his wife (S<sub>3</sub> on 15-1-2004)<sup>117</sup>, and her youngest daughter (D<sub>2</sub> on 19-11-2003) were interviewed. Non-family interviewees were two of E's home care assistants (H<sub>1</sub> on 17-10-2003 and H<sub>2</sub> on 11-2-2004).

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<sup>111</sup> In Dutch: 'Alles doen wat ik zelf niet kan'.

<sup>112</sup> In Dutch: 'In eerste plaats [naam D<sub>2</sub>] en dan mijn broer [naam S<sub>2</sub>]. Dat is de sociale man. Hij staat altijd klaar voor ons, op welk gebied dan ook. Hij regelt, probeert oplossing te zoeken. Hij is heel rustig, verstandig'.

<sup>113</sup> In Dutch: 'Ik zeg op voorhand, ik bemoei me met de operationele kant van de hulpverlening eigenlijk nauwelijks, maar ik ben er wel bij betrokken. Ik ga regelmatig op bezoek, maar van specifieke dingen, zoals tijden en personen, ben ik absoluut niet mee op de hoogte.'

<sup>114</sup> In Dutch: '... ze geeft wel aan als iets niet goed is of vraagt: 'Wil je dit zo doen'. Dat geeft ze wel aan. Dat zegt ze gewoon, bijvoorbeeld met haren wassen, vraagt ze wel om er conditioner in doen. Wat ook kan gebeuren is dat ze het niet tegen ons zegt, maar tegen [naam D<sub>2</sub>] en dat die dan toch wel weer bij ons komt. Maar op dit moment vraagt ze het gewoon rechtstreeks. Want ik loop er al zolang rond dat ze dat vertrouwen in mij wel heeft.'

<sup>115</sup> In Dutch: 'Nee. Ik vind het wel fijn, dat wanneer je een briefje voor de familie schrijft, dat het direct gehaald of gedaan wordt.'

<sup>116</sup> In Dutch: 'D<sub>3</sub> is gewoon de spil. Daar draait het om. Als er wat is, als een cadeautjes gehaald moet worden, dan bel ik naar D<sub>3</sub> heen, dan zeg ik 'wat doen we?'

<sup>117</sup> E's daughter-in-law was present during the whole interview and sometimes supplemented the answers of her husband. For reasons of simplicity, however, this interview will be referred to as S<sub>3</sub> in the course of this report. However, an exception will be made if it is desirable to quote or paraphrase Dil<sub>3</sub>.



## 5.2 Some Background Data

In Case B, the person who receives support is a lady of nearly 85 years of age at the time of the interview. She lives in a third floor studio apartment in a development of sheltered accommodation in Rijssen. Two years ago, she moved to this place. Until that moment, she had been living in a four-bedroom house. E followed a lower level vocational training for girls in her youth. After her marriage, she became a housewife and never took up a job later in life. E widowed nine years ago. E says to have a decent income, because her husband worked as a departmental head in a meat-processing factory. Therefore, she receives a retirement pay in addition to her state pension.<sup>118</sup> Other facts about E are that she is member of the protestant church and that the interviewees consider E's family to be a close family. Sil<sub>3</sub> even states that she meets her family-in-law more frequently than her own family.

E requires support, because she is short of breath due to heart problems. Moreover, she suffers from arthritis in her shoulders and legs and has a high blood pressure. Due to these problems, she is unable to wash herself or take a shower. Additionally, she is easily tired and takes a rest every afternoon, which is something she was not used doing before her health deteriorated. Moreover, a decreased mobility made that she is just able to walk short distances. She uses a wheelchair to be transported over longer ways.

According to the interviewees, E's situation is rather stable. They certainly do not expect an improvement of E's health conditions, but indications of a change for the worse in E's condition are not present. H<sub>1</sub>, however, mentions that she has the impression that she has to take over slightly more tasks of E in comparison with the situation two or three years ago. A short while before the interview, however, E had been ill. At that time, she needed more support, because she was unable to cook her own meal, carry out even the least intensive household tasks, or tab a glass of water.

The mission of E's support network is what we identify as the main purpose of all support given to E. According to her children and home care assistants, they aim to ensure that E can continue to live independently. Especially the contacts with the neighbours make that she likes the place where she lives at the time of the interview a lot. Therefore, all interviewees say to try to make it possible for her to stay in her current home as long as possible. Transferring E to a nursing home is considered as a last resort, which is only appropriate if the network members are - despite increased efforts - no longer able to provide enough care for E. E herself mentions never to have thought on what would happen if she would require more care structurally. The support network members state that they think that more care would simply be provided. They expects that E would only need to move to a nursing home if her care demand becomes too high to be provided in the place where she currently lives.

E is satisfied with the care she receives and considers her support to be well organised. Her only complaints regard the home care assistants who support her infrequently, for example during the weekends, because these people sometimes work in another way than E is used to. E provides an example about a home care assistant who forgot to put away the soap, shampoo, and towel after she supported E with taking a shower. Leaving aside this kind of minor irritations, the other support network members are also very satisfied with the functioning of E's support network and the support she receives. D<sub>1</sub>, however, suggests that she could visit E more often, but this would rather be for social reasons than for providing practical assistance. According to the home care assistants, the current care allowance of E is high enough to provide her with the support she needs.

## 5.3 Network Image

E has a support network consisting of a rather large number of people who provide social contacts and support. We can classify the members of E's support network in four categories. Firstly, the close family consists of her two daughters, three sons, and their partners (D<sub>1</sub>, S<sub>1</sub>, S<sub>2</sub>, S<sub>3</sub>, D<sub>2</sub>, Sil<sub>1</sub>, Dil<sub>1</sub>, Dil<sub>2</sub>, Dil<sub>3</sub>, and Sil<sub>2</sub>). E's children range in age from 48 to 57 years. Four of these children and their partners also live in Rijssen. It takes them approximately five minutes to reach E. S<sub>2</sub> lives in Wierden, a village 15 minutes away by car.

In the category 'more distant family' we can locate E's grandchildren. The number of grandchildren was not mentioned during the interviews, but some of E's grandchildren live on Malta, because their mother - D<sub>1</sub> - returned to Rijssen after having lived on Malta for a long time. Other family members are C<sub>1</sub>, C<sub>2</sub>, and C<sub>n=?</sub> who were referred to by E when the interviewer asked whether she has cousins.<sup>119</sup> The interviewed children and H<sub>1</sub>,

<sup>118</sup> The members of E's network have an annual family income of either €18,000 to €25,000 or above €25,000. Their level of education is generally lower or middle level technical and vocational training.

<sup>119</sup> Again, due to the use of the words 'nicht' and 'neef' in Dutch, we cannot be totally sure whether these people are male and female cousins or nieces and nephews.

however, did not refer to the existence of cousins, but stated that E still has five siblings-in-law.<sup>120</sup> According to D<sub>2</sub> and S<sub>3</sub>, E still has two sisters-in-law who married E's brothers (Sbil<sub>1</sub> and Sbil<sub>2,W</sub>). Moreover, one of the brothers of E's husband is still alive (Sbil<sub>2,M</sub>). Additionally, E is still in touch with two of the wives of her by now deceased brothers (Sbil<sub>3</sub> and Sbil<sub>4</sub>).<sup>121</sup>

E's has several types of acquaintances. On the one hand, she has good social contacts with her neighbours (N<sub>n=?</sub>). She knows these people since she moved to her apartment in the sheltered housing development. On the other hand, she has some people in her network with whom she has already been acquainted for a long time. A<sub>1</sub> is the 'boy next door' from the place where she lived before she moved to the apartment. A<sub>2,W</sub> and A<sub>2,M</sub> are E's former neighbours.<sup>122</sup> A<sub>3,W</sub> and A<sub>3,M</sub> are the former domestic help of E and her husband. A<sub>4</sub> was a friend of E's husband who continued his involvement with her after the death of E's husband. Moreover, E is still in touch with a few elderly ladies (A<sub>n=?</sub>) who she - according to D<sub>1</sub> - knows because the husbands of these women were friends of E's husband who knew each other through their work.

The people who provide formal care to E form the final category of network members. The majority of support is supplied by the home care assistants, referred to as H<sub>1</sub>, who is the EVZ of E, H<sub>2</sub>, and H<sub>n=?</sub>. Other formal carers involved in E's support network are a GP, a dermatologist (MS<sub>1</sub>) and a cardiologist (MS<sub>2</sub>). The pharmacist delivers E's drugs at her home. Another formal supporter of E is the handyman (HM) who takes care of the sheltered housing premise, in which E is living.

Finally, but not properly fitting within the categories of support network members discussed in the previous paragraphs, we see the V<sub>n=?</sub> as members of E's support network. These people are volunteers who organise activities in the home for the elderly to which the sheltered housing premise in which E lives is adjacent. Illustration 5.1 includes an image of E's support network. Images per interviewee and a larger, coloured overview image are included in Appendix 4. In the following section, we will turn to the tasks carried out by the members of E's support network.

## 5.4 Tasks

In this section, the tasks carried out by each of the support network members are described. Although E requires some support by other people, she is able to perform several of the tasks that were discussed during the interview herself. She, for example, prepares her meals herself<sup>123</sup> and waters her plants and flowers. However, E is only able to walk short distances herself, because of her heart problems. Sometimes she uses a rollator to walk from her apartment to the adjacent home for the elderly. E has a wheelchair to be transported over longer distances. Also going up and down stairs causes her problems. Since she lives in an apartment, she does not experience this as a practical problem during her every day life. E is able to get in and out of her bed and to use the toilet without further support. E carries out most of the tasks involved in doing the laundry herself. However, since E replaced her old washing machine circa two years ago, she gets somewhat confused by the buttons on the washing machine. During the interview, D<sub>2</sub> told to have demonstrated the use of the new washing machine to E several times, but E is still uncomfortable when she wants to use it. Therefore, the home care assistants start the machine for E.<sup>124</sup> As we will see in the following section, several people visit E on a regular basis. E is still able to welcome these guests herself.

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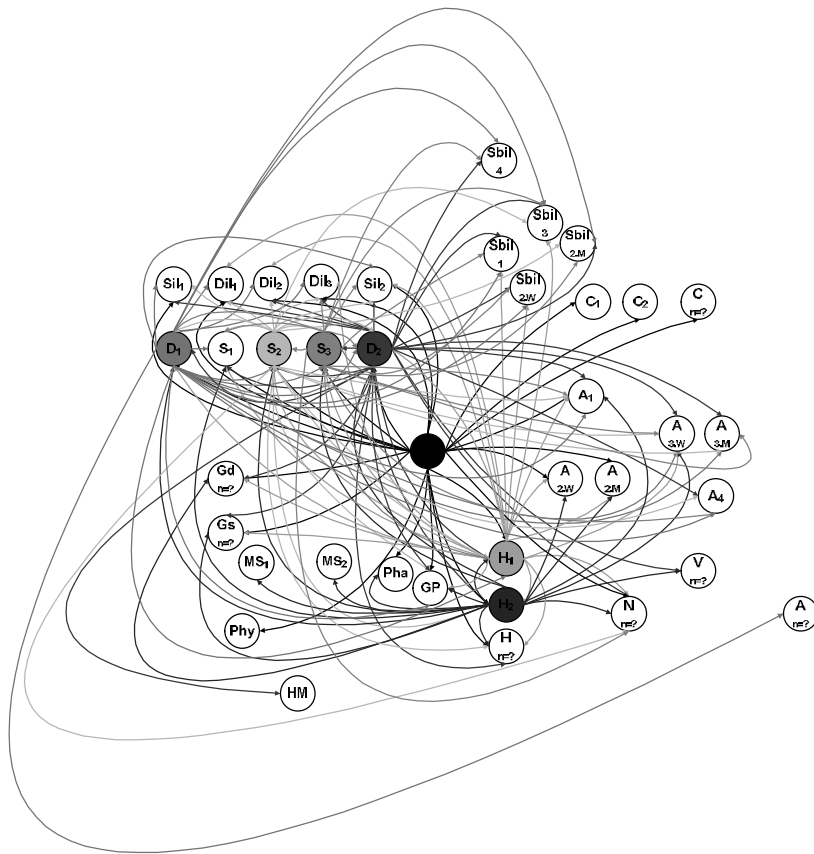
<sup>120</sup> Considering that E mentioned the same places of residence for these cousins as her children and H<sub>1</sub> mentioned for her siblings-in-law, we might conclude that these cousins were mentioned due to a confusion of tongues. However, another explanation might be that E has several cousins as well as siblings-in-law, but did not mention the latter. Given the availability of multiple explanations for the seemingly contradictory data provided during the interviews, I decided to include the cousins as well as the siblings-in-law in the network image.

<sup>121</sup> S<sub>2</sub> reported that a brother and sister of E's husband are still alive. Since this is not coherent with the information provided by E's other children, who do not refer to a living sister of E's husband, this information has not been included in the network image.

<sup>122</sup> It is likely that A<sub>2,W</sub> and A<sub>2,M</sub> are the parents of A<sub>1</sub>.

<sup>123</sup> Her children reported that they sometimes bring a meal to E if they prepared something special. Moreover, E always shares diner with one of her children on Sunday. Despite this support for E, E is able to prepare her own meals without noticeable difficulties.

<sup>124</sup> E reported that D<sub>2</sub> regularly and Dil<sub>2</sub> sometimes hang out the washing.



**Illustration 5.1 - Network image Case B**

#### 5.4.1 Social Contacts

The interviewees described E as somebody who easily connects to other people and maintains her social contacts well. She is said to be very interested in, for example, the work of her children and their other day-to-day worries. E's children are an important source of social contacts for E. They and their partners all visit her regularly and sometimes take her a day out or go for a drive at a Sunday afternoon.<sup>125</sup> Normally, E sees one or more of her children every day. S<sub>2</sub> reported that E's children try their visits a bit over the week. He generally visits E on Wednesday evening, D<sub>2</sub> is certainly at E's place on Monday, S<sub>3</sub> goes to E Tuesday evening, and D<sub>1</sub> drops by on Thursdays.<sup>126</sup> This pattern emerged without E's children making formal arrangements to divide the visits among them. However, in the current situation they know from each other when who will visit E. To make sure they are not there at the same time - something that happened in the past - everybody sticks to this pattern. On Saturdays and Sundays, E welcomes a larger number of guests. Her three sons and A<sub>5</sub>, who is a friend of S<sub>2</sub> and visited E and her husband already on a weekly basis before the latter died, gather at E's place to have a chat. According to S<sub>3</sub>, A<sub>5</sub> generally fetches some products, like sausages or chicken legs, from the butcher's.<sup>127</sup> S<sub>2</sub> claimed that E is really looking forward to these meetings. Furthermore, the whole family - E's children and children-in-law - gathers on Sunday mornings around coffee time. They take turns in welcoming the other family members and picking up and bringing back E. E stays for dinner at the home of the child who makes his or her place available for the family meeting. According to H<sub>1</sub>, these visits have in addition to a social purpose certainly also the function to check whether E is still doing well. Though E is said to discuss personal

<sup>125</sup> As in the previous case, a problem is that the interviewees are not explicit on the question whether they include the children-in-law if they refer to E's children in general.

<sup>126</sup> S<sub>2</sub> seems to know for sure the days of the visits of S<sub>3</sub> and D<sub>2</sub>, but has some doubts whether D<sub>1</sub> always visits E on Thursdays.

<sup>127</sup> According to S<sub>2</sub>, however, E's sons and A<sub>5</sub>, take turns in buying the snacks.

problems with all her children, the interviewees pointed particularly at S<sub>2</sub> and D<sub>2</sub> as the people who fulfil this role.<sup>128</sup> E sees her siblings-in-law when one of them celebrates their birthday. On these days, they come together the whole day.

E has also several social contacts outside the direct family circle. She regards the contacts with her neighbours in the sheltered housing development as very important. These people often drop by at each other's place and take some care for each other. For example, if one of them is ill, they provide this person with a meal. Sometimes these people go to the coffee sessions and other activities which are organised in the adjacent home for the elderly together. These activities are often organised - partly - by some volunteers (V<sub>x</sub>). Moreover, E said to be still in touch with her former neighbours (A<sub>2,W</sub> and A<sub>2,M</sub>). Also A<sub>1</sub>, who is the former 'boy next door' sees E still regularly. He comes every Saturday morning to drink a cup of coffee with E. Every Wednesday evening N<sub>3,W</sub> and N<sub>3,M</sub> - E's former household assistant and her husband - collect E and take her to their place for an evening out.

In addition to the persons who E meets regularly, she phones several other elderly ladies regularly. These women and their husbands were friends of E and her husband, who they knew via the job of E's husband. Currently, some of these women are widowed, but the contacts between them still exist. Some of these friends of E are also experiencing some health problems. Nevertheless, E enjoys to speak to them on the phone and to speak about their shared past. A<sub>3,W</sub> and A<sub>3,M</sub> sometimes accompany E to a visit to one of these elderly ladies.

#### 5.4.2 Support by Informal Carers

Besides being an important source of social contact, E's children provide her with several forms of support. D<sub>2</sub> is unquestionably very active in this field according to the interviewees. Though it is rarely necessary anymore in practice, this daughter would take care of E's house if E would be away for several days. In the current situation, D<sub>2</sub> goes to E once a week to clean E's apartment. Additionally, D<sub>2</sub> makes sure that E is provided with enough products from the supermarket.<sup>129</sup> Sometimes, however, this daughter takes E to the shops to purchase the products she wants. According to H<sub>1</sub>, whether E goes to the supermarket with her daughter depends on how she is doing. D<sub>2</sub> is not guided by E when she performs the household tasks. Although she reports that E determines the shopping list, D<sub>2</sub> performs sort of a check to this list and sometimes remembers E of the fact that she, for example, already took a product with her last week. Nevertheless, the more organisational side of running E's household, such as deciding when to clean the kitchen, is taken care of by D<sub>2</sub> according to E and H<sub>2</sub>. Nonetheless, some of the other people spoken to, among which H<sub>1</sub>, reported that E, for instance, makes sure that she has enough groceries at home. S<sub>3</sub>, however, said that D<sub>2</sub> is in charge of E's household, but his wife mentioned that E notices herself if, for example, a bulb has broken down. In such a situation, E might ask S<sub>3</sub> to replace it. S<sub>3</sub> mentioned that a comparable situation might occur when the batteries of E's hearing aid are exhausted. Thus, the views of the interviewees on who surveys E's household in general and the shopping particularly differ significantly.

The interviewees gave dissimilar answers to the question who does the minor maintenance tasks in E's apartment. On the one hand, E and D<sub>2</sub> stated that these tasks are carried out by Sil<sub>2</sub>. On the other hand, S<sub>3</sub> identified himself as well as Sil<sub>2</sub> as the persons who do these tasks. Still another version is provided by D<sub>1</sub>, who - in addition to E's sons and Sil<sub>2</sub> - classified her partner as somebody who might do some minor maintenance tasks for E. D<sub>2</sub> and H<sub>2</sub> also mention the existence of a handyman of the care organisation to which the sheltered accommodation belongs for some more specialised odd jobs, such as those tasks involving electricity or plumbing.

Generally, D<sub>2</sub> accompanies E to appointments, but D<sub>1</sub> and E's daughters-in-law also do this if needed. S<sub>2</sub> said that practical considerations determine who will give E a ride if she has to go to an appointment. For example, if the family has a party in Rijssen, most of E's children will go there by bicycle. S<sub>2</sub>, however, wants to go there by car anyway, because he lives in a neighbouring village. Therefore, he and his wife will take charge of bringing E to and from the party. E and S<sub>3</sub> reported that D<sub>2</sub> accompanies E to the hairdresser. However, this task division is not an ironclad rule as can be illustrated by the fact that D<sub>1</sub> referred during the interview to the fact that she had gone to the hairdresser with E that morning. When inquired about the people who go to the dress shop with her or buy clothes for her, E responded that D<sub>2</sub> carries out this task. However, according to some other interviewees - for example H<sub>1</sub> - D<sub>1</sub> might also support her with this task.

E told the interviewer that D<sub>2</sub> manages her money and fills out forms if needed. She was also the person who organised the indication for formal care with the institutions involved when E required this some years ago.

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<sup>128</sup> H<sub>1</sub> particularly points at D<sub>2</sub> as the one who fulfils this role.

<sup>129</sup> A milkman delivers his products to E's door.

D<sub>2</sub> shares this view, because she stated that she fills out forms and administers E's finances. This process was described by D<sub>1</sub> in greater detail. E opens the incoming post and puts it at her table. D<sub>2</sub> looks through these postal items and pays the bills she finds among them. S<sub>3</sub>, however, reported that D<sub>2</sub> as well as S<sub>2</sub> might help E with filling out forms and doing her financial administration.

D<sub>2</sub> said that she is E's advisor when it comes to making decisions. Nevertheless, if a decision has to be made on an important issue, she will consult E's other children. In D<sub>2</sub>'s opinion, however, they rarely have important decisions at hand. According to her, this is partly due to the fact that E is still mentally fit. While she mentioned illness of E as a situation in which she would certainly discuss the actions to be taken with her sister and brothers, the purchase of large consumption goods, such as a television, is not something on which she consults her siblings. Despite all the support given by E's children and the relatively high level of transfer of tasks, such as the financial administration and filling out forms, from E to her daughter, E regarded herself as the person who is in charge. She is the one who makes the final decisions. This view is supported by the information provided by H<sub>1</sub>, who said that E's children might take part in deciding, but that E determines the broad lines.

We might consider it to be remarkable that D<sub>2</sub> spends most time with E and seems to be the sole child who provides E with practical help, while the other children also attempt to support her. This support, however, is more of a social character. Although D<sub>2</sub> mentioned that she has quite a lot to do, the family as a whole seemed to be satisfied with these arrangements. D<sub>1</sub>, for example, expressed the opinion that it is better that one of E's children is responsible for the practicalities than that this duty was spread over the five children.

D<sub>2</sub> is the only informal carer who is paid for the support she provides. She receives €15 per morning for the cleaning of E's apartment. Since this is not a wage in accordance with the market, we might consider this to be of a symbolic nature. E stated that she wants to pay D<sub>2</sub> for the cleaning, because she would also have to pay if she asks somebody from outside the family to do this. An additional benefit of the existing arrangement is that E prefers somebody she knows well to clean her house. According to D<sub>2</sub> this payment is not necessary, because she would have done this for her mother even without receiving the money. However, she knows that E wants to pay a bit and she does not object to these payments. D<sub>2</sub> has done this cleaning for a long time without receiving a payment in the past. However, D<sub>1</sub> brought this issue up once and since that moment E pays D<sub>2</sub> for doing the household tasks. Nevertheless, S<sub>2</sub> and S<sub>3</sub> did not seem know of the existence of this 'wage' for D<sub>2</sub>. Remarkable, however, is that both sons interviewed stated that D<sub>2</sub> might receive some money. They immediately add that they certainly would not object if this was the case. E mentioned to be willing to pay the other children and their partners if they do something for her. An example given during the interview was that E wanted to give a reimbursement for the petrol when her sons drive her somewhere. However, they do not want to accept these monies.

#### 5.4.3 Support by Formal Carers

The home care assistants are the professional carers most actively involved in the care for E. She receives only assistance with personal care. In other words, E does not have an indication for domestic care. She benefits from half an hour of care of the home care assistants a day. These people wash her in the morning and support her with dressing up. Moreover, they shower E twice a week. H<sub>1</sub>, who is the EVZ of E, provides this care to E four days a week, whereas H<sub>2</sub> performs these duties on Wednesday. During the weekend a team named 'AWD'<sup>130</sup> (H<sub>n</sub> -?) carries out these tasks. This team has several members, but none of them is specifically assigned to E. Therefore, E encounters various homecare assistants, which she does not know by name, from week to week during the weekend. These home care assistants are not affiliated to the home for the elderly that is next to E's apartment in the sheltered housing premise. Nevertheless, E has an alarm which is linked to the caregivers in that institution. Since E moved to the apartment two years ago, no situation in which she needed to use the alarm occurred.

The interviewees held different views on the way in which E's drug intake is organised. S<sub>3</sub> thought that D<sub>2</sub> fills the weekly pillbox and that E takes the medication each day herself. The other interviewees told that H<sub>1</sub> fills the pillbox. Other contrasting responses during the interviews concerned the question who makes sure that E takes her medication each day. E and H<sub>1</sub> mentioned that the home care assistants hand the drugs to E, while H<sub>2</sub> said that she only checks whether E has taken her medication. According to her, however, it varies whether E has already taken her pills. D<sub>1</sub> and D<sub>2</sub> responded that E herself remembers to take the drugs. H<sub>1</sub> phones the pharmacist, who delivers the drugs for E at her home.

Other formal carers included in E's support network are her GP, MS<sub>1</sub>, and MS<sub>2</sub>. MS<sub>1</sub> represents a dermatologist who E consulted recently regarding some eczema. While this medical specialist is mentioned by

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<sup>130</sup> AWD stands for Evening and Weekend Duty (in Dutch: Avond en Weekeind Dienst).

several interviewees, H<sub>2</sub> adds that E had a heart attack once. Therefore, she expected that E is also seen by a cardiologist (MS<sub>2</sub>) regularly. H<sub>1</sub> and H<sub>2</sub> feel that the amount of care provided to E is suitable given her conditions. However, like in Case A, the home care assistants have the authority to increase the amount of support provided to E as long as this remains within the boundaries set by the institution responsible for determining care indication (RIO)<sup>131</sup>.

The table in Illustration 5.2 provides an overview of fulfilment of some tasks as mentioned during the interviews.

Task	E	D <sub>1</sub>	S <sub>1</sub>	S <sub>2</sub>	S <sub>3</sub>	D <sub>2</sub>	H <sub>1</sub> H <sub>2</sub> H <sub>n=?</sub>	Other	Comments
<b>Personal Care</b>									
Getting in and out bed	x								
Bathing or taking a shower							x		
Dressing	x						x		The home care assistants support E only in the morning, while E redresses herself after her rest in the afternoon.
Use of the toilet	x								
Matching day, time and type of drug						x	x		H <sub>1</sub> fills E's pillbox, though S <sub>3</sub> reported that D <sub>2</sub> carries out this task.
Taking drugs	x						x		The interviewees reported different views on whether E remembers to take the drugs herself or is handed the pills by the home care assistants.
<b>Household Tasks</b>									
Cleaning the home						x			
Watering the plants	x								
Investigate shopping needs	x					x			The interviewees disagree.
Shopping	x					x			Though E sometimes accompanies D <sub>2</sub> , this daughter sometimes buys to products for E and delivers them to her home.
Preparing meals	x								
Laundry	x					x	x		
Small maintenance			x	x	x	x		x	The other persons carrying out this duty are S <sub>1</sub> , S <sub>2</sub> , and the on site warden.
<b>Administrative Tasks and Decision Making</b>									
Paying bills/ financial matters	x					x			
Completing forms/ administration				x		x			
Providing advise regarding important decision		x	x	x	x	x			
<b>Social Contacts</b>									
Emotional support		x	x	x	x	x			
Welcoming guests/ social contacts	x					x			E welcomes her guests herself if, for example, her neighbours drop by. In the case of bigger events, D <sub>2</sub> will support E.
Accompany to appointments with, e.g., GP		x				x		x	Others are D <sub>1</sub> , D <sub>2</sub> , and D <sub>3</sub> .

Illustration 5.2 - Network image Case B

<sup>131</sup> In Dutch: Regionaal Indicatie Orgaan. Nowadays known as Centrum Indicatiestelling Zorg (CIZ).

## 5.5 Organisational Analysis

In the six subsections of this section, all aspects of Mintzberg's framework on the structure of organisations will be discussed for Case B. The question whether configuration is achieved in this casus is answered in Subsection 5.5.6. The results regarding the importance of aspects of the informal organisation in the analysis based on Mintzberg's typology in this support network were comparable to Case A. Therefore, the informal organisation will be elaborated on in Subsection 5.5.7.

### 5.5.1 Parts of the Organisation

Starting with the operating core, we can see that many of the members of E's support network who have roles transcending the one of providing E with social contacts, can be classified in this category. All five children and their partners provide support to E and are, thus, members of the operating core. In addition, the formal caregivers, such as the home care assistants, the GP, and the medical specialists belong to this category. The same holds for the volunteers and the handy man of the adjacent home for the elderly. The functions performed by these operators, however, relate mainly to the transformation of inputs into outputs. However, we even need translate this term rather freely, because E benefits from services instead of the production of goods. The three other prime functions identified by Mintzberg cannot be recognised in the case description. Nevertheless, the statement that the operating core produces outputs which are inevitable for the survival of the organisation (see Subsection 3.5.2) seems to be applicable to the support network in Case B.

Who oversees the whole support network and can consequentially be named a member of the strategic apex of E's support network? Although E appears to have delegated quite some tasks to D<sub>2</sub>, it might be justified to say that E is a member of the strategic apex of her support network. Indeed, after consultation of one or more of her children, she is the one who makes the final decision. Moreover, H<sub>2</sub> stated during the interview that she thinks that E is still able to oversee her whole support network. Additionally, D<sub>2</sub> appears to be an obvious candidate to be member of the strategic apex. The interviewees do not doubt her role as central informal carer. For example, D<sub>1</sub> stated that she asks D<sub>2</sub> if she has a question and then D<sub>2</sub> will keep an eye on that issue. Whereas D<sub>2</sub> is of major relevance in the context of the day to day functioning of E's support network, we might identify S<sub>2</sub> as a more distant, but nevertheless, important member of the support network. Since he tries to keep an overview of the support network and said to intervene if problems are experienced in the support network, it seems to be reasonable to include him as the third member of the strategic apex of E's support network. If we look at the duties carried out by these members of the strategic apex, we find that they do not carry out the typical management tasks identified by Mintzberg. Direct supervision, for instance, is only provided by E to the home care assistants. She performs this role, however, more because she is the person who receives the support than that she feels a need to check whether the operators carry out their tasks well. Several of the subtasks, which Mintzberg describes as part of the duty of providing direct supervision - such as designing an organisation structure and finding resolutions for conflicts - are not carried out at all in E's support network under normal circumstances. If these tasks need to be done, for instance when E is ill, E's children cooperate to design, for example, a schedule to make sure that E is seen by one of her children daily. The second duty of the members of the strategic apex, the management of the relationship of the organisation with its environment, is sometimes carried out by the members of E's support network. For example, D<sub>2</sub> arranged a RIO indication when E required support by formal carers. Strategy development is to a high degree absent in E's support network.

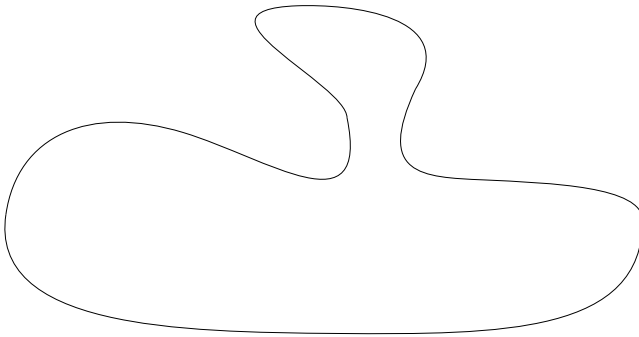
According to Mintzberg, the middle-line consists of managers with formal authority who establish a hierarchical link between the strategic apex and the operating core. The only formal caregiver in E's support network to whom we might ascribe the role of middle-line manager is H<sub>1</sub>. Since she is the EVZ of E, she has to pass up and down the information between the strategic apex and the operating core. Moreover, she is the first point of contact for E and her family within the home care organisation. In her function of EVZ, H<sub>1</sub> has to observe whether care related aspects of the functioning of E's support network have to be changed. Another member of the middle-line is D<sub>2</sub>, because she is the contact person for the home care organisation regarding E. Although dissemination of information is the most important task of these middle-line managers, they are not as much concerned with performance and management of the boundary conditions of a unit as suggested by Mintzberg.

None of the members of E's support network plans and controls the work of other support network members. Besides this, training is not provided to the support network member by one of the other actors. The work of the home care assistants is, however, somewhat standardised by the rules of the organisation they work

for. Although this comes across as technostructural work, these analysts can hardly be said to be part of the technostructure of E's support network. Therefore, it seems to be justified to conclude that a technostructure is absent in this support network.

The fifth part of the organisation introduced by Mintzberg is the support staff. Although they do not conform to Mintzberg's description of a specialised unit, we might consider E's children and their partners as support staff when they welcome the other family members at their homes on Sunday mornings. As such, they facilitate an important part of E's support network, though not the entire support network. In addition, it should be noted that this arrangement was already in place before E became to require support. If we add that these people do not receive organisational resources in return, we can justly argue that support staff is absent in E's support network.

As in Case A, we encounter the problems of the lack of separated individual organisational units if we want to draw a Mintzberg style logo of E's support network. Therefore, also in this case a more organic shape appears to be suitable. Given the absence of proper support staff and technostructure in this support network, a innovative organisation like shape is most appropriate (see Illustration 5.3).



**Illustration 5.3 - Organisational logo of the support network of E**

Secondly - but related to the preceding problem - we have seen in the previous paragraphs that it is not unusual for people to fulfil roles which belong to several parts of the organisation. Contrary to the situation in E's support network, the abundant availability of this type of double roles is uncommon in the organisations described by Mintzberg. To visualise this aspect of the support network a Venn diagram type image turned out to be suitable. This diagram and the corresponding explanation of the numbers is shown in Illustration 5.4. The sizes of the ellipses resemble the number of people in each part of the support network as closely as possible - though not mathematically. Limitations were imposed on this aim, however, by the prerequisites of a graphical representation covering all possible combinations of functions.<sup>132</sup>

### 5.5.2 Coordinating Mechanisms

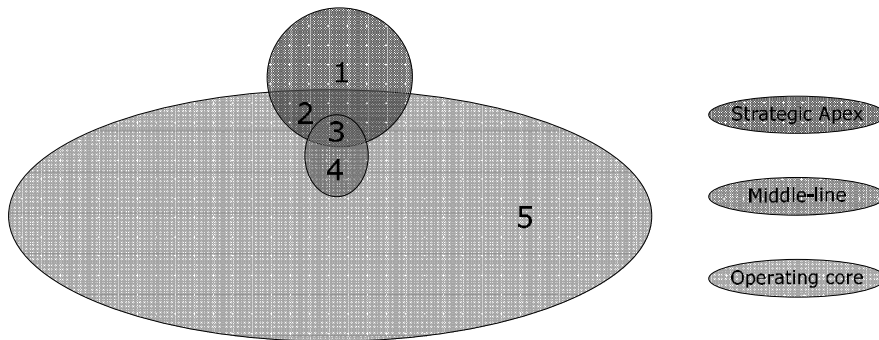
In this support network, we can recognise four out of the six coordinating mechanisms identified by Mintzberg. The main form of coordination applied is mutual adjustment. Focussing on respectively the interactions among the informal carers, the formal caregivers, and the interactions between formal and informal carers, the coordinating mechanisms utilised in E's support network will be discussed in this subsection.

Firstly, the coordinating mechanisms among the informal carers will be analysed. The most important coordinating mechanism for E's informal carers is mutual adjustment. Informal communication is of major importance to make sure that E is provided with the support she needs and to ensure that the informal carers cooperate if necessary. In the current situation, the patterns of support in E's network are already established. For instance, E's sons visit her each on another day. Therefore, coordination is only required if something differs from the standard practice. In the description of social contacts of E (see Subsection 5.4.1), we already encountered the routine that E's children and children-in-law gather to drink coffee with E on Sunday. During these meetings, E's children might discuss the support that needs to be supplied to E during the following week.

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<sup>132</sup> A drawback of the image, presented in Illustration 5.4, however, is that nobody can be a member of the middle-line as well as the strategic apex, without being also member of the operating core. Since this situation was not found in this case, this is not a problem.





Position	Explanation	Support network members*
1	Member of strategic apex	E
2	Member of strategic apex as well as operating core	S <sub>2</sub>
3	Member of strategic apex as well as middle-line and operating core	D <sub>2</sub>
4	Member of middle-line as well as operating core	H <sub>1</sub>
5	Member of operating core	D <sub>1</sub> , S <sub>1</sub> , S <sub>3</sub> , Sil <sub>1</sub> , Dil <sub>1</sub> , Dil <sub>2</sub> , Dil <sub>3</sub> , Sil <sub>2</sub> , H <sub>2</sub> , H <sub>n=?</sub> , GP, MS <sub>1</sub> , MS <sub>2</sub> , Pha, V <sub>n=?</sub>

**Illustration 5.4 - E's support network in Venn diagram style organisation logo**

\* The members of E's support network who only serve a social purpose - which we can expect them to have done before E got on in age - are excluded from this overview.

Please note that the support network members may carry out more tasks, even if they are only a member of the operating core.

These consultations, however, are generally at a relatively practical level. An issue that might be discussed is who is able to accompany E to a certain appointment. If some work comes up during the week and D<sub>2</sub> does not have the opportunity to do this task for E, this daughter might phone one of E's other children. D<sub>2</sub> works in the baby clothes shop of Dil<sub>3</sub>. Hence, they have several additional possibilities to speak to each other informally about E's support. S<sub>2</sub> mentioned that he sometimes writes short notes on the support for E for his family members. Given the informal nature of these notes, they can also be classified as mutual adjustment within the context of Mintzberg's categorisation of coordinating mechanisms.

As long as E's situation is stable, the children support her following the patterns they are used to. These patterns developed over time and formal planning procedures were not involved. The interviewees mentioned the period after E's hospitalisation as a period in which they discussed the support for E more often with each other. Moreover, they draw up a schedule to make sure that one of the children visited E in the evening to have a drink with her and to help her to go to bed. D<sub>2</sub> administered this schedule. All informal carers considered it self-evident they do for E what is within the reach of their possibilities. We might consider this a form of standardisation of norms. Since these norms are not imposed on them by the support network as such and these norms do not infuse the entire organisation, the evidence for the application of standardisation of norms as coordinating mechanism is limited.

The coordinating mechanisms used between the formal carers are the second group of coordinating mechanisms under investigation. These people apply mutual adjustment as well as standardisation of output and knowledge and skills. The home care assistants use a care dossier, which lies at E's home. This dossier encompasses, among others, a care plan and documentation regarding E's medication. These documents are especially useful for the home care assistants who do not provide care to E on a regular basis. The home care assistants write most often in this care dossier, but also other formal carers, such as the GP, are entitled to enter data in this dossier. E's EVZ, H<sub>1</sub>, is the person who is most likely to change E's care plan. A weekly meeting of the home care assistant team, which consists of circa ten home care assistants, at their office provides the possibility to discuss such amendments together. If H<sub>1</sub> wants to notify H<sub>2</sub> on something regarding the care for E, she has two options. She can either tell this to H<sub>2</sub> during the weekly meeting or write it down in the care dossier. If something has to be organised or known urgently, the home care assistants may contact each other by phone. In addition to this team, which is responsible for providing care during daytime, the home care organisation has also the AWD team (see Section 5.3). The activities of this team are guided by the care planning and the instructions provided by the daytime home care assistants. They decide, for instance, on which clients will receive support from the AWD team. Moreover, the AWD team is supplied with a form on which the details of the client are summarised. If particulars are relevant for a certain client, the AWD team members are directed to the care dossier. At the moment that the AWD team plans its work, they have a look at a notebook in which the

special circumstances that occurred during the week are noted. The AWD team does also leave this type of notes for the daytime home care assistants if they encounter a special situation during the weekend or evening. In this description of the coordination between the home care assistants, we can easily recognise several instances of the application of mutual adjustment. However, also standardisation of outputs is applied, for example, because the care tasks are specified in the care dossier. Finally, standardisation of skills and knowledge applies to the work of the home care assistants, because their education ensures that they perform their tasks in more or less the same way. The application of standardisation of outcomes as well as standardisation of skills and knowledge seems somewhat contradictory if we look at the conditions under which Mintzberg specifies each of the forms of standardisation as appropriate. However, both forms of standardisation are not imposed on the formal carers by E's support network, but by the organisation which employs them and their profession.

Sometimes one of the home care assistants - particularly H<sub>1</sub> mentions this as part of her task - contacts E's GP. This only happens if she arrives at E's place in the morning and notifies that something is going wrong. H<sub>1</sub> stated that she discusses such actions with E. These contacts between H<sub>1</sub> and E's GP seem to be meant to ask advice regarding E's health situation, but they do not function as a mean to coordinate the work of the home care assistants and the GP. Thus, they cannot be regarded as a coordinating mechanism. Other forms of coordination between formal carers were not reported.

The final class of coordinating mechanisms to be discussed are the means which are applied in the contacts between the informal and the formal supporters of E. Only a very limited degree of coordination is applied by these groups of carers. H<sub>2</sub>, for example, reported never to meet E's children, because she provides care to E early - around 7:30 o'clock - in the morning. Although she knows the names of E's daughters, she does not know the names of E's sons. Nevertheless, she knows that E has three sons from what E told her about them. This view is in line with the comments made by S<sub>2</sub> and S<sub>3</sub> on the formal care for E, because they said never to meet the home care assistants. Moreover, S<sub>3</sub> reported never to look in E's care dossier. H<sub>1</sub> and D<sub>2</sub> contact each other by phone if an issue concerning E that requires discussion arises. D<sub>2</sub> mentioned that she sometimes goes to E at the time that H<sub>1</sub> is providing support to E or tells E to ask H<sub>1</sub> to phone her to arrange something. Normally, however, H<sub>1</sub> interacts with E, who in her turn informs D<sub>2</sub>. Additionally, H<sub>1</sub> reported that D<sub>2</sub> may read in the care dossier. D<sub>2</sub>, however, told the interviewer that she only looks in this file if the circumstances require this. She did, for instance, read in the care dossier when E was ill. On the question of the interviewer whether she writes in the care dossier, D<sub>2</sub> responded that she may do this, but that she prefers to go to E's place to meet H<sub>1</sub> over writing in the care dossier herself. A page has been included in the care dossier on which the home care assistants register which tasks are done by the informal carers. This is particularly useful for the home care assistants of the AWD team. H<sub>2</sub> stated that she sometimes writes a note for E's children. She provided an example regarding the soap she recommended for E when she acquired eczema. In that situation, she wrote a note for D<sub>2</sub>, who went to the shop to buy the soap. All interviewees agree with the view that fixed patterns are not established in the contacts between the home care assistants and E's children. All illustrations of the coordination between E's informal and formal carers concern informal communication. Since this is a vital characteristic of mutual adjustment, we can conclude that this is the main coordinating mechanism governing the interface between informal and formal supporters of E.

To finish this subsection, an answer has to be given on the question whether we can recognise the pattern of application of coordinating mechanisms as specified by Mintzberg. The fact that mutual adjustment is the dominating coordinating mechanism in this case can according to the pattern developed by Mintzberg point at either a very simple or a highly complex organisation. I tend to classify the support network in Case B as an instance of the former. However, also standardisation of output and standardisation of knowledge of skills were identified as coordinating mechanisms present in this support network. Therefore, Mintzberg's continuum of coordinating mechanisms does not seem to be fully applicable to this case study. It is noteworthy that just the formal carers apply other coordinating mechanisms. Furthermore, these forms of coordination seem to be imposed on them by the organisation they work for or their profession instead of E's support network. That being the case, we might regard the home care assistants as a pivotal point in which the relatively formal coordinating mechanisms of the home care organisation are translated into mutual adjustment and vice versa.

### 5.5.3 Systems of Flows

Contrary to Mintzberg's statement that we can generally find all five systems of flows in each organisation, only two of these systems can be identified in this case study without too much difficulty. The first system of flows identified is the system of informal communication, which may not need to be elaborated on given the abundance of mutual adjustment in the discussion of coordinating mechanisms in Subsection 5.5.2. The second system of flows which seems to be relevant in E's support network is the system of ad hoc decision processes.

This type of decisions is made regularly in E's support network. Whereas Mintzberg describes this flow system as a combination of aspects of formal authority, the regulated flow of information and the flow of informal communication, the ad hoc decisions in E's support network appear to be grounded in the relative lack of formal structure.

With regard to the set of work constellations, a comparable argument can be made as in Case A (see Section 4.5.3). On the one hand, we may defend the thesis that work constellations are absent, due to the lack of support tasks which have to be carried out by multiple persons. On the other hand, however, it proved useful again to consider work constellations from the perspective of categories of support requirements. From this case study we may conclude that most sets of work constellations are formed by either formal or informal carers.

The two other systems of flows could not be identified in this case. Formal authority, for example, is lacking because a chain of command running from the strategic apex via the middle-line to the operating core is not detectable. The only actor who has such a role is E, but she may bypass the middle-line if she wants to arrange something with the people in the operating core of her support network. Also the system of regulated flows can hardly be recognised in Case B. The formal carers apply some standardised ways of exchanging information, but also among these carers informal communication plays a major role. Moreover, explicit control is absent in E's support network, informal decision making does not follow fixed patterns, and an operating work flow is unavailable, because a production process with subsequent stages is not involved in supporting E.

#### 5.5.4 Design Parameters

The design parameters are elaborated for Case B in the table in Illustration 5.5.

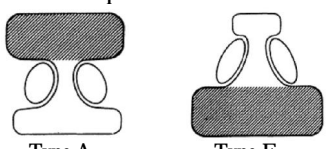
Group	Design parameter	Applicability of design parameter in Case B
Design of positions	Job specialisation	Job specialisation is an important issue in this case if we look at the division of tasks. Although the tasks are divided in small units, they are hardly specialised. In the horizontal dimension the main task specialisation can be identified by the difference between tasks that belong to the formal caregivers and those that are performed by the informal carers. Vertical job specialisation is nearly fully absent, because all actors carry out the administration that is related to their tasks themselves.
	Behaviour formalisation	The degree of behaviour formalisation in E's support network is rather low. All support network members are allowed to carry out the tasks in a way they consider suitable. Only the home care assistants are subjected to some formalisation by rules, but these rules are issued by the home care organisation and not by E or her support network.
	Training and indoctrination	Training is relevant for the formal carers. This mainly takes the form of the education these carers received before they entered the field. Indoctrination is not imposed on the members of E's support network explicitly. However, situations might occur in which the expectations of his or her siblings guide the behaviour of one of E's children. However, it is debatable whether this is a proper form of indoctrination.
Design of superstructure	Unit grouping	We could consider each of E's five children and their partners as a unit as well as the home care assistants. For the former, only the effect of fostering mutual adjustment can be identified, while sharing resources seems an additional issue for the latter.
	Unit size	Given the elaboration of unit grouping in the previous row, the sizes of the units in E's support network are rather small, because the units exist of either two or three persons.
Design of lateral linkages	Planning and control systems	Since the care the home care assistants have to provide to E is only described in rather general terms, we could hardly say that this is a proper planning system. These systems are unavailable within the informal branch of E's support network. Control is hardly applied, because formal measures are not in place to determine whether the desired output has been achieved. However, if E experiences her support as unsatisfying, she might complain to her supporters.
	Liaison devices	H <sub>1</sub> and D <sub>2</sub> can be said to be liaison officers.
Design of decision making system	Vertical decentralisation	Vertical decentralisation is applied in E's support network, because she delegated quite some tasks to D <sub>2</sub> . Since D <sub>2</sub> was also identified as a member of the strategic apex, it is, however, not possible to say that this decision-making power is delegated down the chain of authority. Horizontal decentralisation is only applied regarding the operational decisions. Given this mixture of decisional power in the strategic apex as well as in the operational core, E's support network shares characteristics of the decentralisation types A and E. These types, however, are the extremes of a continuum which makes this a rather paradoxical outcome.
	and  Horizontal decentralisation	 <p style="text-align: center;">Type A                      Type E</p>

Illustration 5.5 - Mintzberg's design parameters in Case B

### 5.5.5 Contingency Factors

See the following table for the results of the investigation of the contingency factors in Case B.

Category	Number	Hypothesis	Findings Case B
Age and size	1	The older the organisation, the more formalised its behaviour	No evidence found.
	2	The larger the organisation, the more formalised its behaviour	No evidence found.
	3	The larger the organisation, the more elaborate its structure, that is, the more specialised its tasks, the more differentiated its units, and the more developed its administrative components	Does not hold. The task division seems to depend on the characteristics of E's children and not on the number of children. Moreover, the unit sizes are mainly determined by the characteristics of the family and not by the size of the support network.
	4	Structure reflects the age of the industry from its founding	Not applicable.
Technical system	1	The more regulating the technical system that is, the more it controls the work of the operators - the more formalised the operating work, and the more bureaucratic the structure of the operating core	Technical system is hardly available. This matches with the lack of control over the work of the operators and bureaucratic structure.
	2	The more complex the technical system, the more elaborate and professional the support staff	Same argument as for Technical System 1.
	3	The automation of the operating core transforms a bureaucratic administrative structure into an organic one	Not applicable.
Environment	1	The more dynamic an organisation's environment, the more organic its structure	No evidence found, because environment does not appear to be of major importance for E's support network. The organic structure seems to be induced by the fact that E's support needs might change from day to day, wishes of supporters, and the need to be able to take action quickly if E's health condition changes.
	2	The more complex an organisation's environment, the more decentralised its structure	No evidence found.
	3	The more diversified the organisation's markets, the greater the propensity to split it into market-based units, or divisions, given favourable economies of scale	Not applicable.
	4	Extreme hostility in its environment drives any organisation to centralise its structure temporarily	Not applicable.
Power	1	The greater the external control of an organisation, the more centralised and formalised its structure	Does not seem to hold. E's support network is hardly controlled externally, but is nevertheless rather centralised. This is due to the role of E in the strategic apex as well as customer.
	2	A divided external coalition will tend to give rise to a politicised internal coalition, and vice versa	Not applicable.
	3	Fashion favours the structure of the day (and of the culture), sometimes even when inappropriate	No evidence found.

**Illustration 5.6 - Mintzberg's contingency factors as identified in Case B**

### 5.5.6 Configuration?

Having investigated all building stones of Mintzberg's framework in the previous five subsections, the question whether the characteristics of support network B fit together in a configuration has still to be answered.

If we leaf backward to Illustration 3.8, we can see that configuration is not achieved in E's support network. Given the fact that mutual adjustment is the dominating coordinating mechanism, we might expect an innovative organisation. The lack of support staff, however, does not match with this expectation. Moreover, the decentralisation found in this case study is not as selective as we would expect to find in an innovative organisation. Since the strategic apex is an important part of E's support network, we might consider the entrepreneurial organisation another configurational candidate to fit the characteristics of E's support network. Nevertheless, contraindications do also exist for this configuration. Direct supervision and horizontal centralisation, for example, were hardly identified in this case study. A third option might be the professional

organisation, because of the relatively large number of network members who were classified as members of the operating core. Though some standardisation of skills was identified as coordinating mechanism between the home care assistants, I would certainly not call this the prime coordinating mechanism in E's support network. Since also the pull to professionalise and horizontal decentralisation were not recognised in the case data, also this configuration does not match the structure of E's support network. Comparable arguments can be made about the lack of similarity between the support network in Case B and the characteristics of the machine organisation and the diversified organisation. Therefore, these configurations can be dropped as configurations that resemble the situation in E's support network. Only two configurations remain after the previous discussion: the missionary organisation and the political organisation. These two, however, were primarily presented by Mintzberg as overlays for the five other configuration. Besides this, the political organisation can be crossed out, because interpersonal problems within E's support network were not reported by the interviewees. Notwithstanding that we could argue the pull together which Mintzberg associates with the missionary organisation can be recognised in E's support network, the other features of this configuration - such as standardisation of norms and decentralisation - were only to a rather limited extent reported by the interviewees.

In the preceding paragraph, we could read that configuration does not seem to be achieved in E's support network if we compare it with the overview of the characteristics of each configuration in Illustration 3.8. If we set the findings in this case against the more detailed description of the configurations, the conclusion that configuration if not obtained, is reinforced. Appendix 5 contains a copy of Illustration 3.10 in which the organisational characteristics of support network B are shaded. We can draw the following conclusions from this table. Firstly, if we look at the design parameters we do not encounter a consistent pattern and some of the possible categories of design parameters do not apply to Case B. Even if we concentrate on the key design parameters, a tendency towards one of the configurations is not found. Secondly, several of the categories included by Mintzberg regarding the functioning of the organisation are not applicable to the support network in this case study. Those categories that seem to be useful for this case, however, point in the direction of the entrepreneurial or innovative organisation. Finally, only two of the contingency factors seem to fit with the case study data. Therefore, we can conclude that configuration, internal fit, and external fit are not achieved in Case B. In the context of the reported satisfaction of the support network members, it is even debatable whether a change of the organisation in the direction of one of the configuration would be desirable. An even more important conclusion is that the logic behind Mintzberg's construct of organisational configurations does not seem to hold for support network B.

### 5.5.7 The Informal Organisation

In Case A, it turned out to be desirable to pay additional attention to aspects of the informal organisation, because of the importance of the systems of flows related to this phenomenon in the case analysis. At this point, we may conclude that the two cases are at least convergent regarding this topic. Indeed, also for the second case study a further elaboration of some aspects according to the lines set out in Section 3.6 is considered to be a potentially useful addition. This elaboration of this theme is the topic of this chapter.

A comparative analysis of the case attributes with the characteristics of the formal and informal organisation as summarised in Illustration 3.11, shows that E's support network bears a relation to the informal organisation as well as the formal organisation. Moreover, several elements were identified in which ambidextrous turned out the most appropriate label.<sup>133</sup> An overview of organisational elements and whether their manifestation in Case B shows most resemblance to the characteristics ascribed to the formal or the informal organisation is included in Illustration 5.7.

In Section 3.6, six contingencies for the development of the informal organisation were discussed. A table containing information about their applicability on the support network investigated in this second case study is included in Illustration 5.8. The conclusion from this table is comparable to the conclusion in the previous case study. In sum, only some of these propositions hold for the support network studied. As a consequence, we may doubt whether the reasoning behind the construction of the propositions holds for mixed support networks of the non-institutionalised elderly.

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<sup>133</sup> As elaborated in Subsection 4.5.7, I use this term to indicate that neither the characteristics of the formal nor those of the informal organisation clearly dominate in a support network for a certain organisational element.

Element	Classification of E's support network	Explanation
<b>Structure</b>		
- Units	Informal	Individuals - though sometimes related to each other by family or employer ties - are the basis of the support network.
Group leadership	Formal	E is the explicit leader of this support network. The influence of the two other members of the strategic apex - D <sub>2</sub> and S <sub>2</sub> - is less than E's influence.
- Type of hierarchy	Ambidextrous	Lateral linkages govern most interactions, but in the end, it is E who has vertical authority.
- Origin	Informal	The support network emerged when E's health deteriorated. Hardly any prescriptions by the network.
- Rationale	Ambidextrous	The rationale varies between the formal and the informal carers. The former have mainly a rational rationale, while the latter's behaviour depends on an emotional rationale.
- Stability	Ambidextrous	On the one hand, the network is currently relatively stable. On the other hand, in case of emergency, flexible behaviour is permitted by the structure of the support network.
<b>Communication</b>		
- Basis for communication	Informal	Proximity - based on tasks - governs most communication.
- Channels	Ambidextrous	In practice, the network members know to contact either E, D <sub>2</sub> or S <sub>2</sub> . However, this has never been established deliberately as a communication channel.
- Basis for interaction	Ambidextrous	Spontaneous and personal characteristics as well as role requirements come into play.
<b>Influence</b>		
- Base	Formal	All these aspects are classified as formal, because E has in the end the power to decide what should happen. She has this power because of her position in the network.
- Type	Formal	
- Flow	Formal	
<b>Control mechanisms</b>	Ambidextrous	As far as control mechanisms are applied, the formal carers are controlled by a combination of rules and professional norms, while the informal carers base their behaviour on their norms and values.
<b>Salient goals</b>	Ambidextrous	The goals of the support network as a whole and the individual support networks members were reported to align.
<b>Changes over time</b>	Ambidextrous	Shifts may occur if, for example, E's health situation deteriorates suddenly, while incremental changes may take place at other times.

**Illustration 5.7 - Informal and formal organisational aspects of E's support network**

	Proposition	Case B
1	A large and complex formal organisation results in the development of sophisticated informal structures	No evidence found. I would not classify the formal organisation in this case large and complex. Nevertheless, extensive informal structures appear to be in place.
2	A weak formal structure leads to the development of an informal structure to fill the gap	This proposition might explain why E's support network shares several characteristics with an informal organisation. Moreover, in Subsection 5.5.3, was noted that 'the ad hoc decisions in E's support network appear to be grounded in the relative lack of formal structure' instead of in the combination of aspects of formal authority, the regulated flow of information, and the flow of informal communication as suggested by Mintzberg. Nevertheless, the causal link that is suggested by the proposition cannot be proved using the research data used in this project.
3	Well-developed and formalised communication structures which encourage links across and around conventional formal channels lead to partly usurped and tamed informal communication	Does not seem to be applicable, because formalised communication structures are hardly in place.
4	Discouraging links around formal structures leads to informal links with minds of their own	No evidence found, because links around formal structures are not discouraged in E's support network
5	If emergent networks are left to themselves without the aid of conscious design, they will form in ways that are suboptimal and sometimes even dysfunctional for the organisation	The evidence in the case study does not support this proposition, because conscious design of the informal organisation is not applied. Nevertheless, the support network seems to function smoothly. Moreover, no suggestions for improvement related to the cooperation of the network members or the organisation of the care were made by the interviewees.
6	Informal organisations are more valuable when the needs of the individuals in the organisation are to be satisfied	Since we may say that the reason for existence of the whole organisation is to satisfy the needs of E, we might conclude that this proposition holds. However, no clear evidence of the satisfaction of the needs of other network members through the informal organisation was found.

**Illustration 5.8 - The propositions on the development of the informal organisation and their applicability in the case of E's support network**

## 5.6 Conclusion

In this chapter, a second example of a mixed support network of a non-institutionalised elderly person was elaborated. Several elements of Mintzberg's typology on the structure of organisations were recognised in this support network. However, it was a notable finding of this case study that several other aspects, which Mintzberg considers essential for organisations, are not identified in this support network. Important examples of such ideas are the chain of authority and the flow of regulated activity. The rather strong informal organisation in this support network might explain this. Moreover, we could say that we, had to 'translate' some other parts of Mintzberg's framework to make them suitable for the investigation of the support network.

In Subsection 5.5.6, it was concluded, among others, that the characteristics of E's support network do not match with one of the configurations determined by Mintzberg. From this perspective, we might call it at least surprising that none of the interviewees comes up with any serious issues for improvement.<sup>134</sup> A way out of this paradox is provided by some of the statements made by the interviewees. Some of the interviewees mention positive aspects of E's character and behaviour. D<sub>2</sub> and S<sub>2</sub>, for example, state that they do not experience E as a troublesome or demanding person, while H<sub>1</sub> mentions that E shows that she is very satisfied with the support she receives. This makes H<sub>1</sub>'s work more enjoyable. According to H<sub>1</sub>, it is also her own attitude towards the people she cares for that makes that they get along with her easily. Moreover, she thinks that her 'slightly advanced age' makes the contacts between her and her elderly clients easier, because she is of approximately the same age as the children of most of these elderly. H<sub>2</sub> reported that she thinks it is useful that E's family carries out the requested tasks if she writes a note for them to ask them, for example, to arrange something. Moreover, the home care assistants have a strong internal motivation for doing their job. H<sub>2</sub>, for example, experiences back problems and was, therefore, advised to quit working as a home care assistant. She decided, however, not to act upon this advice, because she enjoys her current job too much. Another explanation is offered by S<sub>3</sub>, who reports that the combination of the facts that E does not require too much care and that D<sub>2</sub> does a lot for E, makes that the support network is functioning smoothly. Moreover, he refers to the fact that D<sub>2</sub> is the contact person for all people involved and that these people meet each other regularly benefits the support network. D<sub>2</sub>

<sup>134</sup> As in the previous chapter, the possibility that all interviewees have covered the problems in the network by giving socially desirable answers is excluded in the following discussion.

also mentions that E does not require an excessive amount of care. She expects that providing the support to E that she needs would be more complicated if her health situation would deteriorate. An additional explanation mentioned by D<sub>1</sub> is that E trusts her children, because she knows that they will arrange the support in a suitable way. Given these reasons supplied by the interviewees for the proper functioning of E's support system, it seems reasonable to conclude that E's support network is not governed by the logic of contingency factors in the Mintzbergian sense of the word, but by issues such as the ones discussed in this paragraph. At first sight, these conclusions seem to resemble the conclusions of the previous case study rather well. However, to answer the research question, it is preferable to carry out a more in-depth comparison of the two case studies. This cross-case comparison is presented in the subsequent chapter.



# 6

## Comparing the Cases and Answering the Research Question

### 6.1 Introduction

This chapter serves a twofold purpose. Firstly, the Cases A and B will be compared to make as much of the multiple-case design of the research project as possible. Therefore, the general data about the two cases, such as the characteristics of the elderly person involved and the composition of the networks, are compared in Section 6.2. In the following section, the focus will be shifted to the similarities and differences in the outcomes of the organisational analysis of both mixed support networks. The aim of these sections is to investigate whether the outcomes of these cases are convergent. Secondly, an answer to the research question is presented in Section 6.4. As will be explained in the introduction to that section, this answer will be provided at three levels: description, analysis and design.<sup>135</sup>

### 6.2 General Comparison of the Cases

The logic behind the choice for a multiple-case design for this research project was elaborated in Chapter 2. A short summary of the argument in that chapter is that carrying out a second case study enables the researcher to confirm or negate the results of a first case in another - but comparable - situation. In the following paragraphs, the results of the comparison of the cases regarding background data, and the support network and tasks are discussed. The word tables that underlie the observations, which are presented in this section, are included in Appendix 6.

The comparison of the background data in the first table of Appendix 6 shows that the elderly people studied have highly comparable characteristics. Moreover, some of the dissimilarities that can be identified, such as the differences in their health problems, prove to be of only minor importance for this project. Though their health problems are not exactly the same, the reported compromised functional capacity of the two elderly ladies is roughly comparable. The main difference between the two cases is the living situation of the elderly persons whose support networks were investigated. While the elderly person in Case A still occupied in the house she had lived in with her family, the other woman had moved to an apartment in a sheltered housing development two years before the interview. This dissimilarity seems to be one of the explanatory factors for the difference in the hours of formal care received each week.<sup>136</sup>

Additionally, the support networks of the two elderly ladies do also resemble each other to a rather high extent. Both, for example, have still some acquaintances and are in touch with their neighbours. Moreover, their children and grandchildren visit them regularly. The analyses of the tasks, however, showed that the elderly lady in Case A receives informal support from a wider range of sources than the focal person in network B. Neighbour (N<sub>1,w</sub>) and granddaughter (Gd<sub>1</sub>) are examples of these additional supporters in Case A. In Case B, the practical support for E is delivered almost exclusively by D<sub>2</sub> under normal circumstances. Anecdotal evidence suggests that this situation exists, because she is the only daughter of E, who lives in close proximity.

In sum, we can conclude that in spite of some differences, the support networks investigated in the two cases are similar enough to expect comparable outcomes of the organisational analysis of these two mixed support networks.

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<sup>135</sup> From this introduction becomes clear that the purpose this chapter is not to provide the reader with observations on the content of the cases. The possibilities to develop such arguments from the data available are abundant, but this would not contribute to answering the research question and is, thus, considered to be beyond the scope of the project reported in this thesis.

<sup>136</sup> A complementary explanation could be that the elderly woman in Case B never asked for household support, because she prefers her daughter to support her with these tasks.

### 6.3 Comparison of the Outcomes of the Organisational Analyses

In the previous section, it was concluded that the cases were similar enough to expect comparable outcomes of the analyses of these mixed support networks as organisations. In the following paragraphs, it will be discussed whether we did actually achieve equivalent results in this part of the research project. Whereas the data on the background of the elderly persons and the composition of the support network were of an objective nature - somebody's age or number of children are factual information - the analyses of the support networks depend more heavily on the interpretation of the researcher. From the rather tentative and subjective way in which several statements were formulated in the Chapters 4 and 5, the reader might already have concluded that some interpretations are at least debatable. This is something that also becomes clear if we have a look at the tables in the Sections 3 to 9 of Appendix 6. Indeed, in some of the instances in which this becomes evident - especially in the cases of the design parameters and the contingency factors - it is not easy to explain why relatively comparable case data resulted in different research outcomes. This indicates that, even if one and the same researcher investigates several cases, an unambiguous interpretation cannot be guaranteed.<sup>137</sup> Of course, it is an option to rework the case interpretations to ensure they are presented in a way that is as comparable as possible. I considered this possibility, but decided not to reinterpret the cases. The main reason for this decision was that an unifying reinterpretation of the two cases might leave the reader with the impression that it was beyond doubt that aspect X had to be classified in category Y of Mintzberg's framework. This might cause a false impression of certainty. In the end, several classifications are debatable and depend strongly on the interpretation of the researcher. In Section 3.7, it was argued that this need for interpretation is inherent to the use of a typology for analytical purposes. What is important, however, is that I consider the main lines of the organisational analyses became sufficiently apparent to draw conclusions on the value of Mintzberg's typology for the understanding and design of mixed support networks of the non-institutionalised elderly (see Section 6.4).

With regard to the parts of the organisation, the comparison shows that both support networks have a large operation core, while the middle line and the strategic apex were both small. Moreover, hardly or no technostructure and support staff were identified. During the analysis of this aspect of the support networks, it turned out that in both cases the boundaries between the organisational parts were not as clear cut as suggested by Mintzberg's publications. Moreover, several support network members fulfilled two or sometimes even more roles. The involvement of E as beneficiary of the support network as well as a co-producer of several services complicated in both cases the determination of her position in the organisation in the terms suggested by Mintzberg.

The investigation of the coordinating mechanisms in the two cases was divided in five categories on the basis of the answer to the question between or among which type of network members - formal carers, informal carers, and the elderly person herself - were applied. Mutual adjustment was identified as the prime coordinating mechanism used. The research outcomes were highly similar for the two cases.

A comparable outcome was achieved for the investigation of the systems of flows. In both cases, flows of formal authority and regulated activity were not identified, whereas the flows of informal communication and ad hoc decision processes turned out to be of major importance. The set of work constellations was usefully identified in both cases if it was interpreted on the basis of the groups of care needs of the elderly persons.

The comparison of the design parameters and the contingency factors resulted in outcomes which were only partly convergent. As argued in the first paragraph of this section, however, this may have more to do with the space left for interpretation in organisational typologies than in an actual difference in content of the support networks studied. In this context, it is important to note that the elaboration of these aspects in the case analyses showed that much of the terms used by Mintzberg had to be 'translated' - that means had to be interpreted rather freely - to allow some kind of interpretation of aspects of the support networks.

Configuration, internal fit and external fit were all not identified in both cases. Moreover, bringing the actual situations in line with the configurations cannot be expected to be of benefit to the support network, because the interviewees involved in both cases reported the support network, in which they participated, to function smoothly.

The outcome of the investigation of the systems of flows in Case A as well as Case B pointed out that a further elaboration of the cases using characteristics of the informal organisation was desirable. These analyses, which are summarised in Section 9 of Appendix 6, turned out to be highly convergent. Both support networks shared characteristics of with the formal as well as the informal organisation and were classified ambidextrous on several organisational elements.

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<sup>137</sup> This aspect was already hinted at in Chapter 3 when it was described as a consequence of the use of typologies.

To recapitulate, the comparison of the outcomes of the organisational analyses of the two support networks show that these research results are rather convergent. They are at least convergent enough to say that Case B proved to be a replication of Case A. Moreover, though the classification of the support network characteristics in some categories of Mintzberg's typology might be a matter of interpretation, the general tendency in the outcomes of the analysis of the support networks as organisations is pronounced enough to allow us to draw conclusions on the value of this framework for the understanding and design of mixed support networks of non-institutionalised elderly.

## 6.4 An Answer to the Research Question

### 6.4.1 Introduction

In Chapter 3, the research question was specified as: 'Which contribution to the understanding and improvement of mixed support networks of non-institutionalised elderly can be made if we apply Mintzberg's typology on the structure of organisations as a tool?' This question will be answered drawing from the case comparison presented earlier in this chapter.

However, a slightly more detailed interpretation of 'contribution for understanding and improvement' appears to be desirable. Lammers et al. (2000) introduce a triad of purposes of the study of an organisation: revealing, discovering, and designing.<sup>138</sup> According to these authors, revealing relates to showing wrong practices, discovering involves the description of how things are done different and better in other places, and designing is the construction of images of the way in which the current practices might be improved. In other words, revealing relates to the identification of problems, discovering is concerned with what exists elsewhere, and design is the creation of new knowledge. As stated in the first chapter of this thesis, the ultimate goal of studying support networks of the non-institutionalised elderly is to enable us to design them using the practices developed in the field of Industrial Engineering & Management. As we can see from the triad described by the authors previously mentioned, not only design, but also revealing might be relevant for an improved understanding. Discovering is not equally appropriate, because in this research project only a small number of non-problematic cases have been studied. Given the limited availability of approaches to study the support networks of non-institutionalised elderly persons as an entity, I want to add the function of description to the triad introduced by Lammers et al. (2000). Since this function precedes revealing, which I will refer to as analysis, and design, this section will start with an investigation of the value of Mintzberg's typology for describing support networks (Subsection 6.4.2). In the Subsections 6.4.3 and 6.4.4, the usefulness of Mintzberg's framework for analysis and design of support networks will be elaborated.

### 6.4.2 Mintzberg's Typology as Tool for Description

As elaborated in the introduction to this section, the first question to answer is whether Mintzberg's typology on the structure of organisations provides us with a tool to develop meaningful descriptions of mixed support networks of the non-institutionalised elderly. At the most general level, the answer to this question is: 'yes, it does'. However, if we take a more detailed look at each of the building stones of the typology, it turns out that can be concluded that this statement only holds for some of these building stones. The reader should be aware that even some concepts used by Mintzberg within the context of these building stones resonate more easily with the support networks studied than others. An overview of the building stones of Mintzberg's typology and their value as a tool for the description of mixed support networks of the non-institutionalised elderly is provided in Illustration 6.1.

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<sup>138</sup> In Dutch: onhullen, ontdekken en ontwerpen.

Building stone	Judgement	Comments
Basic parts of the organisation	Relevant	These concepts help us to describe issues such as who has authority. Nevertheless, technostructure and support staff turned out to be terms that were hardly applicable to the support networks studied.
Coordinating mechanisms	Relevant	
Systems of flows	Relevant	Both cases showed that informal communication, sets of work constellations, and ad hoc decision processes could be identified in the support networks.
Design parameters	Relevant	
Contingency factors	Hardly relevant	Too many of the contingency factors appeared to be not applicable or did not hold to state that we can develop meaningful descriptions on the basis of these factors.
Configuration	Hardly relevant	Since configuration, internal fit, and external fit were not achieved and aligning the support networks to one of the configurations defined by Mintzberg was expected not to benefit the support network, meaningfully describing the support networks as one of the five - or seven - is not possible.

**Illustration 6.1 - The building stones of Mintzberg's typology on the structure of organisations and their value for the description of mixed support networks of the non-institutionalised elderly**

#### 6.4.3 Mintzberg's Typology as Tool for Analysis

An overview of the value of the building stones of Mintzberg's typology on the structure of organisations for the analysis of the support networks of non-institutionalised elderly is given in Illustration 6.2. It might be good to note that the identification of either the presence or the absence of certain concepts in support networks, may serve an analytical purpose. We could, for example, argue that the failure to recognise a technostructure in the two support networks investigated reveals more about these networks than the fact that a operating core could be identified.

Building stone	Judgement	Comments
Basic parts of the organisation	Relevant	May help to explain which functions are lacking.
Coordinating mechanisms	Relevant	May support the identification of the sources of problems experienced among and between groups of carers.
Systems of flows	Partially relevant	The sets of work constellations appear to be the most informative concept related to this building stone.
Design parameters	Hardly relevant	No explanatory power, because the reasoning behind most of the parameters does not hold for the support networks.
Contingency factors	Not relevant	Too many of the contingency factors were not applicable or do not hold to expect them to support valid analyses of support networks.
Configuration	Not relevant	Because of the lack of relevance of the design parameters and the contingency factors it does not seem to be reasonable to ascribe analytical value to Mintzberg's construct of configurations

**Illustration 6.2 - The building stones of Mintzberg's typology on the structure of organisations and their value for the analysis of mixed support networks of the non-institutionalised elderly**

The study of these support networks applying Mintzberg's typology of the structure of organisations as a framework for analysis, allowed us to draw interesting conclusions on some of the characteristics of the support networks. Especially, the coordinating mechanisms and the concept of sets of work constellations appeared from the case studies as being able to fulfil such a role. These concepts, for example, draw attention to the fact that the informal carers and the formal carers operate mainly within their own group. Only some sets of work constellations transcend the boundaries between these two groups. Moreover, each of these two groups applies their own coordinating mechanisms. Although mutual adjustment by informal communication is important within both groups, the formal carers tend to use more formalised coordinating methods than the informal carers. The home care assistants have to cope with the relatively formal requirements and coordinating methods of the home care organisation as well as with the specific demands and informal character of each of the support networks in which they operate. In the two cases studied, these two worlds were integrated by the person of the

home care assistants. It was reported that these people were really flexible in carrying their job and contributed to the smooth functioning of the mixed support network in that way.<sup>139</sup>

#### 6.4.4 Mintzberg's Typology as Tool for Design

In the previous subsection, it was claimed that the design parameters and the contingency factors were hardly or not useable for the analysis of mixed support networks of non-institutionalised elderly persons as organisations. This conclusion has an important implication for the value of Mintzberg's typology on the structure of organisations as a tool for the design of support networks.

Given the composition of Mintzberg's typology from several building stones that fit together in specific ways to form configurations, we have to conclude that the failure of one or more building stones to be applicable to support networks has to result in the rejection of this framework as a tool for design. An important argument for this conclusion is that the hypotheses identified by Mintzberg in conjuncture with the contingency factors do not seem to govern the logic behind the structure of the mixed support networks studied in this thesis. In other words, the linking pin between the building stones of the typology developed by Mintzberg is absent in the case of the mixed support networks. As a consequence, it is not possible to derive at valid prescriptions regarding a most desirable structure for support networks on the basis of Mintzberg's typology on the structure of organisations.

### 6.5 Conclusion

This chapter was constructed to formulate an answer to the research question through a comparison of the cases which were already elaborated individually in Chapter 4 and 5. In the previous sections, we saw that we can - at least to a certain extent - apply the terminology used by Mintzberg for the description and analysis of support networks of non-institutionalised elderly persons. The classification of the basic parts of the organisation as well as the coordinating mechanisms turned out to be useful to shed some light on the functioning of this type of support networks. Some of the design parameters, particularly the ideas on task division, are applicable to these networks. Especially if used as a heuristic device to identify aspects of interest of mixed support networks, the typology may be useful for the further investigation of mixed support networks of non-institutionalised elderly persons.<sup>140</sup> In this way, characteristics of mixed support networks can be uncovered, which not yet have come to light in study of these networks by other disciplines.

Despite the fact that we could describe the support networks in the terms of Mintzberg's typology of the structure of organisations, its value for design seems to be rather limited. Both cases showed that configuration was not achieved, although the members of the support networks were generally satisfied with the functioning of the support network. An explanation for these contradictory findings, might be found in the fact that the contingency factors could not be recognised in the mixed support networks studied. In combination with the reported limited relevance of the design parameters, this finding indicates that the logic underlying the formation of configurations in Mintzberg's typology is not applicable to mixed support networks of the elderly.

In sum, the value Mintzberg's typology on the structure of organisations as a tool for the understanding and improvement of mixed support networks of the non-institutionalised elderly is sufficiently high to justify additional research in this field. Suggestions for the further development of the study of mixed support networks as organisations are made in Chapter 7.

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<sup>139</sup> See also Van der Lyke (2000) on this role of home care assistants as a bridge between home care organisations and individual clients.

<sup>140</sup> In this context, a note can be made on the amount of freedom one allows oneself in the interpretation of the terminology introduced by Mintzberg. A trade-off between the degree of freedom of interpretation and the possibility to analyse and describe mixed support networks of non-institutionalised elderly appears to exist. In other words, if you decide to take Mintzberg's definitions literally, you can expect to be able to analyse some phenomena relatively in-depth, while a less literal interpretation allows for the description of a larger range of characteristics of the support network, but would have less explanatory power.

# 7

## Developing the Study of Support Networks as Organisations Further

### 7.1 Introduction

As introduced in Chapter 1, the idea to conceptualise mixed support networks of non-institutionalised elderly as organisations was a rather unconventional one. I argued that these support networks do conform to common definitions of the phenomenon organisation. Moreover, it was stated that a further clarification of these networks from an organisational perspective would be of potential, practical value, because problems reported in research and policy reports with regard to support networks were related to issues such as coordination and cooperation.

Mintzberg's typology on the structure of organisations was identified as a widely acknowledged and comprehensive model from the field of organisation theory. An analysis of two mixed support networks using Mintzberg's typology as analytical framework was presented in the Chapters 4 and 5. Although this task was a rather challenging one, the results turned out to be fairly fruitful. Mintzberg's typology proved to be of value for the description and analysis of mixed support networks. On the other hand, we found that this typology was not an adequate tool to design support networks, because the majority of the hypotheses on the contingencies between organisational characteristics did either not hold or were not applicable for the support networks in the case studies. Therefore, the prescriptive value attributed to the organisational configurations did not seem to materialise for the mixed support networks.

Elements of Mintzberg's typology that turned out to be of particular value to shed light on aspects of the mixed support networks that were studied are the concepts of parts of the organisation, coordinating mechanisms and sets of work constellations. The latter, for example, helps us to understand that it might be better not to strive for uniform solutions for problems experienced in the support networks. Each of the work constellations, indeed, appears to be governed by its own logic and customs - even when roughly the same persons are involved. Additionally, the case studies illustrated that, in spite of the appointment of a primary responsible carer (EVZ) among the home care assistants and one of the children as contact person, E has an incredible important role in linking formal and informal carers. As a consequence of her role as 'liaison officer', the formal and informal carers even hardly need to speak to each other. The investigation of the informal organisation that was added to Mintzberg's typology in the framework for case analysis, showed the complex and intertwined nature of formal and informal organisational aspects of mixed support networks. Such an approach can be of use for the understanding of problems in the cooperation between formal and informal carers.

In sum, organisational theory provides a fresh view from which to study mixed support networks. It helps us to investigate aspects of these networks that had not yet come to the fore in the study of mixed support networks. As such we can consider organisational theory an interesting addition to the study of mixed support networks, which is complementary to - rather than a substitute of - the approaches already applied in this field. Given these conclusions, I consider a further elaboration of the study of mixed support networks as organisations desirable. This chapter is written to discuss several issues that one might wish to take into account when developing this field further (Sections 7.2 to 7.4). Some examples of promising approaches to the study of support networks as organisations are presented in Section 7.5.<sup>141</sup> It might be good to state beforehand, that I will only touch on some of these issues lightly, because a full elaboration of these topics would exceed the aims of this thesis. Moreover, which of these suggestions could best be applied in future research projects depends on the precise aims formulated for these studies.

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<sup>141</sup> As in the previous chapter, I do not pay attention to the content of the support networks as a subject of study, because this is only indirectly related to the aim of this research project. However, on the basis of the case studies developed in this thesis, several recommendations for further research on mixed support could be made. Suggestions are available from the author upon request.

## 7.2 Research Designs

In this section, an answer to the question whether the application of different research designs would be of use for the further development of the study of mixed support networks of non-institutionalised elderly persons is developed. I will argue that future studies might benefit from the application of different research designs for reasons related to case selection and the accumulation of knowledge.

Several critical remarks regarding the research design applied in this research project can be made. Firstly, a research design based on the investigation of only two cases, for example, risks a limited generalisability. Secondly, if we compare the support networks studied during this project to the types of support networks identified by Tonkens et al. (2008) and Wenger et al. (see, among others, Wenger (1994) and Wenger & Tucker (2004)), we see that the cases selected cover only part of all support networks of elderly people.<sup>142</sup> Moreover, the cases selected only concerned two situations in which the support network members did not experience particular problems with regard to, for example, the coordination of their tasks. Although such an approach is acceptable for exploratory research (see Chapter 2), it is likely that several issues that might come up in mixed support networks could not be elaborated due to this case selection. For example, the problems in the cooperation between formal and informal carers that were described in Chapter 1, could not be investigated in the cases due to this case selection.

Based on the issues identified in the previous paragraph, three recommendations for research designs for further studies of mixed support networks as organisations emerge. Firstly, draw on more and more diverse cases to increase the generalisability of the research outcomes. Secondly, consider to study mixed support networks which are experienced as troublesome. Moreover, case studies are often considered as a starting point for the investigation of a field. Therefore, those who favour statistical studies over case studies may consider to take the study of mixed support networks as organisations further by proceeding with the application of those methods as soon as the state of knowledge allows the application of such a research design.

## 7.3 Theoretical Frameworks

Another question that is relevant for the further development of the study of mixed support networks of non-institutionalised elderly as organisations is whether it would be desirable to modify the theoretical framework.. Although Mintzberg's typology compares favourably to other theoretical constructs in Industrial Engineering & Management (see Subsection 3.3.3), I think that supplementary theoretical frameworks could be applied fruitfully. Since Mintzberg's typology includes a wide range of organisational aspects, but elaborates these not too much in-depth, I would argue in favour of a more targeted framework. From the case studies became, indeed, clear that some aspects - such as coordinating mechanisms, informal organisation and sets of work constellations - of Mintzberg's typology were of more use to the study of support networks than others. Therefore, I would suggest further research using more comprehensive theoretical frameworks regarding these issues.<sup>143</sup>

While preparing the case descriptions, I felt I had to steer between simply making a description of the situation that was presented by the interviewee as the situation existing at that time and the emergence of the current situation over time. Although it was for the analysis of most parts of Mintzberg's framework not necessary to include these more 'historical' aspects of the support network and its functioning in the case analysis, such characteristics turned out to be important to develop an understanding of the case situation.<sup>144</sup>

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<sup>142</sup> Both cases studied can be classified as mixed networks if we apply the typology developed by Tonkens et. al. Among the elderly, however, this network was identified only in 17% of the cases (see Illustration 1.6).<sup>142</sup> The application of PANT (see Appendix 1) results in the identification of two locally integrated networks in the case studies. According to Wenger et. al. this network types is most common in the regions they studied, because they found it in nearly half of the situations they studied (see Illustration 1.4). This result may be explained by the type of community in which the case studies were selected.

<sup>143</sup> Additionally, different theoretical frameworks may be used. To do justice to the intangible nature of output of support networks of the non-institutionalised elderly and the 'double role' of the elderly as beneficiary of the support network as well as 'co-producer', the perspective of service management may be a useful one (see for example, Grönroos (2007); Maister (1997); Normann (2002)).

<sup>144</sup> Those who are familiar with Mintzberg's oeuvre may point at the life cycle model of organisations, which this author presents on the pages 281 to 300 of *Mintzberg on Management* for a more dynamic approach. For the sake of the argument in this thesis, this model is best summarised by its graphical depiction in Illustration 7.1. Although this model might resemble the developments in some organisations, it does not appear to hold for the mixed support networks of the

Moreover, as described in Subsection 1.5.5, the convoy model stresses the importance of the development of the convoy over the life course (see also, Jacobson (1986)). Additionally, in the case studies was found anecdotal evidence of differences in the structure and functioning of the support networks at times of crises. Therefore, it would be desirable to develop a more dynamic theoretical framework for the study of mixed support networks of the non-institutionalised elderly as organisations. However, including this type of aspects in empirical studies and models has proved to be a major intellectual challenge in the social sciences. Nevertheless, attempts have been made in organisational theory. Aldrich & Ruef (2007), for example, take an evolutionary perspective on the development of organisations over time, while Hatch (2002) theorises time in the context of organisational studies in a cyclical way. These publications might provide starting points for the further elaboration of this topic.

## 7.4 Designing Mixed Support Networks

In Chapter 1, the societal value of the possibility to design mixed support networks was sketched. Important contributions to the efficiency and effectiveness of mixed support networks were expected to be made. The conclusion of the investigation of the value of Mintzberg's typology as a tool for designing organisations, however, was that we cannot use the typology for this purpose. This conclusion was based on the fact that the contingency factors that hold together the individual building stones of Mintzberg's typology did not seem to apply to mixed support networks.

An obvious way to attempt to remedy this problem is to develop a set of contingency factors that apply to mixed support networks of the non-institutionalised elderly. Following a comparable chain of thoughts, it might be worth to reconsider the design parameters to be used for the design of support networks. In other words, drawing from Mintzberg's typology on the structure of organisations we might construct a comparable theoretical framework that is specifically tailored to the study and design of mixed support networks of the non-institutionalised elderly.

Instead of developing a new typology as suggested in the previous paragraph, we might also try to improve mixed support networks of the non-institutionalised elderly following a different approach. Within the field of Industrial Engineering & Management, some authors have paid attention to the differences between the methodologies for design and the way in which practitioners actually solve problems in organisations (see for example, Visscher & Rip, 1999; Visscher, 2001a). These studies clarified, among others, that design methodologies and approaches, such as the ABP and the engineering approach (see Section 3.8), are not applied rigidly or mechanistically in practice. A less mechanistic way of studying mixed support networks of the non-institutionalised elderly as organisations would allow us to cope with aspects such as the behavioural patterns in each family - which are not easily understood, because they developed over several decades and were influenced by a large number of experiences of the family members. Therefore, we might use the insights of Mintzberg's typology on the structure of organisations - or organisational theory in general - a more pragmatic way to generate insight into and solutions for the problems experienced in mixed support networks. 'Recipe style' prescriptions on the basis of a model can not derived at if such an approach is applied, but the potential to develop practical solutions to real world problems is considerable.

## 7.5 Concrete Suggestions for the Study of Support Networks as Organisations

What would I do if I wanted to develop a research project to take the work presented in this thesis further? The obvious answer is that this depends on the purposes of the research project. In this context, it is important to distinguish between knowledge creation and knowledge application. Given my experiences during the research project described in this thesis, I expect the following two approaches to be promising for the study of support

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non-institutionalised investigated in this research project. Firstly, because of the lack of configuration in these case studies we cannot expect to move them from the one configuration to the other. Secondly, the formation and decline of the support networks can be reckoned to be driven by the deteriorating health situation and the death of the elderly persons. Therefore, the logic behind the moves between the types of configuration during the stages of the organisational life cycle does not seem to be relevant for the support networks of the non-institutionalised elderly. Finally, it is debatable whether mixed support networks develop according to the stages identified by Mintzberg, because changes in these network turn out to be of a different character. They are for example reversible if the health situation of the elderly person improves, while it is impossible to return to, for example, the entrepreneurial stage if the formation stage of Mintzberg's model has been left behind.



networks as organisations. The first approach is related to knowledge creation, while the second one provides a framework for problem solving.

Firstly, a rather straight forward way to develop further knowledge on mixed support networks of the non-institutionalised elderly as organisation is to collect best practices related to topics such as coordinating mechanisms in a substantial number of real life situations. Together these best practices might form a body of knowledge that can be used as a source of inspiration for the improvement of other support networks. This approach is related to the idea of developing a new set of contingency factors for mixed support networks of the non-institutionalised elderly. We have to be reluctant in the application of this knowledge. Circumstances differ from support network to support network. Therefore, the best practices should not be used to derive at prescriptions on how a specific support network has to be changed. In each situation, the unique characteristics of that support network have to be taken into account. Nevertheless, it might be possible that the best practices are contingent upon support network type (see the typologies by Tonkens et al. and Wenger et al. in Chapter 1). If this is the case, the search for inspiration using best practices can be structured more pragmatically.

If we wish to study an actual support network in which problems are experienced, we may consider to try to solve these problems using Soft Systems Methodology.<sup>145</sup> This approach emerged from an attempt to apply systems engineering to management problems (see, among others, Checkland (1981); Checkland & Holwell (1998); Checkland & Scholes (1990); Checkland & Poulter (2006)). Direct transfer of these methods failed. Therefore, a new methodology for action research was developed. In 2006, Checkland and Poulter published what they named 'a short definitive account of SSM'. In this book, they depict the basic process of Soft Systems Methodology as follows.

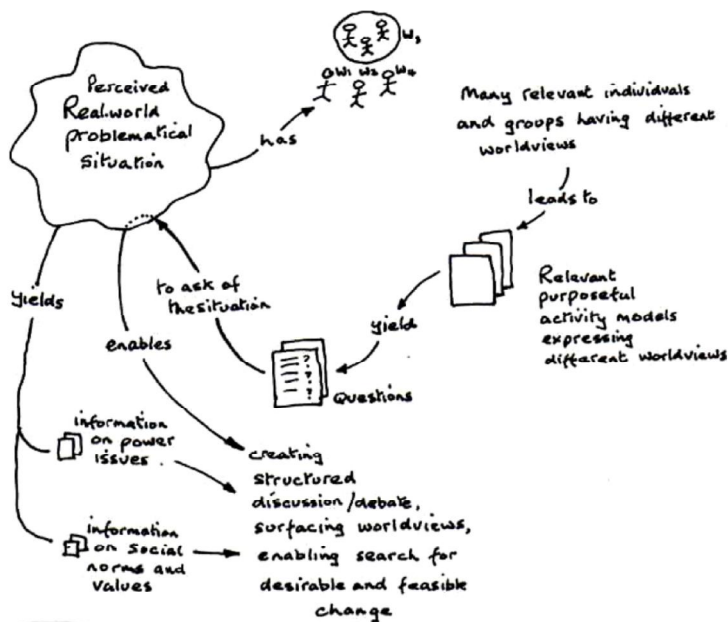


Illustration 7.2 - The basic process of Soft Systems Methodology  
Copy from Checkland & Poulter (2006, p.12).

Soft Systems Methodology has two major advantages in comparison to other problem solving approaches in the field of Industrial Engineering & Management. Firstly, the authors pay explicit attention to the consequences of applying methods from systems engineering to problems in the 'soft', human world (see Checkland (1981), especially chapters 3 and 8). Moreover, Checkland et al. have thought about the consequences of the notion of time for their studies.<sup>146</sup> They state, among others, that 'the system content is regarded to be the product of the previous history of the system itself' (Checkland, 1999, p.52). If we recall the note made on the desirability of a more dynamic analytical framework in Section 7.3, we can see that these characteristics of Soft

<sup>145</sup> As such, this approach does not link to Mintzberg's typology on the structure of organisations directly. However, Mintzberg's typology can be expected to be useful during the search for options for desirable and feasible change.

<sup>146</sup> More precisely, they borrow Vicker's concept of an appreciative system to develop their ideas on the developments of systems over time (see for example, Checkland (1999)).

Systems Methodology are attractive. Therefore, I expect this approach to be fruitful as a methodology to solve actual problems in mixed support networks of the non-institutionalised elderly.

## 7.6 Conclusion

In this thesis, it was showed that the rather unusual conceptualisation of mixed support networks of the non-institutionalised elderly as organisations provides a valuable addition to the study of these networks. The research project reported in this thesis has an exploratory character. Therefore, further investigation of support networks as organisations is desirable. Several suggestions to construct research projects serving this purpose were made in this chapter. The suggestions were made with regard to research design, theoretical frameworks, and approaches to design. Furthermore, two examples of approaches which I consider promising for the study of support networks as organisations were discussed briefly in Section 7.5.

Finally, a more general remark about the field of Industrial Engineering & Management and the engineering approach it employs (see Section 3.8) can be made on the basis of the research described in this thesis. If we regard engineers in fields such as chemical technology and mechanical engineering as people who apply the laws investigated by natural scientists to enable them to design, for example, a chemical plant, the idea that students graduating from an Industrial Engineering & Management programme may be of a different breed emerges easily. The fact that humans are around in many of the systems for which a design can be made in the field of Industrial Engineering & Management, has as a consequence that not all variables can be controlled. Indeed, human behaviour can be induced by a wide range of causes. Therefore, law like relationships which can be used for design purposes are hard to establish. Especially the study of mixed support networks of the non-institutionalised elderly 'suffers' from the involvement of many humans, whereas proper technical equipment was not identified in the case studies. The case studies showed that a rather law like application of Mintzberg's typology on the structure of organisations did not enable us to develop prescriptions regarding the structure of mixed support networks of the non-institutionalised elderly. In conjuncture with the information provided earlier in this paragraph, we might conclude that the consequences of the presence of humans in systems one attempts to design, results in a need for additional knowledge. This knowledge is of a different nature and comes from fields, such as sociology, psychology and anthropology. A further incorporation of the bodies of knowledge and methodological approaches available in these fields, can - in my opinion - only strengthen the field of Industrial Engineering & Management.<sup>147</sup>

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<sup>147</sup> Moreover, this may be of help in aligning design methodologies and actual practice (see for example, Visscher (2001a)).

## Summary

The aim of the research described in this thesis is to determine which contribution to the understanding and improvement of mixed - that means consisting of formal as well as informal supporters - support networks of non-institutionalised elderly can be made by organisation theory as applied in the field of Industrial Engineering & Management. To gain insight in this issue, an explorative research project has been carried out.

The backgrounds of this research question are elaborated in Chapter 1. It is argued that the research question is societal relevant as well as academically interesting. The societal value of the research project is that, if it turns out to be possible to study and design mixed support networks of the non-institutionalised elderly using the tools from the field of Industrial Engineering & Management, we may aim at increasing the efficiency and effectiveness of the support supplied by these mixed networks. The academic contribution of the research project described in this thesis is formed by the conceptualisation of mixed support networks of elderly people as organisation. Literature research has shown that such an approach has not been applied before. Besides this, some definitions of the term organisation are described in Chapter 1. These definitions show that their contents need not impede the conceptualisation of support networks as organisations.

In the second chapter, the research design for this project is elaborated. It is explained why a multiple case study of two mixed support networks of non-institutionalised elderly is a suitable research strategy for this exploratory research project. Moreover, the criteria for case selection were elaborated in Chapter 2. The choice has been made to select the two cases according to the same criteria to enable analytical generalisation of the outcomes of the case analyses in principle. The data used in this research project were collected through interviews with elderly persons and several - informal as well as formal - members of their support network. Additionally, the methods for within-case data analysis - mainly on the basis of an analytical framework - and cross-case comparison - primarily the use of 'word tables' - are described.

The framework for the description and analysis of the two cases is developed in Chapter 3. The case description is carried out using several predefined items to ensure that the two case descriptions are as comparable as possible. These descriptions are combined with two methods that provide a more graphical representation (the 'network images' and the 'task tables'). The reasons to opt for Mintzberg's typology on organisational structures as a framework for the analysis of the support networks as organisation are elaborated in Section 3.3. The following were among the criteria which led to that choice: the model uses a wide definition of the phenomenon organisation, the model incorporates a wide range of organisational characteristics, the model is widely acknowledged in the field, and the model received favourable feedback from Mintzberg's colleagues in organisation theory.

Mintzberg's typology on the structure of organisations is constructed from five building stones: basic parts of the organisation, coordinating mechanisms, systems of flows, design parameters, and contingency factors. According to Mintzberg, these building stones cluster in a rather predictable way in seven configurations: the entrepreneurial organisation, the machine organisation, the professional organisation, the diversified organisation, the innovative organisation, the missionary organisation, and the political organisation. A summary of the framework for case analysis is presented in Section 3.5. The final section of Chapter 3 is dedicated to some reflective notes on the position of the research project described in this thesis within the field of Industrial Engineering & Management. It is argued that the research project, despite the fact that it does not aim to solve an actual problem, can be positioned within the 'engineering approach' advocated in this field.

The description and analysis of the case studies is presented in the Chapters 4, 5 and 6. The within-case analyses are included in the Chapters 4 and 5, while the cross-case comparison is the topic of Chapter 6. On the basis of this comparison, it is concluded that the two cases were convergent and that a replication of the research outcomes of the first case is, thus, realised. Subsequently, the research question - by then somewhat redefined (see Section 3.4) - is answered at three levels. It is argued that Mintzberg's typology provides a valuable contribution to the description and analysis of mixed support networks of non-institutionalised elderly persons. This unconventional approach of the support networks proved to result in additional insights in the structure and functioning of these networks. Such aspects had not received sufficient attention in the research on mixed support networks that were already done. Designing support networks using Mintzberg's typology on the structure of organisations as a tool is, however, not feasible. This can be explained by the fact that the logic of the hypothesis on the relationships between the organisational characteristics in the contingency factors proved not to hold for the support networks. As a consequence, Mintzberg's typology on the structure of organisations cannot serve as a source of prescriptions regarding the structure of mixed support networks of the non-institutionalised elderly.

Overall, the mixed results of this exploratory research project justify a further development of the study of mixed support networks as organisations using models from the field of Industrial Engineering &

Management. Several recommendations for further research with regard to the research design are made in Section 7.2. An example of these recommendations is to study cases in which the network members experience difficulties with the function of the network. Proposals for additions to Mintzberg's typology as framework for case analysis are presented in Section 7.3. Moreover, it is argued that the fact that prescriptions for the design of mixed support networks cannot be derived from Mintzberg's typology does not imply that we have to give up the aim of improving mixed support networks of the elderly through design activities. Suggestions on how these activities might be approached are presented (Sections 7.4 and 7.5).

In brief, it can be stated that the exploratory research project described in this section allows us to conclude that the study of mixed support networks of the non-institutionalised elderly as organisations an approach is which deserves a further elaboration

## Samenvatting

Het doel van het onderzoek dat in deze scriptie beschreven wordt, is om vast te stellen welke bijdrage organisatie theorie, zoals toegepast binnen het vakgebied van de Technische Bedrijfskunde, kan leveren aan het begrip en het verbeteren van gemengde - dat wil zeggen bestaande uit zowel formele als informele ondersteuners - support netwerken van ouderen die niet in een instelling verblijven. Om inzicht te verwerven in dit vraagstuk is een exploratief onderzoek opgezet.

De achtergronden van deze vraagstelling worden beschreven in Hoofdstuk 1. Daarin wordt beargumenteerd dat het een vraagstuk betreft dat zowel maatschappelijk relevant als wetenschappelijk interessant is. Het maatschappelijk nut van het onderzoek ligt in het feit dat, indien het mogelijk is om support netwerken te bestuderen en te ontwerpen met de gereedschappen die hiervoor bestaan in binnen het vakgebied van de Technische Bedrijfskunde, er gestreefd zou kunnen worden naar een verhoging van de effectiviteit en efficiency van de ondersteuning gerealiseerd door de gemengde support netwerken. De wetenschappelijke bijdrage van het in deze scriptie beschreven onderzoek bestaat uit de conceptualisering van de support netwerken van ouderen als organisatie. Literatuuronderzoek heeft uitgewezen dat een dergelijke benadering nog niet eerder toegepast is. Tevens passeren in Hoofdstuk 1 een aantal definities van het begrip organisatie de revue. Hieruit blijkt dat de inhoud van deze definities geen belemmering hoeft te vormen voor het benaderen van support netwerken als organisaties.

In het tweede hoofdstuk wordt aandacht besteed aan de aanpak die gekozen is voor de uitvoering van het onderzoek. Uitgelegd wordt waarom een gevalstudie waarin twee support netwerken van ouderen geanalyseerd worden, een passende onderzoeksstrategie is voor exploratief onderzoek. In Hoofdstuk 2 worden ook de criteria voor de case selectie voor de gevalstudies toegelicht. Er is er voor gekozen om de twee gevallen op basis van dezelfde criteria te selecteren, zodat analytische generalisatie van de uitkomsten van de case analyses in beginsel mogelijk is. De data voor deze studie zijn verzameld middels interviews met ouderen en diverse leden - informele zorgverleners zowel als formele zorgverleners - van hun support netwerken. Tot slot worden de methoden voor data analyse of binnen de cases - hoofdzakelijk op basis van een analytische raamwerk - en tussen de cases - primair aan de hand van 'word tables' - besproken in Hoofdstuk 2.

Het kader voor de beschrijving en analyse van de twee gevallen wordt ontwikkeld in Hoofdstuk 3. De gevalbeschrijving vindt plaats aan de hand van een aantal vooraf gedefinieerde items om de twee gevalbeschrijving zo vergelijkbaar mogelijk te houden. Deze beschrijvingen worden gecombineerd met een tweetal meer grafische weergavemethoden (de 'network images' en de 'task tables'). In Sectie 3.3 is uitgewerkt op welke gronden gekozen is voor de typologie van organisatiestructuren, die ontwikkeld is door H. Mintzberg, als raamwerk voor de analyse van de support netwerken als organisaties. Criteria die onder andere in aanmerking genomen zijn bij de bepaling van deze keuze zijn de volgende: het model hanteert een brede definitie van het organisatiebegrip, het model besteedt aandacht aan een breed spectrum van aspecten van het fenomeen organisatie, het model geniet grote bekendheid binnen het vakgebied en het model heeft waardering ontvangen van Mintzbergs collegae in de organisatiekunde.

Mintzbergs typologie van organisatiestructuren is opgebouwd uit vijf bouwstenen: onderdelen van de organisatie, coördinatiemechanismen, opvattingen over het functioneren van organisaties, ontwerpparameters en contingentiefactoren. Volgens Mintzberg clusteren deze bouwstenen op min of meer voorspelbare wijze, waardoor organisaties zeven configuraties aan kunnen nemen: de eenvoudige structuur, de machine organisatie, de professionele organisatie, de divisiestructuur, de innovatieve organisatie, de missionaire organisatie en de politieke organisatie. Na een samenvatting van het raamwerk voor case analyse in Sectie 3.5, wordt Hoofdstuk 3 afgesloten met enkele bespiegelende opmerkingen over de positie van het onderzoek voor deze scriptie binnen het vakgebied van de Technische Bedrijfskunde. Hier wordt de stelling verdedigd dat, hoewel dit onderzoek niet tot doel heeft om een concreet probleem op te lossen, het toch valt binnen de 'ingenieursaanpak' die binnen dit vakgebied gepropageerd wordt.

De Hoofdstukken 4 tot en met 6 zijn gewijd aan de beschrijving en analyse van de gevalstudies die in het kader van dit onderzoek uitgewerkt zijn. Deze taak wordt ter hand genomen voor de individuele gevalstudies in de Hoofdstukken 4 en 5, terwijl een vergelijkende analyse van de gevalstudies gepresenteerd wordt in Hoofdstuk 6. Hieruit blijkt dat de uitkomsten van de gevalstudies convergent zijn en dat een replicatie van de resultaten uit de eerste casus derhalve gerealiseerd wordt. Vervolgens wordt de onderzoeksvraag - inmiddels in enigszins aangescherpte vorm (zie Sectie 3.4) - op drie niveaus beantwoord. Hier wordt beargumenteerd dat Mintzbergs typologie een waardevolle bijdrage kan leveren aan het beschrijven en analyseren van gemengde support netwerken van ouderen. Deze onconventionele benadering van de support netwerken bleek namelijk te resulteren in aanvullende inzichten in de structuur en het functioneren van deze netwerken. Dergelijke aspecten waren in de reeds uitgevoerde studies naar gemengde support netwerken onderbelicht

gebleven. Het ontwerpen van support netwerken op grond van Mintzbergs typologie bleek echter niet goed mogelijk. De verklaring hiervoor ligt hoofdzakelijk in het feit dat de logica van de hypothesen betreffende de relaties tussen de karakteristieken van organisaties die beschreven worden in de convergentiefactoren, niet op blijkt te gaan voor de support netwerken. Prescripties voor de vormgeving van support netwerken kunnen derhalve niet vastgesteld worden op grond van Mintzbergs typologie.

De gemengde uitkomsten van dit exploratieve onderzoek rechtvaardigen alles bij elkaar zonder meer een verdere ontwikkeling van de studie naar gemengde support netwerken als organisaties aan de hand van Technisch Bedrijfkundige modellen. Diverse aanbevelingen op het niveau van het onderzoeksontwerp, zoals de selectie van cases waarin de leden van het netwerk problemen ervaren, worden gedaan in Sectie 7.2. Voorstellen voor de aanvulling van Mintzberg's typologie als theoretisch kader worden gepresenteerd in Sectie 7.3. Bovendien wordt aangegeven dat het feit dat voorschriften voor het ontwerp van support netwerken niet gegeven kunnen worden op grond van Mintzbergs typologie, niet impliceert dat we ons niet tot doel kunnen stellen om de gemengde support netwerken van ouderen door middel van ontwerpactiviteiten te verbeteren. Suggesties voor de aanpak van dergelijke activiteiten worden gepresenteerd (Secties 7.4 en 7.5).

Samenvattend kan gesteld worden dat uit het exploratieve onderzoek dat in deze scriptie beschreven wordt geconcludeerd mag worden dat de bestudering van gemengde support netwerken van niet-geïstitutionaliseerde ouderen als organisaties een benadering is die zeker een verdere uitwerking verdient.

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## Appendix 1

## Assessment of Network Type Measurement Instrument

The table below consists of the (Practitioner) Assessment of Network Type measurement instrument as developed by Wenger et al. It is a copy from Wenger (1994, p. 102 & 103) and Wenger & Tucker (2004, p.34).

Question	Response categories	Code	Family dependent network	Locally integrated network	Local self-contained network	Wider community focused network	Private network
1. How far away, in distance, does your nearest child or other relative live?*	No relatives Same house/ within 1 mile 1-5 miles 6-15 miles 16-50 miles 50+ miles	A B C D E F	B	C D	D E	E F	E F
2. If you have any children, where does your nearest child live?	No relatives Same house/ within 1 mile 1-5 miles 6-15 miles 16-50 miles 50+ miles	A B C D E F	B C	B C D	A  D E	F	A  F
3. If you have any living sisters or brothers, where does your nearest sister or brother live?*	No sisters or brothers Same house/ within 1 mile 1-5 miles 6-15 miles 16-50 miles 50+ miles	A B C D E F	B C	B C D	C D E	A  F	A  F
4. How often do you see any of your children or other relatives to speak to?	Never/ no relative Daily 2-3 times a week At least weekly At least monthly Less often	A B C D E F	B C	B C	D E	E F	A  F
5. If you have friends in this community/ neighbourhood, how often do you have a chat or do something with one of your friends?*	Never/ no friends Daily 2-3 times a week At least weekly At least monthly Less often	A B C D E F	E F	B C D	E F	B C D	A  F
6. How often do you see any of your neighbours to have a chat with or do something with?*	No contact with neighbours Daily 2-3 times a week At least weekly At least monthly Less often	A B C D E F	A  E F	B C D	D E	D E	A  F
7. Do you attend any religious meetings?*	Yes, regularly Yes, occasionally No	A B C	B	A	B C	A B	C
8. Do you attend meetings of any community/ neighbourhood or social groups, such as old people's clubs, lectures or anything like that?*	Yes, regularly Yes, occasionally No	A B C	B C	A	B C	A	C
NETWORK TYPE (highest number)							

\* Do not include spouse.

### Instructions:

Ask all questions and circle code.

Circle same code across all boxes on same line.

Count (do not add) circled codes for each network column and enter number at bottom of column.

Highest number on bottom line will be in column of respondent's network type.



## Appendix 2

## Topic List Interviews

### Personal Background

Name, initials, and preferred name  
Address  
Phone number  
Age  
Matrimony  
Religious persuasion  
Education  
Occupation  
Income

For elderly person:  
Living environment

For support givers: relation to elderly person  
Duration of journey to elderly person

### Social and Support Network

Ask for the availability of:

Partner  
Siblings  
Children  
Parents  
Grandparents  
Other family  
Housemates  
Acquaintances  
Friends  
Colleagues  
Neighbours  
Volunteers  
Privately paid assistant  
Home care nurse  
Home carer<sup>148</sup>  
Home care cleaner<sup>149</sup>  
Meals on wheels  
Pharmacist  
General practitioner  
Social worker  
Other: ...

---

<sup>148</sup> In Dutch: 'Verzorgenden'.

<sup>149</sup> In Dutch: 'Huishoudelijke hulp van de thuiszorg'.

## Support Tasks

Compromised functional capacity

Reason for compromised functional capacity

Who carries out/ provides support with carrying out the following tasks:

Shopping

Preparing meals

Gardening

Accompany appointments

Go somewhere

Cleaning the kitchen or bathroom

Filling out forms

Administrating financial and administrative matters

Deciding on important issues

Buying clothes

Taking care of the plants

Doing the laundry

Small maintenance of the house

Washing or taking a shower

Walking

Using the toilet

Going in and out bed

Getting dressed

Taking medicines

Plans the shopping

Makes sure the bills are paid

Makes sure the fridge is cleaned

Provides emotional support

Payment of informal carers

Reason of care provision by informal carers

## For elderly person: Children

Names children

Addresses of the children

Care provision by the children and explanation for the patterns

## Formal Care

Number of formal carers

Division of care over formal carers

Coordination

## Satisfaction of Current Situation and Expected Future Developments

Judgement of current situation

Efficiency of current situation

Anticipated future developments

## Appendix 3

## Coding of Interviewees

Abbreviation	Description	Comment
E	Elderly person supported	
D <sub>1</sub> , D <sub>2</sub> , ..., D <sub>x</sub>	Daughters	1, 2, ..., x assigned on the basis of age. Thus, D <sub>1</sub> is the oldest daughter of E and D <sub>2</sub> the second daughter etcetera
S <sub>1</sub> , S <sub>2</sub> , ..., S <sub>x</sub>	Sons	1, 2, ..., x assigned on the basis of age
Dil <sub>1</sub> , Dil <sub>2</sub> , ..., Dil <sub>x</sub>	Daughters-in-law	1, 2, ..., x assigned to match the index of the son of whom the daughter-in-law is the partner*
Sil <sub>1</sub> , Sil <sub>2</sub> , ..., Sil <sub>x</sub>	Sons-in-law	1, 2, ..., x to match the index of the daughter of whom the son-in-law in law is the partner*
Gd <sub>1</sub> , Gd <sub>2</sub> , ..., Gd <sub>x</sub>	Granddaughters	1, 2, ..., x assigned on the basis of age (if known)
Gs <sub>1</sub> , Gs <sub>2</sub> , ..., Gs <sub>x</sub>	Grandsons	1, 2, ..., x assigned on the basis of age (if known)
G-C <sub>1</sub> , G-C <sub>2</sub> , ..., G-C <sub>x</sub>	Great-grandchildren	1, 2, ..., x assigned on the basis of age (if known)
Sis <sub>1</sub> , Sis <sub>2</sub> , ..., Sis <sub>x</sub>	Sisters	1, 2, ..., x assigned on the basis of age
B <sub>1</sub> , B <sub>2</sub> , ..., B <sub>x</sub>	Brothers	1, 2, ..., x assigned on the basis of age.
Sbil <sub>1</sub> , Sbil <sub>2</sub> , ..., Sbil <sub>x</sub>	Siblings-in-law	1, 2, ..., x assigned on the basis of age. An o in the index indicates that these persons are members of the 'own' family (husbands or wives of brothers and sisters), while a h in the index shows that these persons are members of the family of the husband.
F <sub>1</sub> , F <sub>2</sub> , ..., F <sub>x</sub>	Close friends	1,2, ... x assigned at random. F <sub>1,M</sub> and F <sub>1,W</sub> used for close friends who are each others partner. F <sub>1,M</sub> is the man, while F <sub>1,W</sub> is the woman
A <sub>1</sub> , A <sub>2</sub> , ... A <sub>x</sub>	Acquaintances	1,2, ... x assigned at random. A <sub>1,M</sub> and A <sub>1,W</sub> used for acquaintances who are each others partner
N <sub>1</sub> , N <sub>2</sub> , ..., N <sub>x</sub>	Neighbours	1,2, ... x assigned at random. N <sub>1,M</sub> and N <sub>1,W</sub> used for neighbours who are each others partner
H <sub>1</sub> , H <sub>2</sub> , ..., H <sub>x</sub>	Home care nurses/assistants	1,2, ... x assigned on the basis of their involvement in the support network of E. Thus, H <sub>1</sub> provides more support to E than H <sub>2</sub> .
GP	General practitioner	
C	Cousin	
MS	Medical specialist	
HM	Handyman	
Phy	Physiotherapist	
Pha	Pharmacist	
M	Minister	(from church)

### Illustration x Overview of coding of the people involved

\* Same sex couples turned out not to be found in the support networks of the elderly persons involved in this research project. As a consequence of the matching of numbers with their partners who are a child of the elderly person, the numbers of the in-laws need not to be successive.

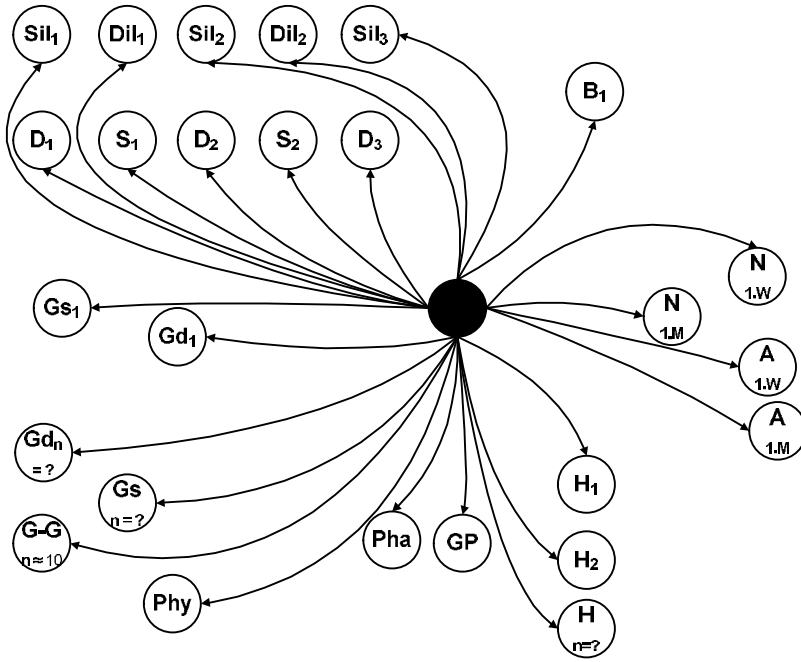
The subscript code n=? is used to indicate that the number of people represented was not determined exactly.

# Appendix 4

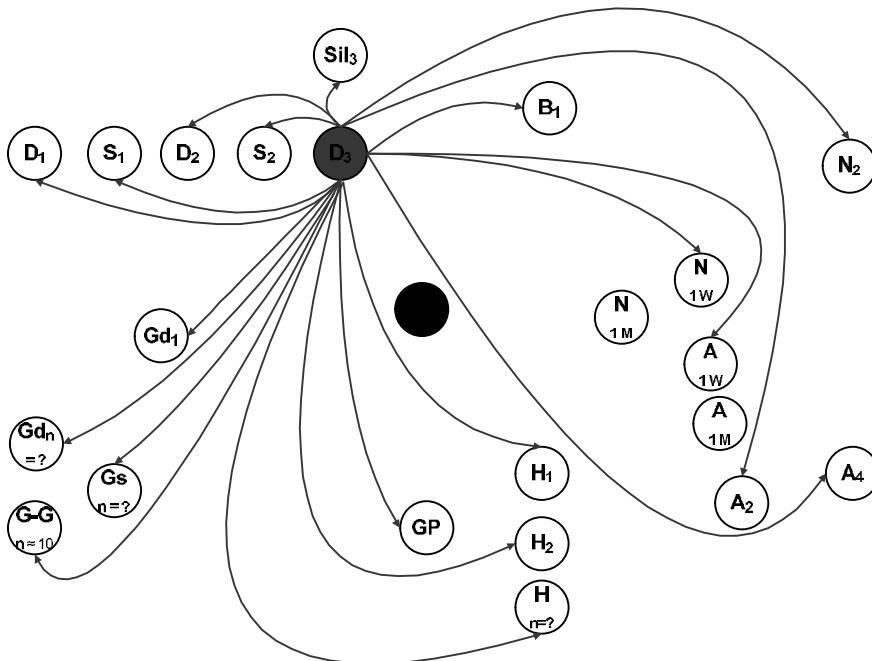
# Network Images

## A.4.1 Case A

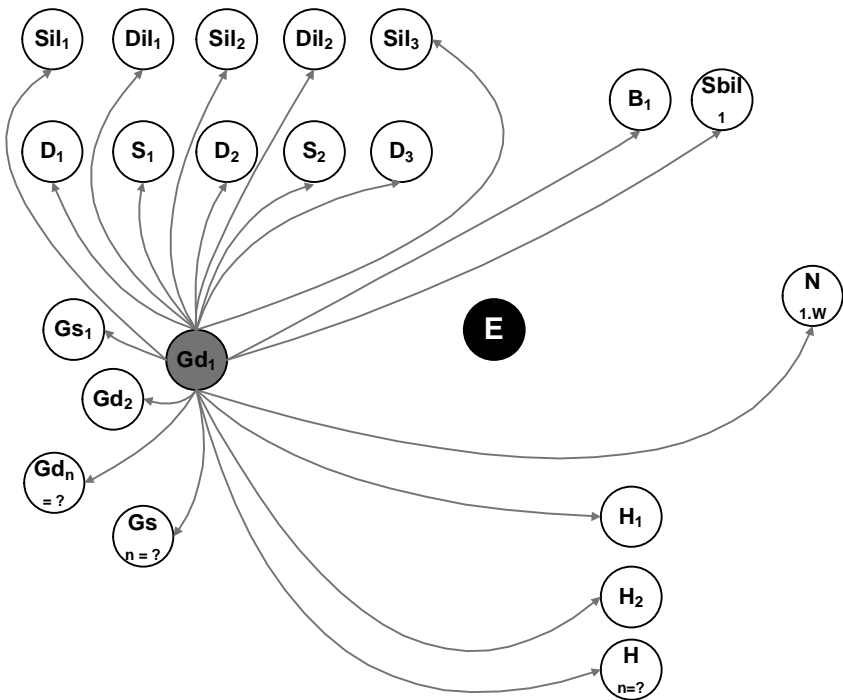
### A.4.1.1 Network Image E



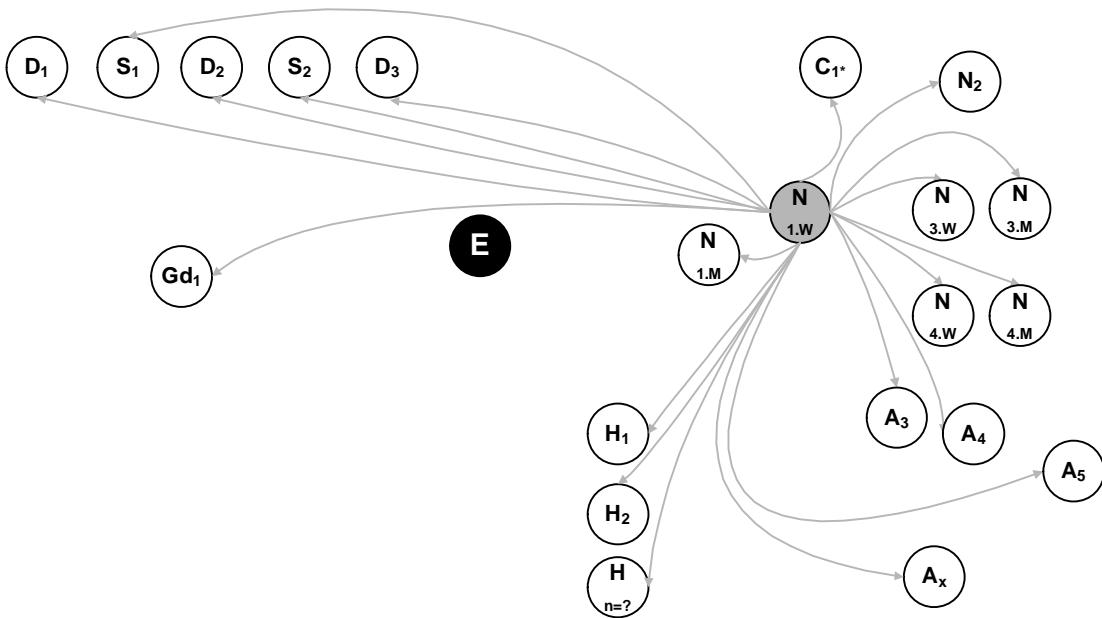
### A.4.1.2 Network Image $D_3$



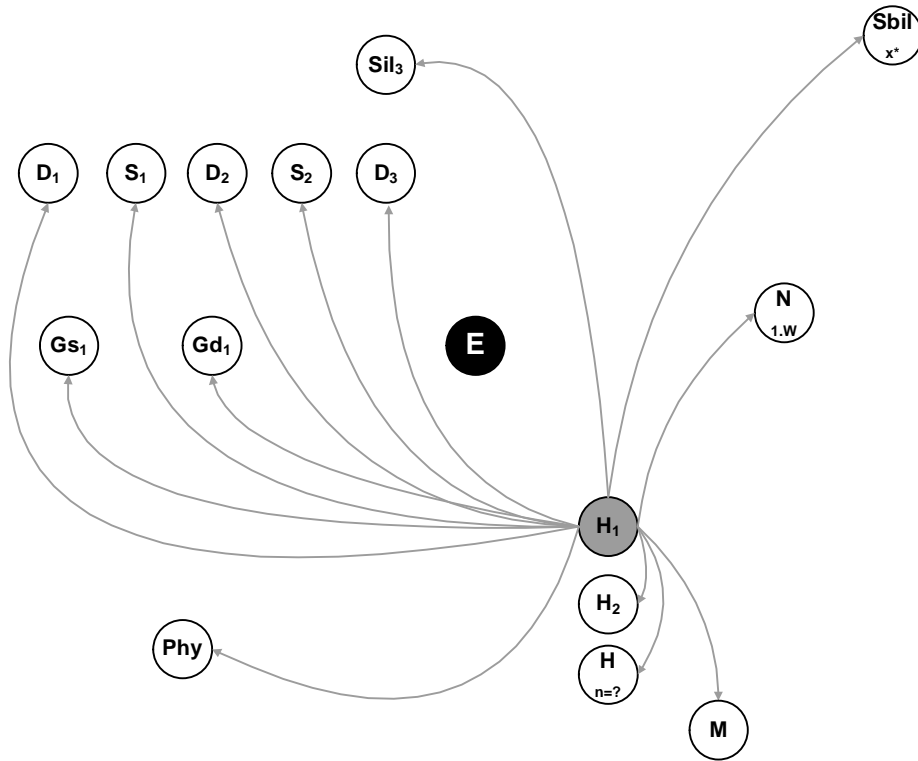
A.4.1.3 Network Image Gd<sub>1</sub>



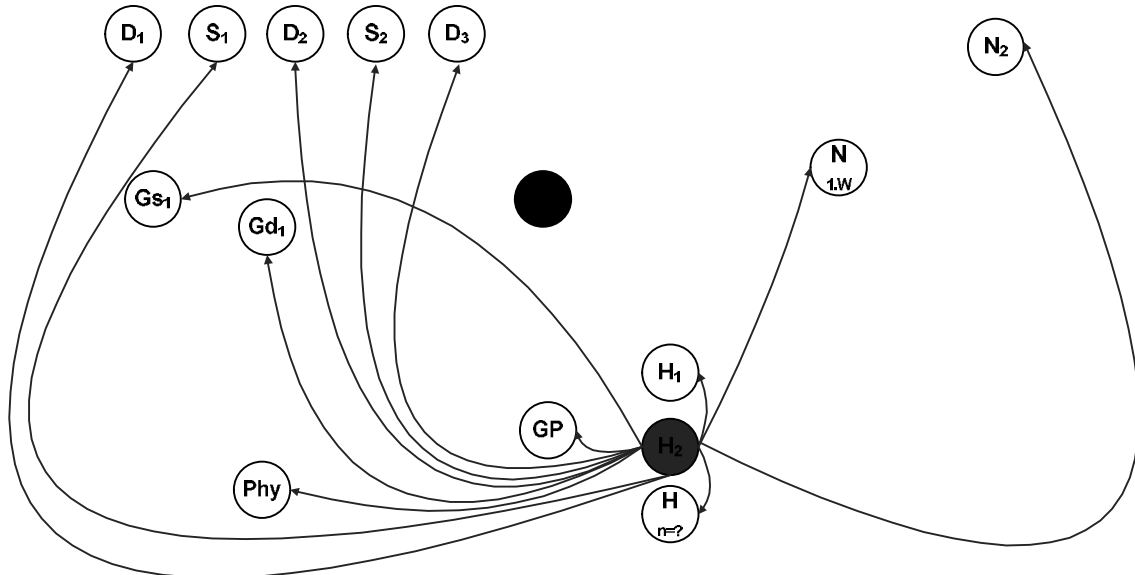
A.4.1.4 Network Image N<sub>1.W</sub>



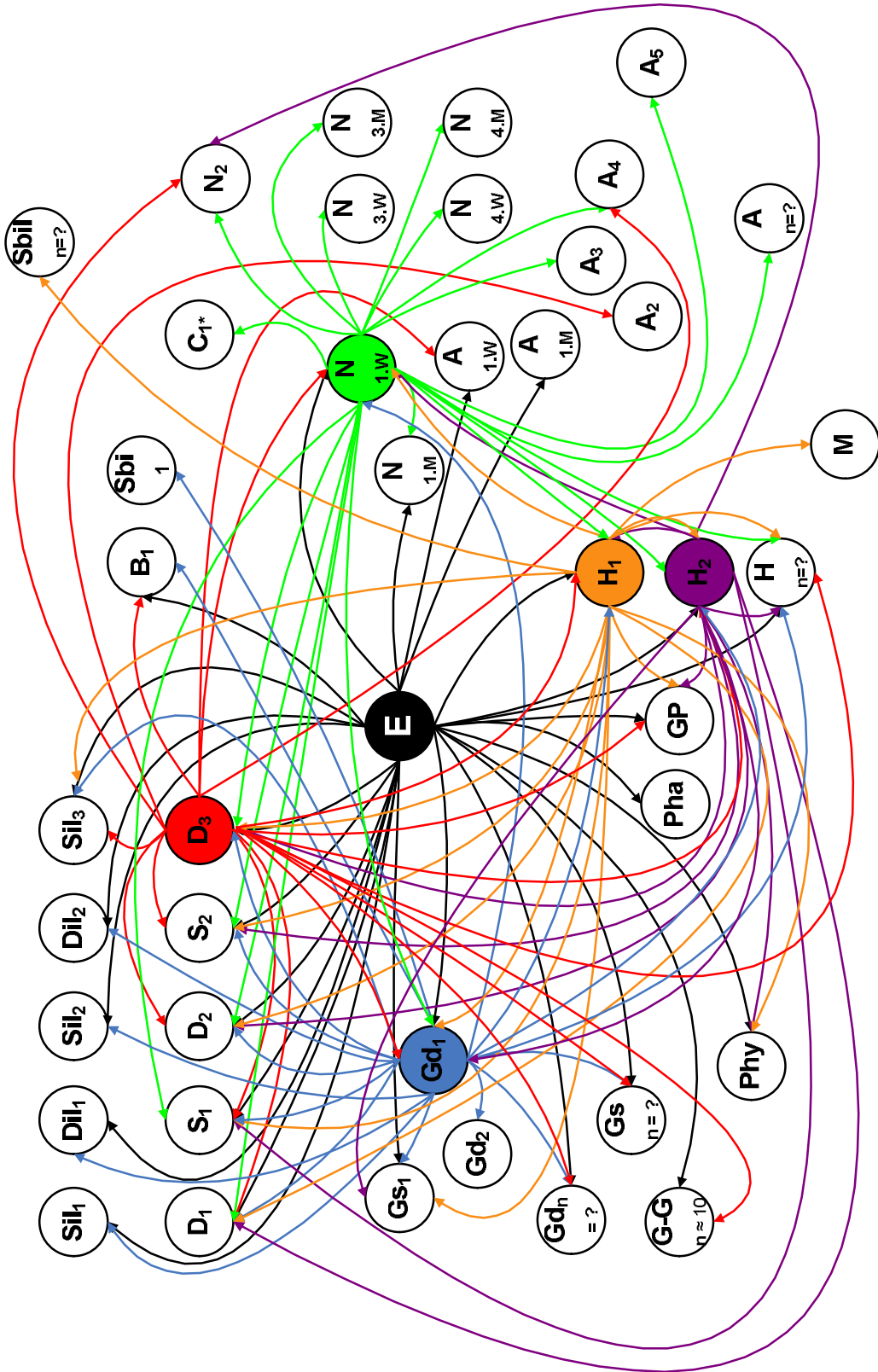
A.4.1.5 Network Image  $H_1$



A.4.1.6 Network Image  $H_2$

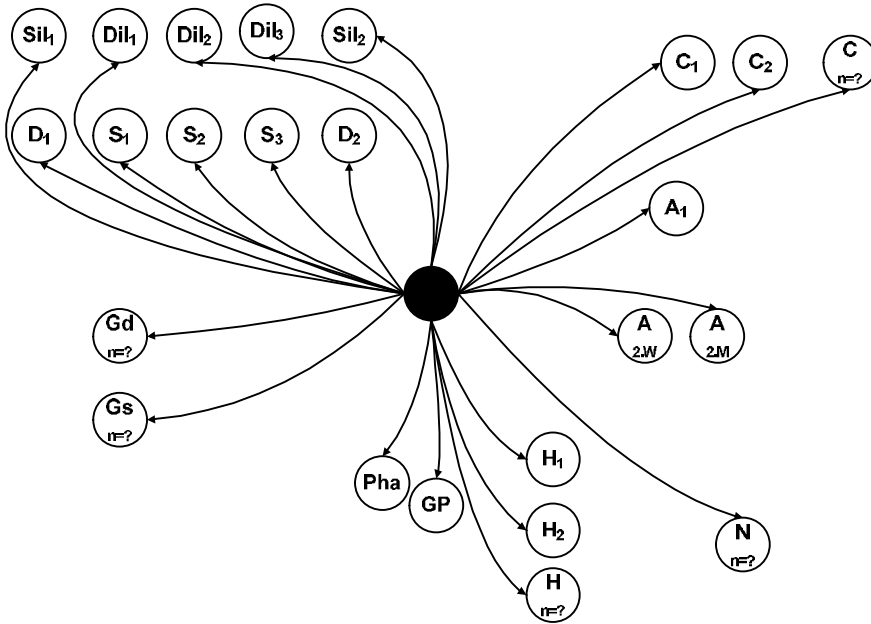


A.4.1.7 Combined Network Image in Colour

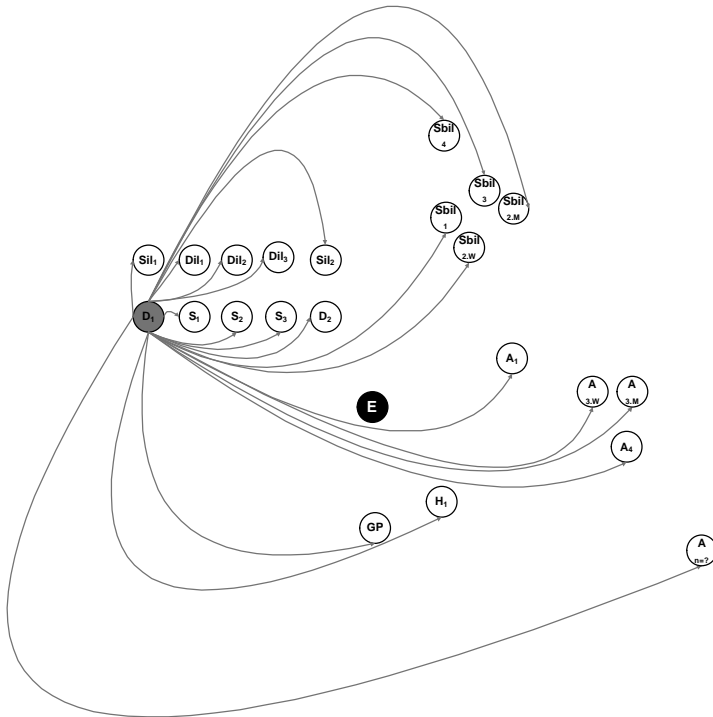


### A.4.2 Case B

#### A.4.2.1 Network Image E

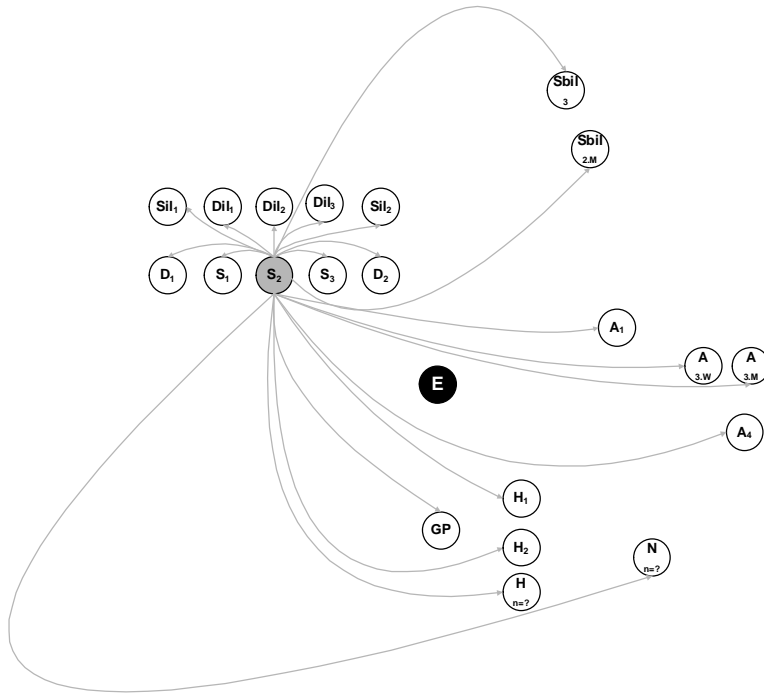


#### A.4.2.2 Network Image D<sub>1</sub>

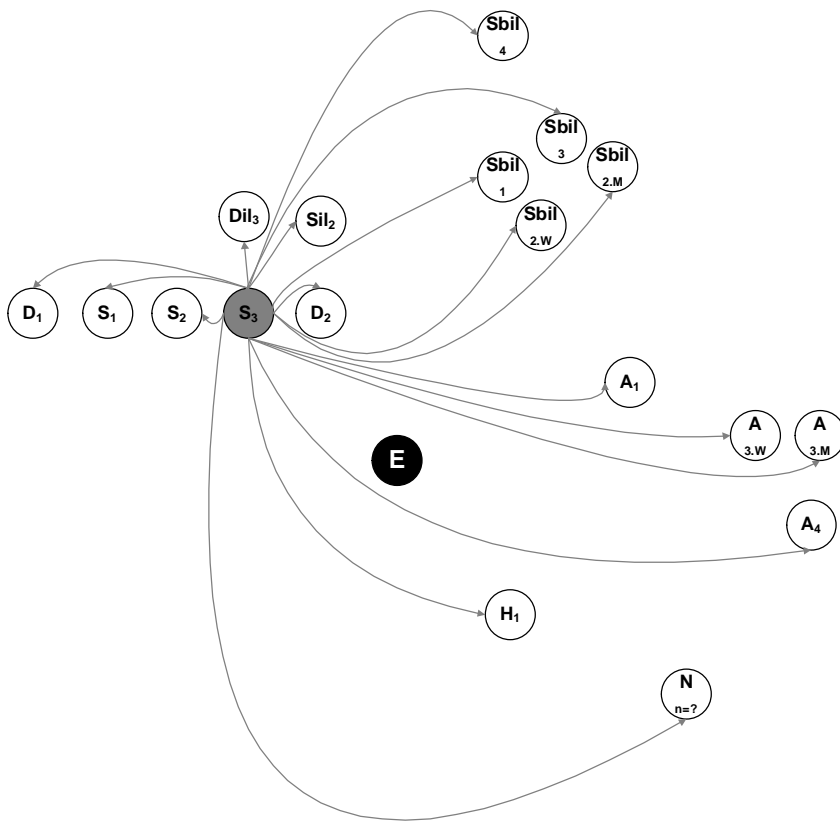




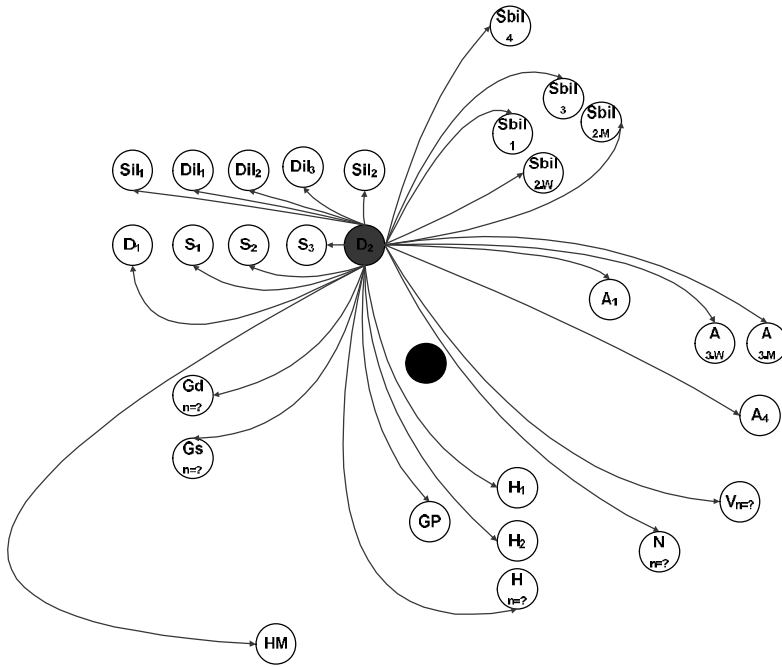
A.4.2.3 Network Image  $S_2$



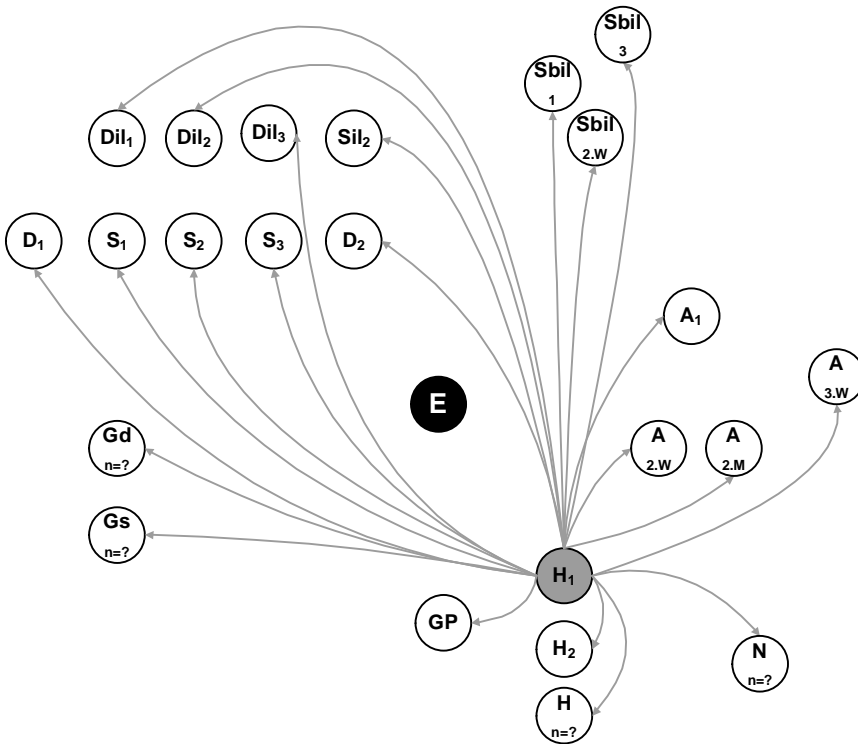
A.4.2.4 Network Image  $S_3$



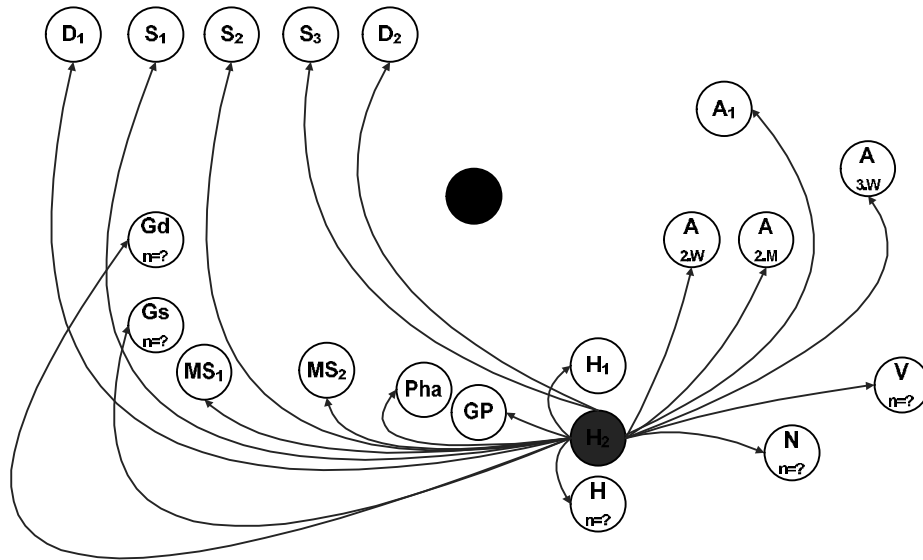
A.4.2.5 Network Image D<sub>2</sub>



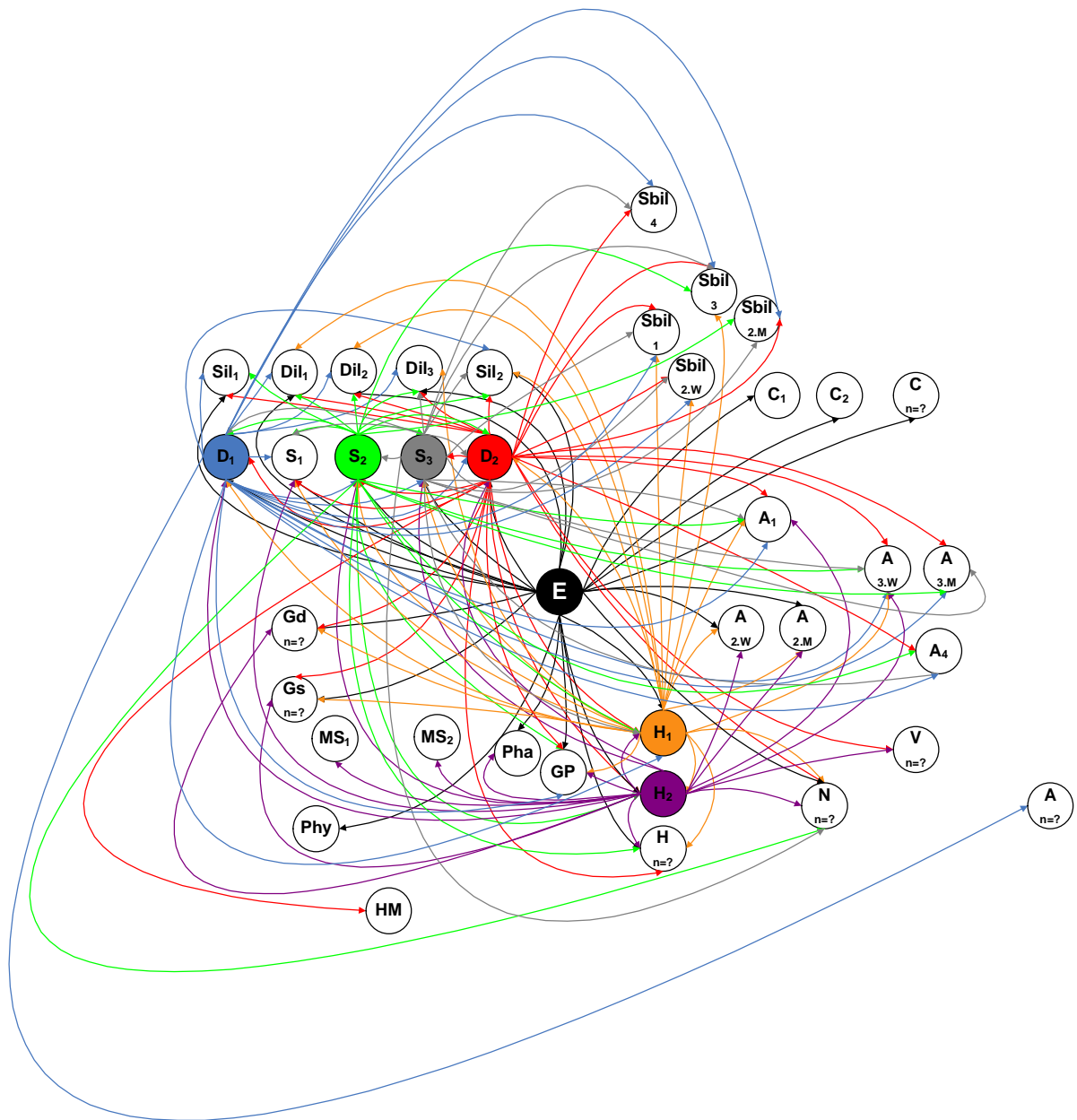
A.4.2.6 Network Image H<sub>1</sub>



### A.4.2.7 Network Image H<sub>2</sub>



#### A.4.2.6 Combined Network Image in Colour



## Appendix 5

## Configuration Tables

Case A	Entrepreneurial organisation	Machine organisation	Professional organisation	Diversified organisation	Innovative organisation
<b>Key coordinating mechanism</b>	Direct supervision	Standardization of work processes	Standardization of skills	Standardisation of outputs	Mutual adjustment
<b>Key part of organisation</b>	Strategic apex	Technostructure	Operation core	Middle line	Support staff
<b>Design parameters</b>					
<b>Specialisation of jobs</b>	Little specialisation	<i>Much horizontal and vertical specialisation</i>	<i>Much horizontal specialisation</i>	Some horizontal and vertical specialisation	<i>Much horizontal specialisation</i>
<b>Training and indoctrination</b>	Little training and indoctrination	Little training and indoctrination	<i>Much training and indoctrination</i>	<i>Some training and indoctrination</i>	Much training
<b>Formalisation of behaviour/ bureaucratic or organic</b>	<i>Little formalisation Organic</i>	<i>Much formalisation Bureaucratic</i>	Little formalisation <i>Bureaucratic</i>	Much formalisation Bureaucratic	<i>Little formalisation Organic</i>
<b>Grouping</b>	Usually functional	<i>Usually functional</i>	Functional and market	<i>Market</i>	<i>Functional and market</i>
<b>Unit size</b>	Wide	Wide at bottom, narrow elsewhere	Wide at bottom, narrow elsewhere	Wide (at top)	<i>Narrow throughout</i>
<b>Planning and control systems</b>	<i>Little planning and control</i>	Action planning	<i>Little planning and control</i>	<i>Much performance control</i>	Limited action planning
<b>Liaison devices</b>	<i>Few liaison devices</i>	<i>Few liaison devices</i>	Liaison devices in administration	<i>Few liaison devices</i>	<i>Many liaison devices throughout</i>
<b>Decentralisation</b>	<i>Centralisation</i>	<i>Limited horizontal decentralisation</i>	<i>Horizontal and vertical decentralisation</i>	<i>Limited vertical decentralisation</i>	<i>Selective decentralisation</i>
<b>Functioning</b>					
<b>Strategic apex</b>	All administrative work	Fine tuning, coordination of functions, conflict resolution	External liaison, conflict resolution	Strategic portfolio, performance control	External liaison, conflict resolution, work balancing, project monitoring
<b>Operating core</b>	Informal work with little discretion	Routine, formalised work with little discretion	<i>Skilled, standardised work with much individual autonomy</i>	Tendency to formalise due to divisionalisation	Truncated or merged with administration to do informal project work
<b>Middle line</b>	Insignificant	Elaborated and differentiated; conflict resolution, staff liaison, support of vertical flows	Controlled by professionals; much mutual adjustment	Formulation of division strategy, managing operations	Extensive but blurred with staff; involved in project work
<b>Technostructure</b>	<i>None</i>	Elaborated to formalise work	Little	Elaborated at head quarters for performance control	Small and blurred within middle in project work
<b>Support staff</b>	<i>Small</i>	Often elaborated to reduce uncertainty	Elaborated to support professionals; Machine Bureaucracy structure	Split between head quarters and divisions	Highly elaborated but blurred within middle in project work
<b>Flow of authority</b>	Significant from top	Significant throughout	Insignificant (except in support staff)	Significant throughout	<i>Insignificant</i>
<b>Flow of regulated activity</b>	<i>Insignificant</i>	Significant throughout	Insignificant (except in support staff)	Significant throughout	Insignificant
<b>Flow of informal communication</b>	<i>Significant</i>	Discouraged	Significant in administration	Some between head quarters and divisions	<i>Significant throughout</i>
<b>Work constellations</b>	<i>None</i>	Insignificant, especially at lower levels	Some in administration	Insignificant	Significant throughout

Flow of decision making	Top down	Top down	Bottom up	Differentiated between head quarters and divisions	Mixed, all levels
<b>Contingency factors</b>					
<b>Age and size</b>	Typically young and small (first stage)	Typically old and large (second stage)	Varies	Typically old and very large (third stage)	Typically young
<b>Technical system</b>	Simple, not regulating	Regulating but not automated, not very sophisticated	Not regulating or sophisticated	Divisible, otherwise typically like Machine Organisation	Very sophisticated, often automated; not regulating or sophisticated
<b>Environment</b>	Simple and dynamic; sometimes hostile	Simple and stable	Complex and stable	Relatively simple and stable: diversified markets (especially products and services)	Complex and dynamic; sometimes disparate
<b>Power</b>	Chief executive control; often owner-managed; not fashionable	Technocratic and external control; not fashionable	Professional operator control; fashionable	Middle-line control; fashionable (especially in industry)	Expert control; very fashionable

Primary characteristic

Secondary characteristic

Case B	Entrepreneurial organisation	Machine organisation	Professional organisation	Diversified organisation	Innovative organisation
<b>Key coordinating mechanism</b>	Direct supervision	Standardization of work processes	Standardization of skills	Standardisation of outputs	Mutual adjustment
<b>Key part of organisation</b>	Strategic apex	Technostructure	Operation core	Middle line	Support staff
<b>Design parameters</b>					
<b>Specialisation of jobs</b>	Little specialisation	<i>Much horizontal and vertical specialisation</i>	<i>Much horizontal specialisation</i>	Some horizontal and vertical specialisation	<i>Much horizontal specialisation</i>
<b>Training and indoctrination</b>	Little training and indoctrination	Little training and indoctrination	<i>Much training and indoctrination</i>	<i>Some training and indoctrination</i>	Much training
<b>Formalisation of behaviour/bureaucratic or organic</b>	<i>Little formalisation Organic</i>	<i>Much formalisation Bureaucratic</i>	Little formalisation <i>Bureaucratic</i>	Much formalisation Bureaucratic	<i>Little formalisation Organic</i>
<b>Grouping</b>	Usually functional	<i>Usually functional</i>	Functional and market	<i>Market</i>	<i>Functional and market</i>
<b>Unit size</b>	Wide	Wide at bottom, narrow elsewhere	Wide at bottom, narrow elsewhere	Wide (at top)	<i>Narrow throughout</i>
<b>Planning and control systems</b>	<i>Little planning and control</i>	Action planning	<i>Little planning and control</i>	<i>Much performance control</i>	Limited action planning
<b>Liaison devices</b>	<i>Few liaison devices</i>	<i>Few liaison devices</i>	Liaison devices in administration	<i>Few liaison devices</i>	<i>Many liaison devices throughout</i>
<b>Decentralisation</b>	<i>Centralisation</i>	<i>Limited horizontal decentralisation</i>	<i>Horizontal and vertical decentralisation</i>	<i>Limited vertical decentralisation</i>	<i>Selective decentralisation</i>
<b>Functioning</b>					
<b>Strategic apex</b>	All administrative work	Fine tuning, coordination of functions, conflict resolution	External liaison, conflict resolution	Strategic portfolio, performance control	External liaison, conflict resolution, work balancing, project monitoring
<b>Operating core</b>	Informal work with little discretion	Routine, formalised work with little discretion	<i>Skilled, standardised work with much individual autonomy</i>	Tendency to formalise due to divisionalisation	Truncated or merged with administration to do informal project work
<b>Middle line</b>	<i>Insignificant</i>	Elaborated and differentiated; conflict resolution, staff liaison, support of vertical flows	Controlled by professionals; much mutual adjustment	Formulation of division strategy, managing operations	Extensive but blurred with staff; involved in project work
<b>Technostructure</b>	<i>None</i>	Elaborated to formalise work	Little	Elaborated at head quarters for performance control	Small and blurred within middle in project work
<b>Support staff</b>	Small	Often elaborated to reduce uncertainty	Elaborated to support professionals; Machine Bureaucracy structure	Split between head quarters and divisions	Highly elaborated but blurred within middle in project work
<b>Flow of authority</b>	Significant from top	Significant throughout	Insignificant (except in support staff)	Significant throughout	<i>Insignificant</i>
<b>Flow of regulated activity</b>	<i>Insignificant</i>	Significant throughout	Insignificant (except in support staff)	Significant throughout	<i>Insignificant</i>
<b>Flow of informal communication</b>	<i>Significant</i>	Discouraged	Significant in administration	Some between head quarters and divisions	<i>Significant throughout</i>
<b>Work constellations</b>	<i>None</i>	Insignificant, especially at lower levels	Some administration in Bottom up	Insignificant Differentiated between head	Significant throughout

<b>Flow of decision making</b>	Top down	Top down		quarters and divisions	Mixed, all levels
<b>Contingency factors</b>					
<b>Age and size</b>	Typically young and small (first stage)	Typically old and large (second stage)	Varies	Typically old and very large (third stage)	Typically young
<b>Technical system</b>	Simple, not regulating	Regulating but not automated, not very sophisticated	Not regulating or sophisticated	Divisible, otherwise typically like Machine Organisation	Very sophisticated, often automated; not regulating or sophisticated
<b>Environment</b>	Simple and dynamic; sometimes hostile	Simple and stable	Complex and stable	Relatively simple and stable: diversified markets (especially products and services)	Complex and dynamic; sometimes disparate
<b>Power</b>	Chief executive control; often owner-managed; not fashionable	Technocratic and external control; not fashionable	Professional operator control; fashionable	Middle-line control; fashionable (especially in industry)	Expert control; very fashionable

Primary characteristic

Secondary characteristic



## Appendix 6

## Word Tables for Case Comparison

### A.6.1 Background Data

Characteristic	Case A	Case B
<b>Interviewees</b>	E, D <sub>3</sub> , Gd <sub>1</sub> , N <sub>1,W</sub> H <sub>1</sub> , H <sub>2</sub>	E, D <sub>1</sub> , S <sub>2</sub> , S <sub>3</sub> , D <sub>3</sub> , H <sub>1</sub> , H <sub>2</sub>
<b>Age E (in years)</b>	80	84
<b>Health problems</b>	Rheumatism, worn out knees and back, and stiff	Heart problems, short of breath, arthritis, and high blood pressure
<b>Compromised functional capacity</b>	Cannot wash her back and legs Cannot clean her house Can only walk small distances in her house; uses a rollator to walk outside her home	Cannot wash herself or take a shower. Is easily tired Can only walk short distances. Uses a wheelchair to be transported over longer ways.
<b>Living situation</b>	Four-bedroom house	Studio apartment in sheltered housing development
<b>Hours of formal care a week</b>	5 hours household support Support with showering twice a week	3.5 hours (30 minutes seven days a week)
<b>Type of formal care</b>	Personal care and household support	Personal care
<b>Number of children</b>	5	5
<b>Age of children (in years)</b>	46 - 59	48 - 57
<b>Place of residence children</b>	Rijssen: 3x Nearby village: 1x Malta: 1x	Rijssen: 4x Wierden: 1x
<b>Characterisation of family</b>	Close family	Close family
<b>Education</b>	E: primary school	E: lower level vocational training
<b>Income</b>	E: AOW Interviewed network members: generally, up to circa €18,500 to €25,000 after taxes a year	E: AOW + pension Interviewed network members: €18,500 to €25,000 or above €25,000 after taxes a year
<b>Religious persuasion E</b>	Protestant	Protestant

### A.6.2 Support Network and Roles

Group of members	Case A	Case B
<b>Children</b>	S <sub>1</sub> , S <sub>2</sub> , D <sub>1</sub> , D <sub>2</sub> , D <sub>3</sub>	D <sub>1</sub> , S <sub>1</sub> , S <sub>2</sub> , S <sub>3</sub> , D <sub>2</sub>
<b>Children-in-law</b>	Dil <sub>1</sub> , Dil <sub>2</sub> , Sil <sub>1</sub> , Sil <sub>2</sub> , Sil <sub>3</sub>	Sil <sub>1</sub> , Dil <sub>1</sub> , Dil <sub>2</sub> , Dil <sub>3</sub> , Sil <sub>2</sub>
<b>Grandchildren</b>	Circa 20 (Gs <sub>1</sub> , Gd <sub>1</sub> , Gd <sub>2</sub> , Gd <sub>n=?</sub> , Gs <sub>n=?</sub> )	Gd <sub>n=?</sub> , Gs <sub>n=?</sub>
<b>Great-grandchildren</b>	Circa 10 (G-G)	None
<b>Siblings</b>	B <sub>1</sub>	None
<b>Siblings-in-law</b>	Sbil <sub>1</sub> , Sbil <sub>n=?</sub>	Sbil <sub>1</sub> , Sbil <sub>2,M</sub> , Sbil <sub>2,W</sub> , Sbil <sub>3</sub> , Sbil <sub>4</sub>
<b>Neighbours</b>	N <sub>1,W</sub> , N <sub>1,M</sub> , N <sub>2</sub> , N <sub>3,W</sub> , N <sub>3,M</sub> , N <sub>4,W</sub> , N <sub>4,M</sub>	A <sub>n=?</sub>
<b>Acquaintances</b>	A <sub>1,W</sub> , A <sub>1,M</sub> , A <sub>2</sub> , A <sub>3</sub> , A <sub>4</sub> , A <sub>5</sub> , A <sub>n=?</sub>	A <sub>1</sub> , A <sub>2,W</sub> , A <sub>2,M</sub> , A <sub>3,W</sub> , A <sub>3,M</sub> , A <sub>4</sub> , A <sub>5</sub>
<b>Home care assistants</b>	H <sub>1</sub> , H <sub>2</sub> , H <sub>n=?</sub>	H <sub>1</sub> , H <sub>2</sub> , H <sub>n=?</sub>
<b>Other formal caregivers</b>	GP, Phy, Pha	GP, Pha, MS <sub>1</sub> , MS <sub>2</sub>
<b>Other</b>	C <sub>1</sub> , M	C <sub>1</sub> , C <sub>2</sub> , C <sub>3</sub> , HM

### A.6.3 Organisational Parts

Part of the Organisation	Case A	Case B
<b>Strategic apex</b>	E, D <sub>3</sub>	E, S <sub>2</sub> , D <sub>2</sub>
<b>Operating core</b>	D <sub>1</sub> , S <sub>1</sub> , S <sub>2</sub> , D <sub>3</sub> , Sil <sub>1</sub> , Dil <sub>1</sub> , Sil <sub>2</sub> , Dil <sub>2</sub> , Sil <sub>3</sub> , Gd <sub>1</sub> , Gs <sub>1</sub> , N <sub>1.W</sub> , N <sub>1.M</sub> H <sub>1</sub> , H <sub>2</sub> , H <sub>n=?</sub> , GP, Pha, Phy	D <sub>1</sub> , S <sub>1</sub> , S <sub>2</sub> , S <sub>3</sub> , D <sub>2</sub> , Sil <sub>1</sub> , Dil <sub>1</sub> , Dil <sub>2</sub> , Dil <sub>3</sub> , Sil <sub>2</sub> , H <sub>1</sub> , H <sub>2</sub> , H <sub>n=?</sub> , GP, MS <sub>1</sub> , MS <sub>2</sub> , Pha, V <sub>x</sub>
<b>Middle line</b>	H <sub>1</sub>	D <sub>2</sub> , H <sub>1</sub>
<b>Technostructure</b>	None	None
<b>Support staff</b>	E	None

### A.6.4 Coordinating Mechanisms

Coordinating Mechanism	Case A					Case B				
	I - I	F - F	I - F	E - I	E - F	I - I	F - F	I - F	E - I	E - F
<b>Mutual adjustment</b>	√	√	√	√	√	√	√	√	√	√
<b>Direct supervision</b>					√					
<b>Standardisation of work processes</b>										
<b>Standardisation of outputs</b>		√					√			
<b>Standardisation of skills</b>		√					√			
<b>Standardisation of norms</b>										

I - I = Between informal carers

F - F = Between formal carers

I - F = Between informal and formal carers

E - I = Between elderly person and informal carers

E - F = Between elderly person and formal carers

√ = identified in case study for category of actors

### A.6.5 Systems of Flows

System of Flows	Case A	Case B
<b>Formal authority</b>	Not identified	Not identified
<b>Regulated activity</b>	Not identified	Not identified
<b>Informal communication</b>	Identified	Identified
<b>Set of work constellations</b>	Identified (if interpreted on basis of care needs)	Identified (if interpreted on basis of care needs)
<b>Ad hoc decision processes</b>	Identified	Identified

### A.6.6 Design Parameters

<b>Design Parameter</b>	<b>Case A</b>	<b>Case B</b>
<b>Job specialisation</b>	Horizontal: high Vertical: very limited	Hardly specialised in both dimensions
<b>Behaviour formalisation</b>	Hardly formalised	Rather low
<b>Training and indoctrination</b>	Training: formal carers Indoctrination: only indirectly	Training: formal carers Indoctrination: only indirectly
<b>Unit grouping</b>	Families and home care assistant team	Families and home care assistant team
<b>Unit size</b>	Small	Small
<b>Planning and control systems</b>	Largely absent	Hardly applied
<b>Liaison devices</b>	E is liaison officer	H <sub>1</sub> and D <sub>2</sub> are liaison officers
<b>Vertical decentralisation</b> <b>Horizontal decentralisation</b>	Vertical: low Horizontal: not an issue Type A	Vertical as well as horizontal decentralisation Type A and Type E

### A.6.7 Contingency Factors

Contingency Factor	Hypothesis	Case A	Case B
<b>Age and size 1</b>	The older the organisation, the more formalised its behaviour	No evidence found	No evidence found
<b>Age and size 2</b>	The larger the organisation, the more formalised its behaviour	No evidence found	No evidence found
<b>Age and size 3</b>	The larger the organisation, the more elaborate its structure, that is, the more specialised its tasks, the more differentiated its units, and the more developed its administrative components	Does not hold	Does not hold
<b>Age and size 4</b>	Structure reflects the age of the industry from its founding	Not applicable	Not applicable
<b>Technical system 1</b>	The more regulating the technical system that is, the more it controls the work of the operators - the more formalised the operating work, and the more bureaucratic the structure of the operating core	Not applicable	Not applicable
<b>Technical system 2</b>	The more complex the technical system, the more elaborate and professional the support staff	Not applicable	Not applicable
<b>Technical system 3</b>	The automation of the operating core transforms a bureaucratic administrative structure into an organic one	Not applicable	Not applicable
<b>Environment 1</b>	The more dynamic an organisation's environment, the more organic its structure	No evidence found	No evidence found
<b>Environment 2</b>	The more complex an organisation's environment, the more decentralised its structure	Does not hold	No evidence found
<b>Environment 3</b>	The more diversified the organisation's markets, the greater the propensity to split it into market-based units, or divisions, given favourable economies of scale	Holds	Not applicable
<b>Environment 4</b>	Extreme hostility in its environment drives any organisation to centralise its structure temporarily	Not applicable	Not applicable
<b>Power 1</b>	The greater the external control of an organisation, the more centralised and formalised its structure	Does not hold	Holds
<b>Power 2</b>	A divided external coalition will tend to give rise to a politicised internal coalition, and vice versa	Not applicable	Not applicable
<b>Power 3</b>	Fashion favours the structure of the day (and of the culture), sometimes even when inappropriate	Does not hold	No evidence found

### A.6.8 Configuration

Issue	Case A	Case B
Is configuration achieved?	No	No
Is internal fit achieved?	No	No
Is external fit achieved?	No	No
Can support network be expected to run better if changed towards one of the configurations?	No	No

### A.6.9 Informal Organisation

Element	Case A	Case B
<b>Structure</b>		
- Units	Informal	Informal
- Group leadership	Ambidextrous	Formal
- Type of hierarchy	Ambidextrous	Ambidextrous
- Origin	Informal	Informal
- Rationale	Ambidextrous	Ambidextrous
- Stability	Ambidextrous	Ambidextrous
<b>Communication</b>		
- Basis for communication	Informal	Informal
- Channels	Ambidextrous	Ambidextrous
- Basis for interaction	Ambidextrous	Ambidextrous
<b>Influence</b>		
- Base	Formal	Formal
- Type	Formal	Formal
- Flow	Formal	Formal
<b>Control mechanisms</b>	Ambidextrous	Ambidextrous
<b>Salient goals</b>	Ambidextrous	Ambidextrous
<b>Changes over time</b>	Ambidextrous	Ambidextrous