

COMMUNICATIVE RELATIONS

Interventions that create
communication with persons
with congenital deafblindness



Anne Varran Nafstad
& Inger Bøgh Rødbroe

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Published by Stadped Sørøst, Fagavdeling døvblindhet/ kombinerte syns- og hørselsvansker

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Translation: Kirsten C. Schou

Production and press: Materialecentret, Aalborg

Layout: Materialecentret

Design of the cover: Materialcenteret

Illustrations: Bruno Jakobsen

Original title

Kommunikative Relationer

by Statped, Norway and The National Board of Social Services, Denmark

Published by

© Materialecentret, 2013

Kollegievej 1 · DK-9000 Aalborg

Tlf. +45 9764 7230 · www.matcen.dk

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Financial support:

Nasjonalt kompetansesystem for døvblinde, Norway · University of Groningen, The Netherlands



NASJONAL KOMPETANSETJENESTE FOR DØVBLINDE

BEALJEHISČALMMEHEMIID NAŠUNÁLA GEALBOBÁLVALUS

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We dedicate this book to the children, youth and adults with congenital deafblindness who, with their insightful parents and competent professional helpers have demonstrated what we in this book understand as co-creative communicative practices with persons with congenital deafblindness.

Great thanks to the persons with deafblindness and their partners who have provided video documentations for the benefit of sharing and developing knowledge in the field. Special thanks to Kaja's and Andreas' parents and professional partners for permission to use pictures from the video clips.

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Preface

Rewriting Co-Creative Communication

'Co-creative communication' is by now an acknowledged approach to communication intervention practices in the deafblind field. There are several contributors to this approach, which is still in the process of developing. The approach is characterized by emphasizing the role of the person with congenital deafblindness¹ as an active and creative participant in his² own communicative development, and by foregrounding the role of sighted and hearing others as co-creative partners. *Communicative Relations* aims to develop this approach further. We are expanding on models that were initially developed in our first collaborative book, *Co-Creative Communication* from 1999.

The continuous development of the approach relates to the aim of identifying the theoretical concepts and models that inform co-creative communicative practices in the deafblind field. The search for these concepts and models is an ongoing process. In the first book we were inspired by mother-infant research within an overall transactional view on developmental processes. The first book presented the models of basic environmental relations that also appear in this book. These models are the result of a conceptual blend between theoretical models and exemplary case studies in the practical field.

The first book was written at a time when following two issues were prominent in the Nordic practical deafblind field:

- The difficulty of grounding individualized education programmes based on already existing assessment tools with regard to social, communicative, cognitive and emotional function
- The difficulty of differentiating congenital deafblindness from other complex impairments that had similar effects on communication development

1 In order to ease readability we will also use 'the deafblind person' and 'the person with deafblindness' to refer to 'the person with congenital deafblindness'.

2 In order to ease readability we will use 'he, him' to refer to the person with congenital deafblindness and 'she, her' to refer to the partner. Both usages cover 'he, him' and 'she, her'.

These difficulties made an interdisciplinary team of colleagues in the deafblind field suggest that a characteristic congenitally deafblind profile would be masked by the effect of interactional deprivation. This assumption implied that the development of a characteristic deafblind profile required an optimal social relational and communicative context. This view implied that a focus on intervention targeted to support and stabilize the basic relational contexts of development and learning.

In 1980ies and 1990ies this assumption was mainly hypothetical, based on logical thinking. It took several decades to stabilize the basic relational contexts of learning and development sufficiently to observe the clinical manifestations of the relevance of the hypothetical model. Progressively one could observe more and more the functional use of the bodily/tactile modality in cognitive processes of sense-making and symbolic communication.

The fact that persons with congenital deafblindness started to express themselves in their own voice implied that this voice was difficult to understand. There was a need for additional theoretical frameworks that helped expand the view of communication, thinking and language beyond the mainstream conception, so that emergent and non-conventional forms of bodily/tactile communication were included.

These additional theoretical frameworks were mainly concepts and models from dialogical theory, cognitive semiotics and cognitive linguistics. These theoretical contributions share a focus on processes of meaning-making. In addition dialogical theory emphasizes of each individual as a person.

In our second book *Communicative Relations*, we are more explicit about the theoretical frameworks and concepts underlying the intervention models than in the first book. The feedback on the first book from colleagues in the field was that the principles and models seemed relevant to practice, but the intervention model and concepts were difficult to understand and therefore also difficult to implement.

Persons with congenital deafblindness are in a life situation where they have to cope with many different partners, which makes optimal relational conditions for learning and development very difficult to stabilize. To counteract this problem, we have developed an intervention model that is a variation of *Focus Groups*. This means that

all the partners from the different arenas³ in the deafblind person's life are invited to take part in video analysis sessions that aim to discover the expressiveness and proper voice of each deafblind person. All the members of the group then agree on principles on intervention that are actualized by the result of such analysis. This had to be done on a continuous basis. This second book is first and foremost meant as a contribution to the education of professionals who have the role of leading such groups.

The English version of *Communicative Relations* is a bit different from the original Danish version. This is due to the feedback from courses given on the basis of the book, which told us what aspects need to be explained in more depth.

Dronninglund Castle
July, 15th 2015

Anne Varran Nafstad & Inger Bøgh Rødbrøe

³ Arenas or life environments are composed of family and professional contexts in which the deafblind person lives.

Introduction

Outside – inside the community

The pedagogic practice described in this book concerns persons with congenital deafblindness. They are few in number, and in many ways very different from one another. Something they share is their existence on the periphery of our social and cultural reality. Most persons with congenital deafblindness stand outside the effortless access to the linguistic practice of the culture that we otherwise take for granted. When individuals – such as persons with congenital deafblindness– are so positioned, those working with them must think and act in alternative ways. This is possible in a practice that invites persons standing outside into a community in which, they have the opportunity to co-create communication and language with their partners⁴.

Special education may find its best example in encounters with persons with congenital deafblindness. Not because such encounters are frequent or common occurrences, but because they so clearly demand individualized special pedagogic thinking and practice. Only communication can 'cure' the isolation caused by congenital deafblindness, and such communicative relations occur between the deafblind person and a seeing/hearing person. It is rare for the person with congenital deafblindness to have language in the conventional sense; the seeing/hearing person will understand himself/herself and the world with intact sensory modalities and his/her cultural background. Initially, the person with congenital deafblindness and his partner will not share access to a common language. We cannot wait for the deafblind person to acquire our language and become more like us. We need to acknowledge that the condition of congenital deafblindness exists, and we have to try to understand the deafblind way of being in the world.

⁴ Refers to all those who interact with a person with congenital deafblindness, e.g. family members, friends and professionals. The term implies equality in the relationship.

Various perspectives – different ways of understanding

One can understand differentness, language, and communication in several ways. One way of understanding the concept of differentness is, that a person has a problem that is to be treated and trained away – that deafblindness should disappear, that this condition creates hindrances or barriers that exclude persons with this disability from having a worthy life. An alternative way of understanding differentness is in terms of a spectrum of actual variations rather than in terms of normality and deviance.

Working in a knowledge-based way can mean that argumentation and documentation are required. The demand for documentation with which we are confronted today may be understood as the requirement to account for the perspective upon which our practice is based at any given time. When we describe how we think and act in practice, we give others access to or insight into our practice. The purpose of such documentation is to make it possible for others, also colleagues from neighboring fields, to discuss our practice with us. Documentation of our practice in the deafblind field will bring our perspectives and our modes of action to light. Such openness prevents our field becoming looked upon as closed and protected.

The perspective influenced by dialogical theory

The author and psychologist Per Lorentzen has inspired us to emphasize that any given mode of understanding and form of practice must be relevant for the student. Per Lorentzen (2005; 2006; 2009) has in several books concerning professional work with persons with disabilities, been inspired by dialogical theory. His works show that this perspective takes the complexity and variation of human life seriously – it opens instead of closes or excludes. Face-to-face meetings with persons with congenital deafblindness can be regarded as a prototypical example of how such encounters challenge many dimensions of being professional. The Norwegian teacher of special education Liv Holmen takes the same approach in her book *Pedagogikk og Kjærlighet [Pedagogy and Love. Educating children with multiple disabilities]* (2009). By pairing these terms, she points at the relational dimension in high quality teaching.

The understanding of differentness offered by dialogical theory is binding. Julia Kristeva in her short book *Letters to the President* (2008) states a requirement for how society should understand people viewed as alien because they have a disability.

Kristeva says: “Society consists of several ways of being a person, and life is conjugated in the plural” (p. 65). In the context of special education, the highlighting of diversity of ways of being in the world and the manifold ways in which one can express oneself implies the willingness to enter into one another’s differentness as well as attempts to do so. This willingness requires an ability to endure being in a field of tension without being like the Other or getting the Other to become like us. We find meaningfulness in being in, and in continuing to be challenged by, the struggle with one another’s differentness.

Special education has a tendency to orient itself towards isolating difficulties that can be viewed and treated as though they belong to individuals. The formulation ‘persons with communication difficulties’ is an example. From the perspective of dialogical theory it is meaningless to say that communication can be an individual’s problem. A communication problem must consist of at least two persons having a problem with communicating with one another. It is obvious that it is extremely difficult for seeing/hearing people to communicate with persons with congenital deafblindness about what they are thinking about, or what we ourselves are thinking. If one understands this difficulty in the sense that it is only the deafblind person who has a communication problem, the practical consequences will be completely different than if one understands the problem as relational and thus concerned as much with the seeing/hearing partner.

Knowledge-based/evidence-based practice

Society currently demands that we work in an evidence-based manner and at the same time that we acknowledge diversity. These demands can be perceived as contradictory and difficult to accomplish. However, we may understand evidence-based practice as working in a knowledge-based manner, i.e. inspired and informed by theory that applies universally to all possible variations of human conditions. In our field, the relevant theory will address general and fundamental developmental and communicative processes. A theory is relevant if it helps partners engage in sustained face-to-face relations with persons with congenital deafblindness.

The purpose of this book

This book is not intended to be groundbreaking or to propose completely new approaches. On the contrary, we have attempted to make the practice that we both currently promote known to others both within and outside of our field. We have joined our respective special education and developmental psychology fields and allowed ourselves to be inspired by others' ways of thinking and acting. The contents of the book are largely based on the many inspiring meetings we have both had with children, youths and adult persons with congenital deafblindness, their families and their professional partners.

The discourse among professionals about what our discipline is, is kept alive by our wondering over the question of how one can engage in face-to-face relations with persons with congenital deafblindness and relate to the deafblind way of being in the world. We hope that this book will inspire and support professionals to discover and study each individual deafblind person's way of being in the world. Beyond each act of planned intervention lies an inspiring journey into differentness for the partner.

2

The theoretical framework

The communicative development of the person with deafblindness is unique through the prominent bodily/tactile way of being in the world - so different from the seeing/hearing partner's way. This fundamental difference means that it is demanding for the seeing/hearing partner to co-create good enough, sufficiently many and sufficiently stable communicative relations with deafblind persons. Good quality in communicative relations is indicated by increased engagement by the deafblind person. Partners, Significant Others as well as experienced professionals, may find that the engagement takes time to discover, that it appears strange at first and difficult to understand. When the deafblind person becomes an active co-creator in communication, professionals encounter a new challenge. The new challenge is to discover, understand and relate to the engaged expressiveness of the deafblind person. The core of the challenge is to relate in such a manner that the processes that promote development are sufficiently nourished by the quality of the interaction with the environment.

The knowledge of professionals who support the partners of the deafblind person contribute to create the developmental opportunities of each individual deafblind person. Basic areas of knowledge concern:

- The general processes of communication development and how this knowledge applies in the special case of congenital deafblindness.
- How partners can be supported to discover the developmental potential for communication and person-hood of the individual deafblind person
- How the unique bodily/tactile perspectives on the world taken by a deafblind person can enrich our understanding of general processes

In sum, great demands are made on professionals' knowledge and competence to make it useful for the partners of the individual deafblind person. The purpose of applied knowledge is to help partners plan and perform interventions. The interven-

tions should strengthen the communicative relations in which the deafblind person engages, so that these relations are in continuous and positive development. Two central questions then arise:

- What areas of knowledge are relevant for professionals who support the partners of persons with congenital deafblindness?
- What professional competence is required in order to enable partners to plan and perform interventions, i.e. to apply this knowledge in daily practice?

The first question concerns the choice of theories from which we gather knowledge. The second question concerns the target areas of intervention as illustrated in *The Developmental Profile* and how the target areas are brought into focus in daily practice.

The Developmental Profile is an intervention model that is composed of two sub-models. The sub-model called *The Diamond* gives the overview of target areas of intervention and of how one target area is connected to the other target areas in the model. The second sub-model is called *The Cue Model*. This model suggests observational cues that indicate the contributions of the individual deafblind person within each target area. The combination of the two sub-models makes it possible to see the function of the particular contributions of each individual in a social relational context and in a developmental-theoretical perspective.

We have chosen to begin this book with a chapter about the theoretical framework on which *The Developmental Profile* is built. Congenital deafblindness does not change the developmental micro-processes that are basic to communicative relations. However, when a person has congenital deafblindness, these processes tend not to develop by themselves, i.e. without planned intervention. We are therefore searching for theories that afford a detailed understanding of the characteristics of processes underlying the development of basic communicative relations, of how these processes and relations develop and of what promotes development. Such a detailed understanding supports partners in discovering, recognizing and being able to participate in communicative relations, even though the processes and relations occur in different bodily/tactile ways.

Theories that support the understanding of communication, language and thought as co-created in the relationship between the individual and his environment will be especially useful for the partner. *The Developmental Profile* builds on such theories, as the contributions of each deafblind person to his own communicative development can contribute to acknowledge differentness as variation.

Background for the choice of theoretical contributions

The Developmental Profile is based on contributions gathered from several different theories that complement one another. Each of these theories focuses on specific areas in development. We need support from several theories in order to deal with the complexity of all fundamental areas of communicative development. Historically, *The Developmental Profile* was constructed from the challenges professionals and partners encounter repeatedly in practice with children and adults with congenital deafblindness. These challenges all have to do with the difficulty partners have in relating to the differentness of congenital deafblindness. They have pointed to theories that are useful for practice; i.e. theories that can help us deal with diversity and differentness.

The theories described in this chapter all concern universal⁵ and fundamental dimensions of human development, and propose a broad, open and inclusive understanding of communicative and linguistic development. With such an open understanding, it is possible to recognize and acknowledge forms that appear differently from what one is used to. The core of the problem partners have with perceiving, reading and understanding the behavior of deafblind persons is to discover and react to expressions partners do not immediately expect to see.

High and low readability

The seeing/hearing child is biologically prepared to participate in and develop communication with his care-persons easily. The behavior to which parents intuitively react is recognizable and immediately perceived as meaningful. In this way, development is nourished in the encounter between the child and its care-persons. According to the Norwegian developmental psychologist Harald Martinsen (1992; 2006), the conditions listed below are crucial in order for the seeing/hearing child's behavior to be perceived and understood:

5 Apply to all people.

- The behavior occurs regularly – it is characterized by rhythmic patterns
- The behavior occurs often – the activity level is high
- The behavior is easy to understand – easy to read – has high readability because it answers the expectations of the culture.

By contrast, the behavior of persons with congenital deafblindness is characterized by complex biological conditions that have a negative effect on regularity, frequency and, not least, readability. Congenital deafblindness has therefore many developmental risk factors built into its nature. Consequently, it is vitally important that deafblind persons engage with partners who have the knowledge and competence that enable them to support communicative development in spite of the complexity and difficulty it entails. Given such relations deafblind persons can use their cognitive capacity for development and learning.

Visual loss by itself represents a high risk factor. When a serious visual loss is combined with a serious hearing loss, risk factors increase to far more than double, as the combined effect of the sensory impairments is the result of reciprocal negative influence. The problem of low readability is consequently many times more serious than in the case of visual loss or hearing loss alone. In most cases, persons with congenital deafblindness have other impairments such as for example motor and/or cognitive impairments. This complexity necessitates high standards of knowledge and competence about planned intervention.

The low readability of the deafblind person's way of being in the world and manner in which he expresses himself can have a negative influence on the care-taking environment in the sense that it creates uncertainty in otherwise competent partners. Intervention should initially address this feeling of uncertainty so that the partner can find the experience of being with the deafblind person exciting and rewarding even though difficult. Therefore, there is a need for the partner to have good will and personal engagement supported by theoretical insight. In spite of low readability of the deafblind person, theoretical insight makes it possible for the partner to acknowledge difficulties and at the same time aim to create and stabilize a good environment for the deafblind person.

An optimal developmental environment can create frames that enable the deafblind person to thrive and develop communicatively over time and across life environments. Close relationships with other persons form the core of such an environment.

In the following paragraphs, we will elaborate on some of the consequences of the readability problem for partners of deafblind persons.

Consequences of low readability

Any seeing/hearing partner will experience considerable challenges when trying to envisage, discover, read and understand the deafblind person's way of being in the world, in particular his natural mode of expression.

The problem of low readability caused by the consequences of combined sensory impairments will, in other words, reduce and change the deafblind person's access to others. The main reason is that deafblind persons tend not to orient towards others in manners that are effortlessly noticed and answered by these others. In addition, interest in and access to the physical environment will be reduced by lack of motivation caused primarily by lack of visual stimuli.

The prominent bodily/tactile condition (cf. Nicholas, 2010) implies that deafblind persons develop bodily/tactile ways of perceiving and understanding the environment. The partners of deafblind persons should adapt their own manner of relating to and accessing the environment accordingly. The purpose is to match the manner in which the deafblind person relates in the world, follow the direction of his attention and share his interests. The partner should respond in a manner based on carefully observing how the deafblind person relates to the social and physical world, and on imagining how he makes sense of and finds meaning in his impressions.

Readability problems continue throughout the communicative development and form a reciprocal challenge in all communicative relations. As the deafblind person develops communicative competence, new readability problems will arise. In many cases, readability problems will increase with further development. The models we suggest do not remove the challenges that lie in reciprocal low readability, but help professional and personal partners cope with these challenges in a positive manner that supports development.

Contributions from developmental theories: Transactional Models of Development

The Developmental Profile is a tool that can support professionals in identifying and prioritizing acts of intervention targeted to support continuity in developmental processes. This is why we look to developmental theories.

A characteristic of developmental theories on which *The Developmental Profile* builds is that a person's development is understood as a result of the relations in which he is involved over time. These relations are the basic socio-cultural context for the individual's psychological development. The acts of intervention are consequently directed at strengthening the fundamental relations between the individual and the environment. The social context within which the individual develops his person-hood is also strengthened, as the fundamental social relations are also the context for the individual's psychological development.

According to *Transactional Models of Development* (Sameroff & Emde, 1989) there is no sense in the notion that lack of development or disturbed behaviour is only connected to the individual. Developmental disturbances, rather, should be looked upon as a result of the individual's lack of or insufficient social-relational experiences. When intervention is targeted to strengthen developmental processes, we need to be aware that the individual's way of learning can take many different forms. One cannot predict how these forms will look or play out.

The first intervention task of professionals is therefore to strengthen the exchange-processes. The next task is to attempt to discover what the deafblind person has developed in terms of contact and ways of playing, exploring and communicating. The third task is to try out and identify how partners can best relate to the deafblind person in such a way that developmental processes can progress.

The way in which developmental processes progress is not related to a specific outer form. Developmental processes are universal and apply across the whole spectre of human conditions. It is important for intervention to ensure that the readability problem does not restrict or hinder developmental processes. Thus, it is important to be aware of functional equivalence between the different outer forms the relations can take. The specific manners in which the environmental functions are established and the specific sensory modalities used are not essential for the quality of the function that is developed.

The term function is used here to mean for example, seeing something, saying something or listening to someone or something. The function of seeing something does not depend on using a particular sensory modality, such as vision. To see something involves perceiving, recognizing and identifying something. One can achieve the same function using hands and the surface of the skin. Likewise, one can express something by using other parts of the body than the most usual ones. One can, for example, say something with one's hands. The partners of the deafblind person must therefore learn to look to the person's hands, or for example the feet, instead of only to his face to find cues that inform about the deafblind person's direction and focus of attention. With seeing/hearing children, it is not necessary to think about functional equivalence and the diversity of possible forms. Care-persons recognize other persons' expressions intuitively based on what they know from the culture in which they live. The partners' intuitive recognition of function is disturbed by congenital deafblindness. This is the reason why the intervention model emphasizes functional equivalence.

A focus on developmental processes

The Developmental Profile takes its point of departure in a description of processes that are fundamental to development. These processes are called proximal processes by Bronfenbrenner and Ceci (1994). *The Developmental Profile* offers strategies for how exchanges between the individual and the environment that create these processes can be strengthened within a focus on communicative development.

Important factors regarding acts of intervention concern the specification of target areas, the continuity of intervention over time, and stabilization of environmental relations across the different life arenas. Given sufficiently stable environmental relations, the deafblind person becomes less vulnerable to the variations that will exist between different partners' ways of relating to him. It will hardly ever be the case that all persons interacting with the deafblind person relate equally well with him. Therefore, it is important that interventions become stable enough to increase tolerance in the deafblind person for variation in environmental quality.

In relationships between the deafblind persons and their seeing/hearing partners there is a risk for the exchanges between individual and environment that drive the proximal developmental processes becoming too weak or not good enough to empower the individual's further development. Acts of intervention focused on learning products such as signs, for example, will be wastes of time as long as the more

basic communicative processes are disturbed or weak. We need therefore to point out the cues that can, according to developmental theory, support the partner in observing the quality of the exchanges between individual and environment. The cues described below point to criteria of quality we should try to promote in acts of intervention. Meeting these criteria is therefore the main priority in all acts of developmental intervention.

Activity: Intervention starts with a focus on interactional sequences in which the deafblind person shows a high degree of activity. If activity is not present, it can be created, for example, through the partner organizing it in such a way that motivating movements in a social game are created and repeated. When the game is at its most exciting, the partner freezes the action; i.e., she refrains temporarily from continuing the game. The barrier of the frustrated expected continuation triggers eagerness in the deafblind person and motivates him to do something to make the game continue. Activity can also be increased if the partner imitates (reciprocates) spontaneous behaviour that initially is not socially oriented on the part of the deafblind person. Increased activity in the form of socially oriented attention can often be achieved as a result of this strategy.

Reciprocity: Given interactional sequences with high activity and engagement from the deafblind person, intervention can proceed to focus on the next quality criterion: reciprocity in the interplay between the deafblind person and the partner. When exchanges characterized by high levels of reciprocity are sustained in progressively long-lasting sequences, interaction patterns in the form of turn-taking emerge. When a turn-taking pattern becomes stable over time and across different life-arenas a relation is created, i.e. a fundamental mode of relating to the world. We call such a relation an environmental relation.

Sustainability: The third quality criterion in developmental intervention is sustainability. This means that a high level of reciprocity within the same sequence can be sustained over time. In order to achieve sustainability the interaction must build on many variations of the same pattern. Variations create tension and movement (dynamics). Partners need accordingly to balance between following the deafblind person and challenging him.

Stabilization and generalization: Sequences with sustained reciprocal exchanges – for example turn-taking – should be stabilized over time and in all the central life-arenas such as the school, residential setting, and family. Working in a network-model in which all the life-arenas collaborate around acts of intervention is a prerequisite for the possibility of stabilizing exchange patterns and thereby relations across time, persons and places.

The first quality, high activity from the deafblind person, is a prerequisite for the next quality, reciprocity, and so forth. When high activity is sustained over time, the deafblind person expresses the same function in increasingly refined, variable and flexible ways. He can, for example, explore an object from many different bodily/tactile perspectives by exploring it against his forehead, breast, underarm, with the tongue, feet, fingertips, etc. At the same time, he will be able to use his body or parts of his body for an increasing number of functions. He will be able, for example, to use his hands to make contact, to manipulate objects, to explore objects and to listen to another person and to express himself.

Complexity and flexibility increase within the relation: Increasing complexity can be observed in the following ways: The deafblind person tries out several components from his behavioural repertoire in the interaction, displays several different emotional expressions, alternates between and combines behavioural components and applies residual senses in a more functional way. When the deafblind person increases his contributions to his own development in this manner, the partner gains more cues from the deafblind person enabling her to answer in a similarly more varied, refined and flexible manner. The result is that the exchanges become enriched and the relation is strengthened. When exchanges of high quality proceed without planned intervention, they demand less energy and attention. This means that the partner can present novel variations without breaking the flow of the interaction. When the interaction flows, the proximal exchanges are of sufficiently high quality that the deafblind person can develop and learn something new in the interaction. This can lead to the deafblind person himself presenting contributions of such character that complexity increases and reveals glimpses of emerging functions. However, he will not be able to develop new functions unless his partners discover these initiatives as contributions to the Zone of Proximal Development (ZPD)⁶ and relate accordingly.

6 See the section 'Contributions from other theories of development'

Example

Inge⁷ and Heidi – a deafblind girl – play a bodily anticipation game on the trampoline. Heidi takes part in the game, but takes hold of an empty syringe lying beside her and plays with it at the same time. Heidi easily manages to both participate in the game with Inge and to play with the syringe. She addresses Inge several times about the syringe while she also actively participates in the game. In this episode, Heidi shows that she is capable of dividing her attention between something in the world and the partner. This gives a clear cue that Heidi is ready to take on the role of co-author of a shared topic in a conversation.

(Video: Andersen, Rødbroe (2000) Identification of Congenital Deafblindness)

It is important to point out that the principles of strengthening the proximal exchange processes between the deafblind person and his environment do not only apply to very basic communication processes. The same principles of intervention also apply to development of symbolic and linguistic communication. Similar kinds of challenges appear across the whole developmental course. These challenges will be described in greater detail in chapter 4 on ‘conversations’.

Both the deafblind person and the care-taking environment develop over time

In *Transactional Models*, development is viewed as the result of reciprocal influence between child and environment over time. This reciprocal influence that enables change over time occurs normally without planned intervention. When deafblindness is present, the previously described problem of readability has the effect of seriously hindering this process without planned intervention. Therefore, continuous analysis of the quality of interaction and communication sequences between the two partners is necessary. Continuous analysis is necessary to support partners in grasping the deafblind person’s emerging new initiatives. Thereby the partner is empowering the deafblind person’s opportunity to be active in his own development.

7 It should be pointed out that it is not necessary to view the videos to understand the relevance of the example.

During analysis, we look for cues that reveal the deafblind person's opportunities – or openings that enable the partner to add novelty or new variations. These openings point to targeted areas of intervention, relevant to a given phase in communicative development.

Even the partner develops her partner-competence in relation to her deafblind partner. She will be increasingly better at grasping how and when the deafblind person requires new challenges and at meeting those challenges adequately.

Example

Alex⁸ – a deafblind boy – was interested in exploring a staircase between two floors in his preschool. He did this many times each day with great interest, on his own initiative and employing many variations. One day the staff discovered him lying passively and self-stimulating on the staircase.

One might think about the meaning of this behaviour in two different ways. One possibility is that Alex had lost general interest in exploring the environment and 'turned inward'. An alternative possibility is that Alex had completed his particular project of exploring the staircase and was lying on the bottom step waiting for the new 'steps' – i.e. new challenges to explore what someone might offer him.

The acts of intervention that follow from these two ways of thinking will be very different. In this example, the partner managed to discover that Alex had not given up exploring as such, but was clearly 'asking for' new challenges in his very personal way.

(The example is taken from the consultant services at Skådalen Resource Centre in Oslo).

8 The examples that are not based on published video clips use fictitious names.

Positive and negative snowball effects

When the quality of the relation promotes developmental processes, we are talking about positive snowball effects or positive transactional effects. Intervention may, if targeted at core areas in development, influence more areas than the area initially focused on. This principle is built into the construction of *The Developmental Profile*. Intervention that strengthens exchange quality in the face-to-face relation 'social-interactive play/action' may have the positive transactional effect of the deafblind person initiating 'proximity/attachment'. In this way, the opportunity for establishing an attachment relation to the partner is created. As the attachment relation develops further, the partner may be perceived as trustworthy by the deafblind person. Thereby the deafblind person dares to initiate exploratory ventures using the partner as a secure base. The assigned role of secure base is grounded in the experience of the partner's sustained physical accessibility and emotional availability. The experienced quality of the initial social game has thus had a positive snowball effect (a positive transactional effect).

The example above shows that interventions targeted at core areas push developmental processes in a positive direction. Since the deafblind person will always have limited access to interactional experience compared to seeing/hearing persons, areas of intervention must be chosen with care. Intervention directed towards core areas of development will have the effect that positive processes can spread from these to other areas.

In the case that the deafblind person does not experience sufficiently good and plentiful relations with other persons, negative snowball effects/negative transactional effects can occur. A long-term negative effect may imply psychological consequences that are characteristic of social deprivation. Social deprivation is caused by lack of access to experience of social contexts over time. The negative snowball effect is characterized by the deafblind person realizing less innate potential and developing different types of challenging behaviour, such as self-stimulation, self-injuring and extreme passivity. Such extremely socially deprived conditions may be a result of the deafblind person never having experienced good enough relations with his environment. The relations may have been characterized by over-stimulation, stress or under-stimulation (cf. e.g. Brandsborg, 2012). In such cases, intervention should include establishing or re-establishing well-functioning face-to-face relations.

It is important to emphasize that we are not speaking about relational disturbances in the sense that these disturbances are caused by insufficient care-taking abilities or insufficient care-taking environments. Rather, this situation is understood in terms of transactional processes; i.e. as a result of relational problems lasting over time. The relational problem is grounded in the difficulty any care environment is faced with when relating to the deafblind person – especially if the professional help the partner receives is insufficient.

Contributions from other theories of development

The terms Zone of Proximal Development (ZPD) and scaffolding are consistently applied in theories concerned with social learning and development.

The Zone of Proximal Development – ZPD

The Russian psychologist Lev Vygotsky (1971) developed a model that illustrates how the partner's task is to help the child experience that he is capable of achieving what the partner thinks he can. When the child experiences himself in the eyes of the Other, he overcomes the distance between what he is capable of alone just now, and what he will be able to do alone in the near future. The partner solves this task by supporting the child in overcoming the distance between what the child is already capable of and what the child is perceived to be able to achieve alone as the next goal. This distance is called ZPD. When interventions are being planned, it is therefore crucial to identify both what functions and what parts of the interactional relations with the environment the child is able to organize himself, and what functions and dynamic pattern the child is moving towards developing. Cues that point towards the ZPD will be revealed in interaction sequences of high quality. The sequences of interest accordingly will be characterized by a sustained high level of reciprocal exchanges, sustained dynamic complexity, and the mastered functions will be stable within adapted environments. It is precisely here that the child reveals what he is on the way to developing. It is therefore important in intervention analysis to identify sequences of such high quality. The immediate goal of intervention will then be to adapt as many learning situations as possible that have the potential to meet the child in the Zone of Proximal Development. This will result in emerging relational competencies becoming part of the child's repertoire of actions.

However, low readability in the behaviour of persons with congenital deafblindness makes it difficult to identify the ZPD. Therefore, there is a risk that the environment will fail to notice or will misinterpret behaviour that indicates that the deafblind person has developed his relational competencies further and now requires new challenges. In such cases, positive developmental processes stagnate and further development is hindered. Chapter 4 will offer tools that can help the partner both with the difficult process of identifying ZPD, and with finding strategies for building scaffolding that the partner can use throughout communicative development. In the intervention model that is described in this book, ZPD is not used to refer to culture-specific and age-related individual skills, but rather concerns a more fundamental level of relational competencies that are central throughout life. The partner will not build scaffolds in order to promote the learning of the deafblind person alone. The scaffolds of interest here will also promote the partner's own learning, as she is also a part of the developing relationship.

Scaffolding

The multifaceted role of the partner leads to the need for external support in order for her to see her own contribution better. The help the partner adds to the interaction in order to come to the ZPD is what Bruner (1990) calls scaffolding. The partner helps realize emerging relational patterns and functions by providing support that enables the child to experience that he can do what he cannot actually yet do alone. Communicative development is in other words characterized by the child experiencing mastery in communicative relatedness and functions before he actually masters them. Increasing actual mastery is achieved on the basis of the partner scaffolding the experience of mastery and gradually withdrawing the scaffolding support as the child is able to fulfil more and more of his own relational role. *The Cue Model* points at the characteristics of the basic relational scaffolds that partners need to build in each of the basic environmental relations that are pointed to in *The Diamond*.

The Cue Model illustrates the development of progressively more cognitively complex contribution from the deafblind person within each of the four basic environmental relations. One example is that of the baby who cannot actually participate in conversations from birth, but who has a mother who behaves as though he can. She builds a conversational scaffold in such a way that the baby apparently experiences

that he can talk with her without being able to access that experience on his own initiative. The point is that the spontaneous social relatedness of the baby is more than enough to enable the mother to experience being able to converse with her child. The mother's experience of mastering conversing with her child is transferred in a positive way to the child, and thereby the positive snowball effect is underway.

Concluding remarks about the ZPD and scaffolding

The principles of learning described above can be understood in various ways, leading to different approaches to intervention. The approach we are suggesting is based on the assumption that fundamental developmental processes and principles are the same for the deafblind person as they are for others. This assumption about fundamental sameness implies that the more specific products of learning will be characterized by considerable variation, including differentness. Realization of potential contained in the ZPD is dependent on a reciprocal trusting relationship between the deafblind person and his care-persons. The topic of trust leads us to point to additional relevant contributions from development theory as developed by, among others, Ainsworth, Blehar, Waters and Wall (1978) and Bowlby (1980).

Attachment and reciprocal trust

The child's need to form close emotional bonds to particular Others is fundamental and is as basic for the development of social relations with other people generally as it is for developing explorative relatedness to the physical environment. *The Developmental Profile* emphasizes the importance of such reciprocal conditions of trust and builds on pillars derived from attachment theories. These theories are concerned with how children and care-persons form strong emotional bonds with one another. Such reciprocally affectionate and positively bonded relationships organize the child's natural learning and open possibilities for both the child and the adult to identify emotionally with one another. The identification process ensures that the adult will constantly strive to adapt her contributions to the child and that the child will thereby learn more and more about what others can add emotionally to the situation. In this way, fundamental attachment and trust conditions contribute to social and cultural learning.

The child's psychological development can be negatively influenced if the bonds are too strong or too weak. In cases of deafblindness it is therefore important for professionals to co-create bonds that are both strong and flexible enough to motivate the deafblind person to engage spontaneously in explorative social and cultural learning. The deafblind person's contribution to the attachment relation will differ from what the partner culturally expects. This differentness matters since the deafblind person's contribution inspires the continued engagement of the partner. If the deafblind person's emotional contribution is not perceived by the partner, it is hardly possible for the partner to maintain her own engagement in the relation. Many parents have a totally unproblematic attachment relation to their deafblind child. That which is challenging for professionals is that they must find a professional way in which to enter an attachment relation.

The attachment relation has two fundamental dimensions. The first dimension is that the child will experience the care-person as trustworthy when she is experienced as sensitive to his emotional signals and answers these signals adequately. In this way, the care-person shows the child that variations in his emotional state are perceived by the Other⁹. Variations within and between the child's fundamental emotional states are in other words co-regulated through being with the Other. For the child, an important psychological consequence of such a trustful relation is that it gives him an inner strength to cope with emotional challenges and difficulties.

The second dimension is the important psychological consequence that an emotionally trustworthy person will function as a base for the child's exploration of and attendance to the outer world.

A secure base for exploration

In the beginning, the seeing/hearing child feels fundamental safety/trust when in close physical contact with his care-giver(s). The seeing/hearing child finds that he can influence his own emotional context by maintaining and re-establishing proximity to his care-giver. Initially, his contribution to the co-regulated proximity relation occurs within the range of close physical contact and later within ranges that

⁹ In her book *Pedagogikk og kjærlighet [Pedagogy and Love. Educating children with multiple disabilities]* (2009), Liv Holmen describes how this occurs in practice.

cover greater and greater distances from the location of the care-giver. The range of co-regulated proximity expands as the child's functional use of the distal senses of vision and hearing develop with the child's increasing locomotion. In this manner the fundamental attachment relation to one or several care-persons who fulfil the role of emotionally Significant Others will create the condition for the child to dare to move farther and farther away from the secure base and venture out into the world. The experiential core of this condition is that the child has learned that it is consistently possible to re-establish proximity and the implied feeling of security and comfort. In sum, the dynamic movement between the source of security and challenges in the world has as its prerequisite an emotional trust relation based on the reciprocal experience of care and devotion.

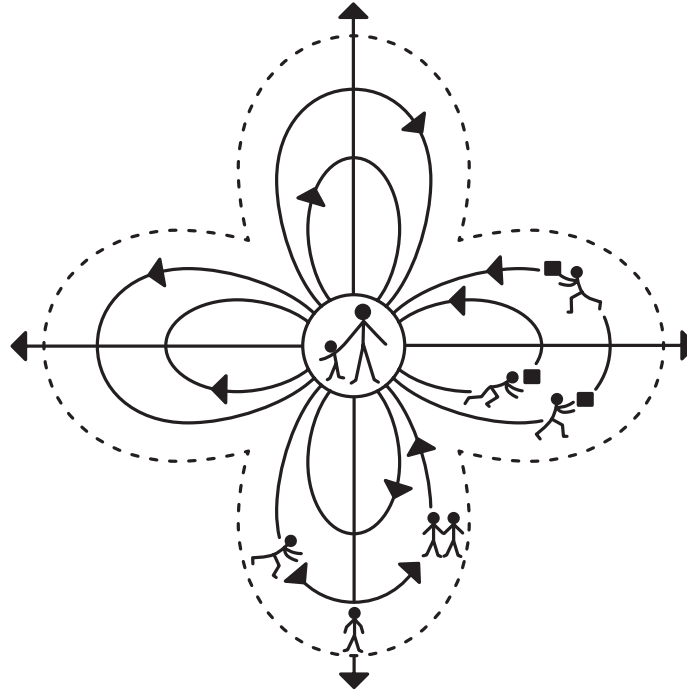
Basic trust that is developed in the relation to primary care-givers leads the child to be able to develop trust in other persons, in other relationships, later in life. These persons may each take on the role as secure base, supporting the child to explore on his own and in this manner make sense of and gain knowledge about the world.

The Life-Space Model

In *The Developmental Profile* we apply a model that illustrates how the child gradually increases the distance to the secure base (the care-person) so that the space within which he can freely explore covers an increasingly larger portion of his surroundings (see illustration 1). The space over which the child has an overview and can move freely within is what we call the child's life-space (Nafstad, 1989). The gradual expansion of the child's life-space occurs as the child experiences his ability to re-establish security by maintaining proximity to the source of security over increasing physical distance¹⁰.

The figure shows how the child's life-space is established as a dynamic relation. The proximity dimension in the attachment relation is established initially within a range which is physically close and then maintained afterwards over an increasingly greater distance and over longer and longer periods of time.

10 *The Life-Space Model* is inspired by studies performed by the developmental psychologist Harald Martinsen who observed how children in a park move between their mothers and exploration of their surroundings (1982).

*Illustration 1***The Life-Space Model**

The same dynamic principles apply in relation to the deafblind child. However, maintaining the experience of emotional proximity to the secure base over increasing distance is much more difficult because of the lack of or strongly reduced distal senses. Expansion of the life-space when the distance to the secure base exceeds the deafblind person's reach tends to be hindered unless special interventions are made. Furthermore the deafblind person has established a stable inner feeling of emotional proximity, i.e. represented proximity in all situations, also when the Other is not physically accessible. Pedagogical interventions that can work towards achieving an expanded life-space can for example be the making of clear 'contracts' with the deafblind person about where and how more concrete proximity to the secure person can be restored.

In sum, congenital deafblindness implies that persons with this functional disability will have a considerably more constrained life-space in comparison with seeing/hearing persons. This is not only a consequence of seriously constrained access to interactional experiences in general. The generally reduced access problem combines with the risk factors that primarily low vision or blindness brings with regard to being motivated by environmental stimuli to explore, and thereby expand the life-space. These conditions add to a third problem: The combined effect of low vision and seriously reduced hearing has the consequence that the deafblind person does not naturally access the learning experiences that are mediated by the distal senses. These are experiences about the continuous accessibility and availability of the trusted Other, which in turn facilitate the gradual representation of proximity over increasing distance.

The conditions described above have the consequence that the partner is challenged to compensate all the different facets of the problem. One facet is that she needs to be able to make a small life-space 'tight', yet inclusive of adequately varied and enriching experiential opportunities as well as communicating her engagement in what for her must be minor things (see the example on page 133).

Example

As a combined effect of her deafblindness and motor disabilities, Kaja has a very limited life-space. In order to help Kaja realize her curious and exploratory nature, her teacher constantly presents her with new challenges located within Kaja's reach. Together, they discover exciting things in the world that are just as exciting for Kaja as for a seeing/hearing child discovering the world. Kaja discovers and shares with her teacher the joy of the moment: The simultaneous existence of what for her are very nice things; light and the porridge she is eating.

(The example is from the video collection by Liv Holmen)



Concluding remarks about attachment and reciprocal trust

The concepts ZPD and scaffolding can contribute to understand the connection between proximity and exploration. The deafblind person's life-space is the area over which he has an overview, and within which he can freely move, where he can maintain the feeling of security by restoring physical proximity. Immediately outside this zone, the deafblind person senses that there is something that might be interesting. This area can be understood as the ZPD or the area of new exploration. This area has the potential to become included in an expanded zone of security. The partner's building of scaffolding can for example occur by the deafblind person contacting the partner to get her to help him within an area he senses is there but which he cannot manage to explore alone. The partner can also take the initiative to support the deafblind person to move further out into the world. The partner does this because she has observed that the deafblind person is ready and motivated to do so.

Contributions from dialogical theory

The human mind is dialogical

Dialogical theory is concerned with the way in which persons understand themselves, others and the outside world. The theory describes the human ability to create meaning in relations with the social and physical environments. We need the reactions and perspectives of others to understand others, ourselves and what we experience.

Markova (2005, 2006) defines dialogicality¹¹ as the ability of the human mind to understand, co-create and communicate about social reality under the influence of Alter. 'Alter' is to be understood here as one's own inner representation of the Other/the Others.

The contributions we have chosen from dialogical theory are composed of themes and concepts that describe the dynamic relational processes that take place between partners when they are engaged in co-creating meaning and communication.

11 According to Linell (2009), dialogicality is a characteristic aspect of human cognition and communication.

Co-authorship – diversity

Assuming that the deafblind person experiences that his perspective is interesting to the Other this experience will give him the opportunity to take the role of co-author of shared themes and shared meaning in the dialogue. When the deafblind person in this way has a voice in the dialogue, this voice becomes more varied and the forms of expression more diverse. At this fundamental level it is not important to achieve a voice that is similar to those of others, but to experience that one has one's own voice. Dialogical theory views all possible variations of human ways of being in the world and expressing oneself as equal. In this way, the deafblind person's way of being in the world is emphasized and made interesting in its differentness – instead of being neglected or overlooked. The partner then has the challenge of giving the deafblind partner the experience that his perspective of the world is interesting to her.

The individual's experience of the relation

Dialogical theory makes it possible to focus on the psychological dimension of communicative development. This part of development focuses on and emphasizes the importance of the fact that an individual, in being with the Other, experiences himself as a worthy person. One experiences oneself as worthy when another person is interested in listening to what one is thinking about. One experiences oneself as a worthy person when one's partner is concerned with following the perspective one puts forth. A person might for example experience himself as one who is worth noticing because he has often experienced that others notice him. The opposite can of course also be the case. To experience oneself as a worthy and interesting person in the eyes of others is essential for one's own view of oneself becoming strong and courageous enough to permit the unfolding of oneself together with others and in the world.

Contrasts with monological theory

The opposite of dialogical theory is 'monological theory' (cf. Linnel, 2009). In theories that from a dialogical perspective can be claimed to be monological, meaning is created in the individual person. Such a line of thinking involves the notion that thought is conducted in the head of the individual and that a communicative message has a fixed meaning for the sender and is thereafter decoded by the receiver. This is in contradistinction to dialogical theory in which the focus is not on isolated messages but on the communicative expressions of the subject. These are by their nature directed to the Other and dependent on the Other answering and contributing to the expression,

perceiving meaning and being included in the creation of a shared meaning community here-and-now. The focus is therefore not on the fixed meaning of the expression but on the meaning co-created here-and-now. Meaning must always be understood in relation to the context in which it is co-created, and expressions are co-constructed by the partners in the dialogue. These two conditions require that meaning cannot be determined beforehand but rather is co-created (co-authored) again and again in conversation by both partners.

Thinking is a dialogical process. When we think, we engage in an inner dialogue with ourselves or with something the Other has said. Our thinking is influenced further by attitudes that can come from groups of people or from the community. Dialogical theory points out that our thinking is constantly going on as an inner dialogue. Thereby our actions, what we say and our choices are influenced by this inner dialogue and by the voices that the inner dialogue contains. These voices are again influenced by what we think, others' opinions, thoughts, expectations of us and the demands or limitations we experience that the environment more or less consciously sets for us.

Intersubjectivity – subjectivity and agency

When we understand mind as dialogical, it seems important that the deafblind person can experience himself as a person to whom the Other finds value in listening. In spite of the difficulties the deafblind person has with expressing his thoughts, he must feel free to express himself with his own voice. In the dialogue with actual others, the deafblind person will need to experience himself in many positions or roles that contribute to the creation of his image of a communicative Self. He will need, for example, to experience himself in the position of one who can express himself to an Other, in the position of one who can think for himself, of one who can listen to an Other, and of one who can tolerate the tension that arises when he tries to get his thoughts through to the Other. Beyond this, he will need the experience that the partner is not only willing to listen to him, but also is honestly interested in following him into his perspective (Nafstad, 2009).

Markova points out (2008) that a person in a dialogue with an Other strives towards reaching shared understanding with the Other (intersubjectivity) and at the same time strives in the opposite direction towards recognition of himself/herself as a subject (subjectivity). In the article *Communication can cure* (2009), Anne Nafstad devel-

ops this general point further and relates it to congenital deafblindness and communication. Partners should be conscious that the deafblind person in the dialogue may not only engage in the collaborative striving to co-create shared meaning or shared understanding with his conversation partner. He may also be striving in the opposite direction, i.e. towards being listened to and acknowledged by the Other. The experience of feeling one's subjectivity recognized develops one's own self-image, one's own voice, one's agency and one's identity. We all strive to maintain inner strength and a sense of Self at the same time as we communicate with other people.

The experience of having one's subjectivity recognized by the Other has to do with the way in which the partner meets the deafblind person in the dialogue. Feeling recognized and valued is the prerequisite for the deafblind person himself becoming strong and brave enough to maintain and develop active participation in the dialogue. It is required of the partner to take the role as one who listens, recognizes and follows utterances – even those utterances she does not immediately understand. A listening partner may in this way create the foundation for the deafblind person himself to become capable of following the partner into her perspective. His following into the Other's perspective is a reciprocation of his experience of the Other having followed him. The point here is that the partner's acknowledgement of the deafblind person's subjectivity has to do with acknowledging the deafblind person with his differentness regarding interests and manners in which he spontaneously expresses himself. The inner strength gained from an acknowledging Other which is built up in this way, grounds the deafblind person's own action competence or agency in the dialogue. A person's communicative agency will gradually become more and more robust when the person has many and positive experiences with his own ability to endure staying in a dialogue while tolerating that his utterances may not be well understood by the partner. The deafblind person becomes in this way better and better at tolerating misunderstanding or breaches in dialogue. Given the felt co-presence of a listening Other, the deafblind person may become better and better at attempting actively to repair both breaches and misunderstandings. Communication becomes less vulnerable because the deafblind person, through adequately good experiences of being acknowledged as having his own voice, develops an inner strength. This inner strength gives the deafblind person greater and greater competence and resilience in tolerating tensions. By the latter, we mean those tensions that arise when the deafblind person experiences that the partner has an intention or a willingness

to understand his utterances, even though she may have great difficulty with actually understanding what the deafblind person is trying to express.

On the basis of dialogical theory, it will therefore be important to focus on how a partner should relate so that the deafblind person can experience her as one who is listening to him. The article *Communication can cure* (Nafstad, 2009) emphasizes the importance of the partner adopting a listening attitude. To take a listening attitude does not merely mean adopting a passive and expectant role. A listening attitude also involves that the partner supports or scaffolds the deafblind person's participation in the dialogue. When one experiences oneself as worthy in the Other's listening attitude, this experience will eventually lead to the person developing the courage and desire to unfold his own communicative agency in the dialogue. It is important to point out that the concept of communicative agency may apply even though the person uses few cultural-linguistic elements. Communicative agency can also be expressed through the listening position taken by the deafblind person, as exemplified by deafblind persons who enjoy the role of listening to others talking about himself. (cf. e.g., Lundqvist, 2012).

Trust

Structuring the environment in terms of person, time and place (Van Dijk, 2015) has been and is still the pedagogical strategy which aims at creating predictability and thereby a feeling of safety. This pedagogical strategy connects to the nature of deafblindness in relation to overview. The social relational dimension of a sense of safety is developed in theories of attachment, which emphasize reciprocal devotion as a prerequisite for the basic trust that enables the deafblind person to explore the world.

Dialogical theory helps us understand the notion of reciprocal trust. Trust stems from the individual's experience of feeling that in the Other's eyes, he is one who is worthy of being valued or of being loved. This form of fundamental emotional trust is developed primarily in parent-child relations and creates the foundation for how one emotionally relates to oneself and other people. Other basic environmental relations – such as social interactive play/actions and conversations – will be the relational contexts for developing other dimensions of trust which in their turn create the basis for other aspects of agency.

For the child, an important psychological consequence of experiencing trusting relations is that he develops inner strength enabling him to meet challenges and difficulties. Among these challenges will be encounters with others who do not acknowledge the differentness of the deafblind person. The abundance and strength the child may develop from experiencing the Other's trust in him promotes his ability to influence and unfold himself with other people and the physical world in his own way. The experience of being one who is worth the Other's trust is the foundation of one's own trust in the Other and later, for trust in other people generally. Basic trust is indicated when the child is generally trusting in relation to other people even though many will not fulfil his expectations (cf. e.g., Markova, 2010).

Markova points out that our ability to enter into close one-to-one relations is influenced by the trust we have in our social and cultural environment. That is to say, our colleague's attitudes, management values, and the frameworks and demands authorities set for us influence the way in which we are able to enter into a close relation with a deafblind person. Professional partners also have the need to build up their professional Self in order to be able to tolerate resistance and disagreement.

The practical background for the choice of additional theories

In the following we will foreground how practical experience from the field of congenital deafblindness and communication intervention has pointed to the relevance of certain additional theoretical contributions. We will then describe these contributions.

Thoughts about what language is

Many persons with congenital deafblindness have built up good trust relations to other people but this is not enough for the development of language to progress by itself. Therefore we are challenged to think about how we understand communication, language and thinking and about how this type of relatedness to the world is developed. The way in which we think about these central issues must be a way that is inclusive in relation to rare and divergent forms and focuses on meaning and on

how meaning is created. It is particularly difficult for most congenitally deafblind persons to acquire cultural language as laid out in traditional linguistics and in the traditional pedagogical strategies for linguistic development. As a point of departure it must be pointed out that the group of congenitally deafblind persons is extremely heterogeneous. Thus, this group includes also the deafblind persons who are able to develop communication through use of conventional language and who need far less radical environmental adjustments than other persons with congenital deafblindness. Most persons with congenital deafblindness will need radical adjustments, making it possible for them to negotiate shared signs and a shared communicative practice even though it may be very difficult for them to acquire conventional cultural language.

Contributions from clinical practice and persons with congenital deafblindness

A negotiated or co-created 'deafblind language' emerges from the deafblind person's bodily-emotional experiences of interaction with his surroundings and from the gestures that he thereafter can create spontaneously. The partner can perceive and eventually acknowledge these gestures as possible signs. When this happens, the deafblind person and the partner can negotiate towards shared signs and shared meaning in ongoing conversations (Nafstad & Vonen, 2000; Nafstad, Rødbroe, 1999; Daelman, Nafstad, Rødbroe, Souriau & Visser, 1999, 2004). Such potential signs will typically have the form of the deafblind person touching a particular place, as usually a place on his own body where the impression of a particular encounter with the world has set a bodily-emotional trace (BETS¹²) in his body and mind (Daelman, Nafstad, Rødbroe, Souriau & Visser, 2004; Vege, Frantzen & Nafstad a.o., 2004). A child's touching of a particular place on his own cheek for example, might be the touching of a place where there is a trace referring to the kiss his mother gave him earlier and/or usually gives him.

Therefore we can expect that the spontaneous utterances authored by persons with congenital deafblindness will emerge from the bodily-emotional traces (BETS) formed on the basis of the child's own attempt to make sense of or categorize the impressions he forms from his ongoing interaction with the world. The knowledge

¹² Bodily emotional expressions, which express thoughts and are (or are not) addressed to the communication partner

that meaning and communicative expressions are based on impressions the deafblind person has had during a bodily-emotional interaction with the world, can to some extent alleviate the partner's problems with low readability. The readability problem concerns here the challenges the partner is presented with when trying to imagine and on that basis discover and relate to bodily emotional gestures of the deafblind person as potentially meaningful signs. Knowledge about the characteristics of such experience-based bodily-emotional expressions may support the partner in discovering the spontaneous expressions of the deafblind person and in viewing these expressions as meaningful. The partner should therefore accept and expect that the gestures the deafblind person uses are bodily based and that they have a high meaning potential.

Creative embodied gestures are initially spontaneous from the part of the deafblind person, and are not originally always directed to the partner. The gestural utterances can be directed to the deafblind person himself as a kind of thinking gesture. It is only when the partner perceives and recognizes the gestures as signs, that the deafblind person can use the creative gestures as other-directed signs in a conversational context. A deafblind person may for example refer to a particular place on his own body where the impression of an event has left a trace. He may then be interpreted by his partner to be attempting to lead the partner's attention towards an event in his memory and/or aspects of such a memorized event. This way of thinking makes it easier to discover and attempt to understand the communicative utterances of the deafblind person, as his experiential perspective is foregrounded.

Additional contributions from theories about meaning-making

It seems useful to consult theories that emphasize that meaning is created on the basis of bodily and emotional experiences that the individual has through exchanges with physical as well as social environments. It is also relevant to look to semiotics which is concerned with how meaning is constructed, and which views all kinds of expressions as having potential meaning. Theory that describes how children create basic concepts from the events and rituals in which they participate in everyday life is also useful.

Embodiment theory

Embodiment theory is described by e.g. Mark Johnson (1987, 2007). This theory has directly inspired the development of knowledge within the field concerning how deafblind persons create basic symbolic expressions from the bodily experience of interaction, i.e. the creation of bodily emotional traces (BETs). One of the fundamental thoughts in embodiment theory is that meaning has embodied conceptual structure. The fundamental experiences the child has when he relates to the world are created by the bodily way he – and all others – are in the world. We live these experiences through the body primarily through the way we as bodies relate to the environment and move in patterned ways.

We move typically from one point along a route to a goal, for example, from one surface and in the direction upward, from a surface downward, within a container-space, out of one kind of container-space and into another container-space. We move straight ahead or in a curved manner. These patterned ways in which we typically move ourselves around in the world and the ways in which the world typically touches or leaves impressions on or in our bodies are repeated, and related fundamental cognitive schemas are created. These basic embodied cognitive image schemas pre-organize how we create meaning out of our experiences in the world.

Beyond the idea that bodily experiences have a schematic image structure, Johnson suggests that movements do not merely have a structure but are also experienced differently on the basis of several qualitative parameters. These parameters have to do with emotional dimensions of bodily experience. The emotional dimensions are the most fundamental in meaning construction. The schemas of bodily representational images suggest that we experience the emotional dimension of an impression basically as tension; that tension builds up, reaches a climax and ebbs away, and that this tension can be more or less powerful.

Example

Matilde is very fond of making bronze figures. It appears that she finds the activity and the bodily emotional impressions she receives from it exciting. She files the figures with a flat file and makes a spontaneous gesture – a shaking gesture for the activity. When, several months later, she is in the woods and gets an electric saw in her hands to saw firewood, she presents the shaking gesture to her partner. Matilde expresses that the impressions of these two bodily emotional experiences are similar to one another or belong to the same image schema.

We can imagine that it is not only the 'shakability'¹³ of the object which she experiences as similar but also the uplifting emotional tension she experiences when she is active in both activities.

(The example is from consultant services at the Center for Congenital Deafblindness and Hearing Loss in Aalborg).

An embodied dimension of understanding an object, such as its 'shakability' enables the deafblind person to notify similarities even if other dimensions differ. Embodied experiences within the same representational schema can therefore be experienced as different because the movements, for example, differ by containing varying degrees of tension and strength. An object's characteristic 'shakability' may be understood further through variation in qualitative dimensions such as the felt tension in the shaking movement and the strength it takes to shake it.

Cognitive theories of meaning-making

Flemming Ask Larsen (2003) has suggested a model with a basis in cognitive semiotics that can support professionals in understanding meaning construction while considering the access the deafblind person has to the world. Such knowledge can help partners discover and relate to the unusual forms of expression of the deafblind person. The model also encompasses how partners themselves can find forms of ex-

13 The experience of how different objects are shaken.

pression that the deafblind person has the opportunity to understand. The model can further help with the creation of learning environments that fit the deafblind person's way of being in the world and that get the partner to focus on those aspects of an experience to which the deafblind person has access. It is these aspects that can become a shared focus.

Ask Larsen's model (2003) suggests that there are four possible ways in which an encounter with the world will be able to leave physical and mental traces in the deafblind person:

- A. Inner state: Experienced inner state (feelings, hunger, pain, etc.)
- B. Movement: Experienced movements
- C. Sensing: Sense impressions (light, vibration, smell, taste, touch and air currents)
- D. Place: Experienced placement on own body or in the room/space

Cognitive and semiotic theories are mostly concerned with how people understand that which they experience at any time. Some of these theories claim that understanding occurs through our construction of mental representational images that one can postulate take the form of mental spaces (Fauconnier & Turner, 2002; Brandt & Brandt, 2005).

Ask Larsen (2003) has adapted the mental space model to fit analysis of difficult communication with persons with congenital deafblindness. This model, called *The 6-Space Model* can support professionals when they try to analyze how a partner can find possible meaning in an expression not immediately understandable and that the deafblind person presents in a conversation. On the basis of this model, it is easier to understand how the deafblind person creates meaning. This model supports professionals' struggle to understand how both we ourselves and deafblind persons try to create meaning at any given moment in whatever is happening. The model helps by enabling the formation of an appropriate interpretational suggestion. The model itself is applied in the analysis of video recordings. The use of *The 6-Space Model* in video analysis gives the participants a tool to discuss the process of meaning projection to utterances/signs that are difficult to understand.

The theory of mental representations of events – MER

Kathrine Nelson's theory (1985, 1999) describes how children understand and store their life experiences as mental representations of the social events in which they have participated. These representations are called 'mental event representation' (MER) by Nelson (1999). Nelson explains the concept in this way:

"MER represents a sequence of actions that take place within a bounded activity that is with a defined beginning and ending. The activity is situated in a particular time and place." (p.130)

The activities considered here are everyday routines and rituals that occur frequently, at particular times during the day and in particular places. The activity consists of different actions that take place in a particular sequence in such a way that several aspects make them recognizable for the child participating in the activity. As mentioned, these are daily routines such as eating together, being dressed, bathed, etc. This also concerns well-known rituals, such as for example, greeting and saying goodbye to one another. These activities are characterized by the fact that, not only are the sequences the same from episode to episode and therefore recognizable, but they also contain openings/slots that can be exchanged. The child eats – but that which the child eats can be varied. Who the child eats with can also be exchanged and even the chain of actions can vary. The most fundamental concepts the small child creates are, according to Nelson, concepts of such events. When the child and the adult are together in these events, communicative expressions are created as well as rules for how one is to relate to one another in a conversation. Shared routines also give parents the opportunity to understand their child's incomplete linguistic expressions because they can easily locate them in the context in which the expressions have emerged.

Nelson's theory is useful in relation to persons with congenital deafblindness. Building up routines and rituals is important for many reasons. It creates coherence and security in a world that deafblindness can easily make incoherent and chaotic. Therefore, routines and rituals have been, over many years, an important part of deafblind pedagogy (Van Dijk, 2015). When one introduces appropriate flexibility and change in routines and rituals, they create a good framework for:

- The co-creation of communicative expressions
- The development of conversational themes
- Proto-conversations (see chapter 4B about 'conversations')
- Acquisition of conversational rules.

Routines and rituals give the opportunity to communicate with deafblind persons about the special events that necessarily arise within a particular routine or to speak about aspects of the routine that lead the deafblind person to think about a similar event. It is precisely these conversations about such special or associated events that can engage the deafblind person and that have the potential to develop both his subjectivity (own understanding of the world) and his agency in communication.

Because of the different ways in which deafblind persons are in the world, the mental event representations (MER) they create are not the same as those of the partner. The partner must therefore attempt to experience the event from a perspective as close as possible to that of the deafblind person. The theory of MER claims that fundamental mental representations are of wholes. This implies that the expressions created on the basis of connected events can only be understood when one knows the context in which they were created. Conversation partners should therefore know about the life-experiences of the deafblind person when they attempt to understand what he thinks about or means.

Summary comments about theories of meaning-making

The theories of how bodily emotional experiences are categorized and stored provide guidelines for how seeing/hearing partners can try to approach the deafblind person's perspective of the world. In this way, partners experience to get support to more easily expect, perceive and understand the possible meaning that can be accorded the spontaneous gestures of the deafblind person. This in its turn gives the deafblind person's partners the opportunity to negotiate shared signs and shared meaning.

Concluding remarks about the theory chapter

The fact that the spontaneous expressions of the deafblind person can be difficult to understand for seeing/hearing partners and vice versa reveals a barrier to communicative development. This is shown in the research of e.g. Daelman (2003) and Hart (2010). Both researchers indicate that the problem of readability for partners of deafblind persons hinders further communicative development and the co-creation of a shared symbolic communicative practice. Further, both researchers find that the readability problem is less serious with regard to the immediate emotional expressions of deafblind persons than it is for symbolic expressions. This can to some extent explain why it is easier to develop a basic interaction of high quality with persons with congenital deafblindness, and why it is much harder to develop symbolic communication. The partners of deafblind persons face the most serious readability problems in improvised conversations about something that has happened outside the here-and-now situation.

In chapter 2 we have focused on describing contributions from those theories that best match problems with low readability in relation to congenital deafblindness. These contributions create the theoretical framework of *The Developmental Profile*. In chapter 3 we will be more concrete when we describe some of the most important concepts from the theories mentioned in chapter 2.

The conceptual framework of the analytical tool

The central concepts that build the model's theoretical framework are tools in *The Developmental Profile*. The conceptual tools are used to analyze video-taped interaction sequences with the purpose of planning and evaluating communication interventions. The thematic focus in analysis and intervention is the fundamental processes involved in the development of communicative relations and the agency of the communication partners. A knowledge-based professional practice is accordingly understood here as practice that is grounded in certain theoretical principles. The theoretical principles that are considered relevant are those that clarify fundamental processes that are presumed to apply generally across the whole spectrum of human conditions. If the principles are useful for practice they are considered relevant. If it appears that a principle does not function in practice, then there are grounds to reject this principle and look for another. In this way, pedagogical practice is quality controlled.

In this chapter we will address the concepts in *The Developmental Profile* that are inspired by dialogical theory. The concepts are translated into guidelines about social-relational dimensions in pedagogical practice. Further, we will point out the consequences of the guidelines for communicative development.

The various roles in planned communication intervention

Planned communication intervention builds on micro-analysis of the manner in which partners of a deafblind person relate to him. The participants in analytic sessions are the different partners of the deafblind person together with one or more consultants with expert knowledge of congenital deafblindness and communication development. Such analytic sessions have a complex relational structure

as several layers of relationship are nested into each other and are played out at the same time. The consultant's overall role is to support, scaffold and strengthen the relation that is being co-created between the deafblind person and his partner. The relation between consultant and partner therefore is an extra layer surrounding the central relation between the partner and the deafblind person. The term partner is used here to refer to the role of communication partner in relation to the deafblind person. In most cases, many different persons have this partner role. The partners of a deafblind person are family members, friends and professionals from all environments in which the deafblind person lives. Planned communication intervention requires in practice co-operative analytical efforts between a consultant and a network of actual partners on a continuous bases.

When one applies *The Developmental Profile* as an analytic tool, the thematic focus is focused on the concrete ways in which the partner relates to the deafblind person. The thematic focus applies in video analysis and in subsequent acts of intervention. The main role for the supporting consultant is that of being a partner for the partner. The consultant is therefore a person in dialogue with the partner about her (the partner) being in dialogue with the person with deafblindness. A consultant should be able to tune into the perspective and role of the partner in such a way that the partner experiences collaborative support in discovering, understanding and relating to the spontaneous expressions of the deafblind person, and to the ways in which he relates spontaneously to other people and the world. This support primarily addresses the problem of low readability.

The partner can best learn to cope with the problem of low readability when she and the guiding consultant study video-taped sequences. These sequences focus on how her own engagement influences the development of the relation between the deafblind person and herself within a particular sequence. The partner's awareness of the influence of her own contribution increases when she can see how her own contribution to the interaction is both influenced by the initiative of the deafblind person and also influences this contribution consecutively. Such guided analysis can increase the partner's knowledge about how she in the role of partner is part of the transactional processes that are fundamental in the emotional, social, cognitive and communicative development of the deafblind person.

The organization of the analytic sessions that are fundamental to planned communication intervention, including the different roles played by the participants, are explained more concretely and in greater detail in chapter 5. We will describe there the characteristic topics in the guided analytical sessions, such as what we are looking for, how we move our analytical gaze, what areas of intervention we prioritize and how partners should engage in the relation. The chapter also discusses the role consultants play when monitoring such sessions.

How the partner perceives and relates to the deafblind person is crucial. That is why we begin our description of the conceptual framework with a thorough review of the partner perspectives that the partner can adopt.

Partner perspectives

Rommetveit (2003) calls the different perspectives a researcher in psychology can take in relation to his topic first-person, second-person and third-person perspectives. We have been inspired by this way of thinking and transferred it to perspectives of the professional partner role. In addition, we have chosen to use the terms I – YOU and IT¹⁴ perspectives because these terms clarify how the partner perceives her own relation to the deafblind person. Thus the term partner perspective refers here to the different perspectives a partner can adopt when she relates to a deafblind person in face-to-face situations. In such situations two partners relate directly to one another and to each other's expressions. In face-to-face relations with deafblind persons, it is important that the partners do not expect a particular culture-similar expressive form. Face-to-face relations can have unusual outer forms, but still fulfill the same basic relational function. This means that the fundamental reciprocity dimension in a face-to-face relation can, for example, be played out back-to-back, foot-to-foot or hand-to-hand. The important issue is that the relation is characterized by both parties being oriented towards one another no matter the appearance of the outer form.

14 We apply the **I** perspective for the first-person perspective, the **YOU** perspective for the second-person perspective and the **IT** perspective for the third person perspective.

In this passage we will attempt to describe why it is relevant for partners to be conscious of the different perspectives they can take, how these perspectives are played out and the consequences the different perspectives may have for the quality of an immediate communicative relation and for the more long-term development of person-hood.

In order to be able to analyze and discuss the different ways a partner can relate to the deafblind person in a here-and-now situation, we will begin with the three previously mentioned perspectives the partner role can take in relation to the deafblind person. In the role of partner one can view the deafblind person (the Other) in the role of IT, YOU or I.

We will in the following characterize the relational characteristics of each perspective and point to the consequences of the different perspectives for the deafblind person's developmental conditions.

The IT perspective

When the partner places herself outside her own partner role and takes an emotionally disengaged perspective in relation to the deafblind person, one can say that the partner has taken an IT perspective. In this perspective, the deafblind person no longer inhabits the role of YOU for the partner's I. This means that the partner does not give the deafblind person the role of a person with his own intentions and feelings. The situation as experienced (the context) by the other person, i.e. the deafblind person, is not relevant for the partner. The partner may accordingly take an outsider observer role in which the directly observable behavior is foregrounded and has importance while the deafblind person as a socially oriented subject is back-grounded. In an IT perspective, the partner has removed herself from the immediate psychological context in which the deafblind person is relating. When the partner moves her attention away from imagining how the deafblind person experiences the situation, the meaning of what the person is doing disappears for her. The partner will as a consequence lose access to the cues that otherwise may be found in the shared here-and-now relational context. These cues concern in particular the detection of what it is that engages the deafblind person's attention in a certain moment; what the deafblind person is focusing on, is concerned with or means.

The I perspective

A partner who takes the I perspective relates to the deafblind person by acting on behalf of him and speaking for him by over-taking his voice. In such a perspective, the partner acts as a kind of second I for the deafblind person. The partner then becomes a speaking channel on behalf of the deafblind person and not a YOU for his I. When the partner takes an I perspective, there is the risk that the deafblind person will not develop as a communicative being. The deafblind person may not develop his own voice and his own communicative agency. In other words, the partner's voice will dominate the voice of the deafblind person. The consequence for the deafblind person could be blocked development of Self as someone with his own perspective and his own voice, which in turn hinders engagement in dialogue. The development of all fundamental dimensions of agency – social, emotional, and cognitive – may as a consequence be negatively affected.

In the I perspective the deafblind person and the partner become unclear for one another as subjects with their own voices and perspectives on what they each experience. The deafblind person risks becoming 'over-understood'. The contrasting possibility is that he develops his subjectivity through his understanding that others recognize him for having a voice of his own and his own opinions. The partner's understanding from an I perspective is immediate and emotional.

In practice with deafblind persons such an unreflected partner perspective is characterized by the partner talking one-sidedly from the presumed perspective of the person with deafblindness. The deafblind person's perspective, i.e. his subjectivity, is therefore not articulated. Neither is the partner's own perspective. It is therefore impossible for the deafblind person to experience herself in the role of the Other, as someone who herself experiences something subjectively. In an I-perspective, the deafblind person is hindered in positioning himself in relation to his partner in the role of a person who has thoughts, feelings and opinions that may differ more or less from that of others.

The YOU perspective

Normally, a partner who is also a mother will relate in what we call a YOU perspective to her child. The mother will perceive the child's expressions as an utterance directed to her with an intention to speak about a particular topic. In a YOU perspective, the mother relates in this way with a clear expectation that her child will direct

an utterance to her about something that is meaningful for the child here-and-now. Only in the next turn does this attitude lead her eventually to try to understand more exactly what the child is speaking about.

On the basis of the ordinary circumstance sketched above, we will point to what it means to understand a child's initiative as an utterance. We will describe some basic preconditions that must be present in order for a partner to take an Other-directed YOU perspective in a relation with a deafblind person.

- The partner has a fundamental trust in – or positive expectation that the deafblind person is a communicative being, i.e. a person with a mind that is fundamentally socially directed; i.e. directed towards a partner/an Other.
- The partner perceives concrete expressions as utterances. When we use the term utterance we mean that the expression is directed to the partner, that the deafblind person has an intention to share his interest in something with the partner, and that the expression refers to something or other that is relevant to him in here-and-now contexts.
- The partner then avoids immediate engagement in over-interpretation of the content of the utterance, and engages instead in negotiation towards a third element of joint attention, eventually a shared topic and eventually co-authored meaning. The topic of such negotiations can be the utterance itself, which means that a result may be a co-authored utterance with degrees of co-created shared meaning.

When the mother in this way takes and maintains a YOU perspective, she implicitly communicates the following to her child: "I have an intention to perceive YOU as one who is capable of addressing ME. I perceive YOU as one who is capable of uttering something about something that is relevant for YOU right now".

When the mother takes the other-directed YOU perspective in relation to her infant, she gives the child a communicative intentionality and agency that the child still has not developed completely. The mother lifts her child's communicative agency because she relates to the child as someone in the role of a communicative person. When the mother accords the child intentional communicative agency before the

child possesses it, the result is that he may develop this agency, as the child may perceive the role which the mother perceives him to have. To perceive the many different roles both partner can take in the face-to-face relations creates the foundation for the development of all dimensions of the child's agency.

Some characteristics of the YOU perspective

We will now develop the notion of the the YOU perspective in relation to persons with congenital deafblindness. Awareness of the characteristics of the YOU perspective is important for professionals who aim to support and supervise partners of persons with congenital deafblindness. For the partner, the YOU perspective contains different YOU-related attitudes. The attitudes outlined below are to be understood such that the attitude described first is the prerequisite for the attitude that follows, and so on:

1. The partner should engage herself in such a way that she clearly shows the deafblind person that she fundamentally trusts him to be a communicative subject. The partner should relate to the deafblind person as a YOU for her I. In practice this implies that the partner sustains her own attitude of positively expectant attention to the deafblind person. The ability to sustained other-directed attention to the deafblind person follows from her trust that he will contribute to the dialogue.
2. When the partner views the deafblind person as an other-directed YOU, she will expect that he will address her with the intention to share a comment on something in the world with her. The YOU perspective involves the partner being socially available to the deafblind person.

Being available as a YOU for the other person's I is difficult when the Other has deafblindness. Social availability of the partner for deafblind persons means primarily that the partner is positioned in bodily proximity or within reach. Beyond this, it means that the partner expresses in a bodily/tactile manner that can be perceived by her deafblind partner that she is listening and ready to wait for his utterance and to answer. We may presume that a deafblind person experiences his partner as socially available if he addresses her spontaneously. The experience that one's partner is available for oneself is crucial in the development of all fundamental dimensions of agency. The partner's emotional availability makes it

possible for the deafblind person to develop his Self in the reciprocal role of one who gives and receives affection, in other words develop his emotional agency. The partner's social availability promotes the social agency of the deafblind person, and the partner's availability as a secure base promotes the exploratory and thereby cognitive agency of the deafblind person.

Communicative availability is especially demanding for the partner. In addition to considering how one can make oneself available to the deafblind person, it can also be difficult to perceive that the deafblind person has addressed the partner and that he has the intention to say something. The reason is that the deafblind person's bodily way of addressing others can be difficult to recognize and therefore easily overlooked. The same goes for his initiatives to share his interest in a particular third element, something that can become a topic in a conversation.

3. Given that the partner trusts that the deafblind person can make contact in order to say something about how he relates to something, chances are better that the partner will perceive the intention of him to express himself on a possible topic. This perception has to be acted out so that the partner shows the deafblind person that she views him as a YOU for her own I; that she sees him as a person who has something on his mind and is one she feels is worth listening to. When the partner takes an engaged listening attitude in relation to the deafblind person, she will at the same time maintain him in the role of a communicative person. If the partner becomes too focused on decoding the meaning in what the deafblind person is saying it can be difficult to maintain the conversation. In practice with deafblind persons it can be that conversations of high dialogical quality and that last a long time are characterized by a high level of tension. In such conversations, the partners maintain the collaborative effort to establish a shared topic of conversation. This is achieved sometimes – but not always.

This means that the partner must show that she sees that the deafblind person has something on his mind and is worth listening to. In the same way, when he experiences that the contribution of the partner is interesting, he may experience himself as an I for the partner's YOU.

Even though the partner finds that the deafblind person has addressed her with the intention of sharing something with her, it is not certain that the deafblind person is aware that the partner has perceived him as a YOU. This is primarily a consequence of the lack of or reduced distal senses. It is therefore crucial that the partner of the deafblind person shows in a bodily/tactile manner that she has perceived that he intends to say something to her. The partner does this by providing bodily/tactile confirmation of his address and his expression. With such a confirmation, the partner is expressing that she has perceived his communicative intention and is interested in listening – and trying to understand.

When the partner intends to say something to the deafblind person, it is further crucial that she ensures that he has actually perceived her address as expression of her communicative intention.

In tactile conversations, ongoing changes in hand position can show when the deafblind person takes the role of one who listens (the hands lie over the hands of the speaker) or the role of one who speaks (the hands are under the listener's hands) or one who thinks (hands are temporarily out of conversational touch).

4. After having confirmed the communicative initiative of the deafblind person the partner tries to understand what his utterance is indicating that he is thinking about. She does this by relating to him as a YOU in a relation in which the parties create the meaning of an utterance together in a type of co-authorship or negotiation. As shared meaning cannot be pre-determined, both partners together need to engage in co-authoring a shared utterance. A co-authored utterance contains as a minimum the deafblind person's original utterance; i.e. his initiative, the partner's perception of this initiative, and the deafblind person's perception of the partner's perception of his initiative (Bjerkman, 1996). Social meaning construction proceeds in this type of triadic and co-creative dialogical process. Both parties are therefore co-authors of shared utterances and of their meaning.

The decisive aspect of this type of meaning constructing process is the possibility for the partners to expand on each others' contributions so that the contributions of both together form an utterance. In concrete terms, this means that the partner

in her next contribution has included aspects of the contribution that the deafblind person has just made. In the same way, the next contribution of the deafblind person is enriched by the partner's contribution (alterity).

Sliding between the perspectives

It is difficult for partners of deafblind persons to establish and maintain a stable YOU perspective. If the YOU perspective is lacking, or is too weak and fragmentary, this can have serious negative transactional effects. The immediate effect will be that the directedness of the deafblind person towards the partner will decline and eventually disappear. Beyond this, the content of the utterance will have a negative emotional charge. We may notice a change in the attitude of the deafblind person from open and vital enjoyment to retracted and withdrawn sadness.

Serious negative transactional effects have been demonstrated by the American researcher on infancy Edward Tronick¹⁵ in experiments with seeing/hearing children and their mothers. After the mother and child have had a reciprocal and emotional interaction, the mother is instructed to not react to her child's initiatives but rather hold a sort of 'still face'. In such an otherwise well-functioning mother/child interaction, an enormous impression is made by how quickly the child retreats into himself and how he expresses extreme emotional discomfort and frustration. Further, he loses control over his own body, expressed by beginning to sway and using his arms to hold his body 'in place'. Experiments on normal interaction show the major negative effect it has on a child to experience that he is not perceived - seen, heard and acknowledged.

If the partner has difficulty taking and maintaining a YOU perspective because of the problems of readability, she will slide more easily between several perspectives. If this occurs, the deafblind person will experience inconsistency. This has the effect of making the Other appear unpredictable in terms of being someone who perceives one's own initiatives. In this way, fundamental trust in one another is threatened. This trust is built up by two partners in the particular relations they have with one another.

15 Video on You Tube (Still Face Experiment: Dr. Edward Tronick).

Sliding from a YOU to an IT perspective

When inconsistency becomes so great that it becomes a problem this may be a consequence of the partner frequently taking an IT perspective. As we have described earlier, in such a perspective, the partner treats the deafblind person and therefore her own role in the relation in a disengaged manner – as IT. In such cases the partner relation becomes rigid, asymmetric and deviant. Relations that do not give the deafblind person the experience of directing himself towards the Other in different roles and from different perspectives will hinder the development of his social, emotional and communicative agency. As mentioned earlier, in an IT perspective, the partner positions herself outside the relation to the deafblind person. In this way she ceases to perceive the expressions of the deafblind person as being directed to her and as being about something. The partner instead will either overlook the expressions or view them as behavior without communicative and potentially symbolic meaning. That is to say that the partner does not see that the expressions are directed to her - or that the deafblind person has the intention to share something about something he is thinking about with these expressions.

The reason why the partner may suddenly slide away from a YOU perspective and positions herself outside the relation is often the uncertainty that is present in being in a situation over which one does not have control. There is a danger for partners of deafblind persons to have this experience of powerlessness, when they enter into the unknown and strange landscape in which the deafblind person lives. Such a situation often arises because the partner focuses on decoding the message instead of focusing on maintaining the other-directed dialogical togetherness that the interaction or conversation is played out within.

It is common to react inappropriately when one is uncertain. Such uncertainty may imply that the partner takes control and decides how the deafblind person should be understood here-and-now. Precisely because this is an understandable reaction, it is important for the partners of deafblind persons to be conscious of when they slide away from the YOU perspective. With such an understanding, a partner can herself attempt to turn back to a YOU – I relation with her deafblind partner.

The problem with sliding between perspectives appears greater when the person with deafblindness actually shows his communicative intention. He does this by clearly addressing the partner and leading her attention to his utterance, indicating that he intends to share something about which he is thinking. The problem is less apparent during phases in which this ability is not completely developed. As previously mentioned, the partner does not tend to indicate the same frustrations or the same uncertainty in dyadic interaction as in triadic communicative sequences where the third element consists of symbolic use of bodily/tactile expressions that often have low immediate readability for the partner. In sum, it is easier for the partner to hold a YOU perspective in social-emotional interaction than in symbolic communication.

Sliding from a YOU to an I perspective

Beyond sliding from a YOU perspective to an IT perspective, the partner can also come to take on something similar to a symbiotic relation. In such a relation, the partner does not distinguish between the deafblind person as YOU and themselves as I. In this way, she does not relate to the need to perceive the expressions of the deafblind person as socially directed utterances with content. As mentioned, in this perspective, the partner overtakes the voice of the deafblind person in such a way that he does not need to express himself. The partner expresses that she understands the deafblind person's utterance but she cannot explain to the deafblind person or to others what cues she is using. This type of partner perspective in which only one particular partner feels that she understands the deafblind person can be prevented through practicing video-analysis in a network meeting consisting of all the partners of the deafblind person. Cooperation in such networks can support the partners in maintaining an engaged and directed YOU perspective in relation to the deafblind person and thereby prevent sliding between the perspectives.

The three partner perspectives and interpretation

We will now expand on why and how the notions of the I – YOU and IT perspectives are relevant in relation to the development of symbolic communication. More specifically, this concerns the role the partner plays in contributing to the transformation of the spontaneous gestures of the deafblind person into symbolic signs. Such transformation requires in the first step that the partner perceives the gestural expressions as an utterance. In other words, the partner perceives the spontaneous gestures as being directed to her because the deafblind person has - by address-

ing her and leading her attention to his gesturing - expressed an intention to share something about something that he has experienced with her. When the partner behaves in this way, she takes a YOU perspective.

Let us take an example recognizable to many who have been in a partner role with a person with deafblindness. In this example we will show what the partner does when she slides from an interpretive YOU perspective to an I and IT perspective respectively, and what consequences this has:

“A person with deafblindness in conversation with a partner presents a spontaneous gesture that the partner does not immediately understand”.

Sliding from a YOU to an I perspective

From an I perspective, the partner will immediately attempt to decode the meaning she believes that deafblind person may have tried to code in a somewhat odd manner, viewed from a cultural perspective. In order to give the utterance meaning, the partner in this case will apply:

- her own knowledge about the deafblind person
- knowledge about the concrete here-and-now situation
- her own cultural linguistic world perspective

Thereafter she will construct a whole statement that expresses the thought she herself has about what the deafblind person is saying. She constructs this statement without giving the deafblind person the opportunity to contribute with additional cues about what he really means. The cues that the deafblind person might eventually have contributed may be cues that exceed the cultural similarity that lies in the form of the gesture. The cues for what the deafblind person's gesture might mean therefore exceed a particular sign from visual sign language or a gesture from the culture.

One could, for example imagine that the partner recognizes the gestural expression of the deafblind person as a poor version of the sign EAT. The partner will thereafter recognize the gesture as similar to the conventional EAT sign and herself add a reference to an everyday eating scenario. She does this without checking if it is relevant to the experience the deafblind person may have of the situation here-and-now. Such acts of poorly cued over-interpretation hinder the development of symbolic communication

in which the partners both co-create shared utterances and shared meaning. The communicative development may become locked in a rigid practice because the partner primarily enters into conversations that merely concern something within the outer characteristics of the here-and-now situation or within known routines and everyday frames. The communication becomes thereby restricted to being about scripts in which one continually speaks about what is happening in a particular order. One consequence can be that the deafblind person never or seldom participates in conversations in which the parties create shared stories or narratives with one another. The tendency is that such rigid practice involves communication that build on imperative exchanges concerning activities. Such exchanges are primarily concerned with directing oneself to the partner in order for her to act in such a way that the deafblind person achieves a particular end. This hinders exchanges of declarative communication that are concerned with the development of comments related to thoughts and creation of stories on the basis of shared experiences. A one-sided focus on imperative exchanges is therefore a barrier to development of a declarative communicative practice. A declarative practice involves the partners being interested in arriving at a shared topic that the conversation can be about. In declarative exchanges, the partners each contribute their own comments or associations about how life is experienced from their own perspective on the shared topic.

A declarative communicative practice is connected to the creation of conversations and relations in which both parties are engaged in co-creating meaning, making their respective understanding known to the Other and gaining better knowledge about oneself, other persons and the world. An imperative communicative practice is connected with using language in such a way that it becomes easier to navigate the everyday demands of action and interaction.

Both communication forms are important, but in communication with persons with congenital deafblindness, it is especially demanding for partners to support the development of declarative communication.

Sliding from a YOU to an IT perspective

The notion of the IT perspective may apply most clearly in those situations in which partners have difficulties with understanding the spontaneous expressions of the deafblind person. The partner may give up the face-to-face relation as the space in which meaning is co-created and where language is co-constructed. In giving up the

partner role she moves to an outsider perspective. From an outsider's perspective she may plan that particular expressions from the deafblind person are to be understood by everyone to have the same meaning at any time in any situation. In doing so, the partner relation is dissolved. Sometimes the partner also plans the way in which the deafblind person is to understand the meaning of, for example, objects of reference, pictures, drawings or other constructed symbol systems. In such cases, the partner has beforehand restricted communication to be about what these constructed symbol systems mean – and the risk is that all communication in the deafblind person's life is restricted accordingly. Augmentative and alternative communication systems can of course be used in a dialogical way in which the meaning in each particular case must relate to the deafblind person's experience of the here-and-now situation and be co-created by both parties. When fixed meanings are planned ahead, the systems are used detached from the person using them, in a way that is not dialogical because the use lies outside the co-creative meaning-making processes in the face-to-face relation. The use of such systems may then become rigid, monological and apply only in imperative communication.

The IT perspective can also come to restrict communicative development if the surroundings decide only to answer cultural expressions in a particular way. The partner can decide that a gesture that is similar to the cultural COFFEE always means: "I want coffee now." When one as a partner relates from an IT perspective, one moves out of the partner role and also out of the context that gives meaning to the utterance here-and-now. In this way the expression is no longer perceived as an other-directed utterance, but rather as a result oriented act.

When the partner perceives the expressions of the deafblind person from within the context of the face-to-face relation, the context makes her perceive the expression as an utterance. An utterance is directed to the Other with an intention to say something about something, which one is concerned with in one's world. When the partner moves out of the face-to-face context she also moves out of the partner role, she takes an outsider observer role. It is the notion of a role outside the face-to-face partner role that lies in the outsider observer role that characterizes the IT perspective. The partner and the deafblind person are no longer in an overlapping social context and they are no longer in a face-to-face relation. In the IT perspective, they cannot therefore communicate with one another or enter into a dialogue with one another.

Concluding comments about partner perspectives

As a conclusion to the description of three partner perspectives we will briefly specify the differences between the perspectives. When a partner takes a YOU perspective, this perspective contains both the Other (the person with deafblindness) and the Self (the partner). The YOU perspective, in other words, is understood as a multiple perspective. A multiple perspective must necessarily be dynamic (fluid) because it is dependent on the two partners shifting perspectives and changing roles.

When the partner takes an I or IT perspective both these perspectives are 'one-voiced' or monological. The YOU and I relation does not exist any longer because the partner either takes over the voice of the deafblind person or positions herself completely outside the relation in order to control the interaction.

Context versus situation

The term context is central in dialogical theory and is therefore already described several times in this chapter. It is nevertheless important to clarify how we understand the terms situation and context and how they differ. Our understanding is inspired by the developmental psychologist Stephen von Tetzchner¹⁶

We can understand **situation** in the following way:

A concrete everyday activity that is set to take place at a particular place and often within a particular time frame. This can for example be a wardrobe situation, an eating situation or a bathing situation. The term situation does not say anything about how the individual experiences it – and nothing about how the subject engages in it and experiences it.

We understand **context** in the following way:

The term context concerns how the individual person experiences the situation here-and-now. When two persons together have experienced a particular situation or an event, it is essential that what they both experience individually contains some overlapping elements. This is necessary in order for them to be able to converse

16 This point is expanding on personal communication with Stephen von Tetzchner.

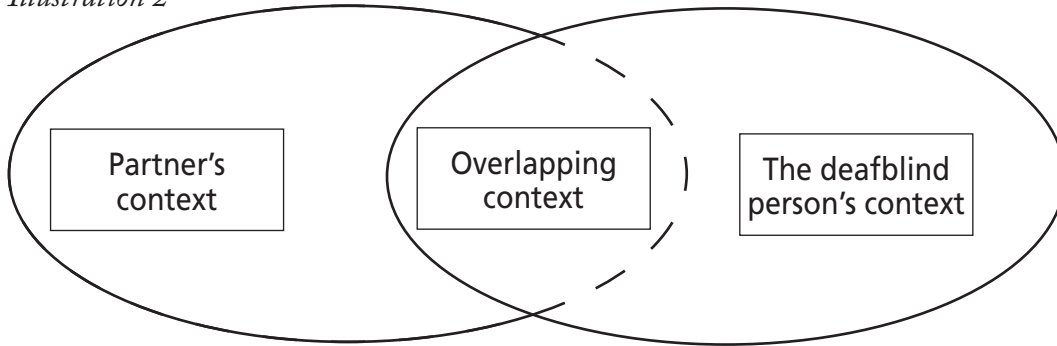
about the situation later on. If a partner and a deafblind person are able to talk together about a shared experience, the experiences and the understanding the two people have of the situation must contain sharable elements. Their respective contexts must overlap one another to a sufficient extent. This is not easy when one person is seeing/hearing and the other deafblind. It is therefore the partner's task in the here-and-now situation to ensure that she inhabits an overlapping context to as great an extent as possible. This is only possible when and if the partner consciously attempts to imagine the world from the perspective of the deafblind person – that is, also tries to be aware of his bodily/tactile co-presence in the world (cf. e.g., Vege, 2009).

Context has as mentioned to do with the way an individual experiences, for example how he/she values a situation or an event. This subjective experiential dimension is lost to communication if the partner reduces her understanding of the situation to a script with particular actions in a particular order – almost as in a script for a theatrical play – irrespective of variations in how the event may be experienced by the deafblind person in a particular here-and-now situation. A script-based understanding that is not taking the experiencing and sense-making subject into account will restrict and fix the meaning the utterances of the deafblind person can have. The partner may not then attend to gestural cues that indicate ongoing sense-making activity in her own understanding of the utterances of her deafblind partner. The important components of the context consist in other words of elements that require a partner whose attention is not directed towards the steps of action in the event itself, but towards the elements she observes as catching the interest of her deafblind partner in a particular here-and-now situation.

Notifying gestural cues that indicate how the deafblind person contextualizes the situation involves the partner both trying to understand how the utterance here-and-now is meaningful and how and to what it refers in the here-and-now situation (see illustration 2 page 68).

Overlapping context

Illustration 2



The illustration shows the partner's context, the deafblind person's context and how much of these contexts in this particular example overlap one another and can therefore be shared. What can become elements of shared attention and further a shared topic in a conversation is constrained to overlapping contextual elements.

Scenarios

In order to gain a better understanding of how one can communicate with a deaf-blind person about what he is thinking about, we need to understand more how human beings continually attempt to make sense of and create meaning about what they are experiencing. Therefore, we will supplement the description of context and situation with a description of scenarios.

A scenario is used in everyday language to describe a potential situation, that is to say, a situation that one can imagine. Here we use the term scenario to describe thinking, categorizing or understanding a type of situation on the basis of the events in which it can play out. A scenario is like a theatrical stage set. The set consists of certain props and particular roles that limit the actions and dramas the play can be about. In the same scene, there can be several variations of the same drama or the same story. This is dependent on how the actors playing the main and supporting parts relate to one another.

The concept of scenario is here used to specify the processes of meaning making. The same element from the same situation can be part of two different scenarios for two different people, as illustrated in the example below:

Example

Peter – a boy with congenital deafblindness – arrives for a visit at a school in a large city. As he steps over the doorstep and enters the building, he presents the sign EAT directed to himself. The consultant who greets him perceives immediately that he is hungry. She does this because she has put the EAT sign into a scenario in which there is a hungry little boy sitting at a table in a kitchen being served food, eating food and being fed and satisfied. On this basis, she leads Peter to the kitchen, places him at the table and puts a dish in front of him. Peter immediately pushes the dish away. It is not the scenario he thought about. The EAT sign must be able to be involved in other scenarios. Peter's mother remarks that she noticed that the EAT sign was performed as Peter walked over the threshold. The mother says further that Peter is currently very interested in different types of buildings and that he sorts them in relation to the types of events that can be experienced in them. Peter sorts the buildings in relation to different types of scenarios. Peter's favorite building is the café. Such buildings are found, as a rule, in built-up areas or in cities. For Peter, cafés as scenarios do not merely contain the opportunity for eating but also opportunities for eating something especially good, for example a slice of cake. Eating something special is conducted in a particular way: One walks to the counter, 'sees' what is on offer, pays, takes the food back to the table, sits in the chair and eats. In addition, the café scenario contains something special for Peter, namely the sense of many people being present in one place. This concerns a sense of many people walking past and who create a living, vibrating airspace that Peter notices.

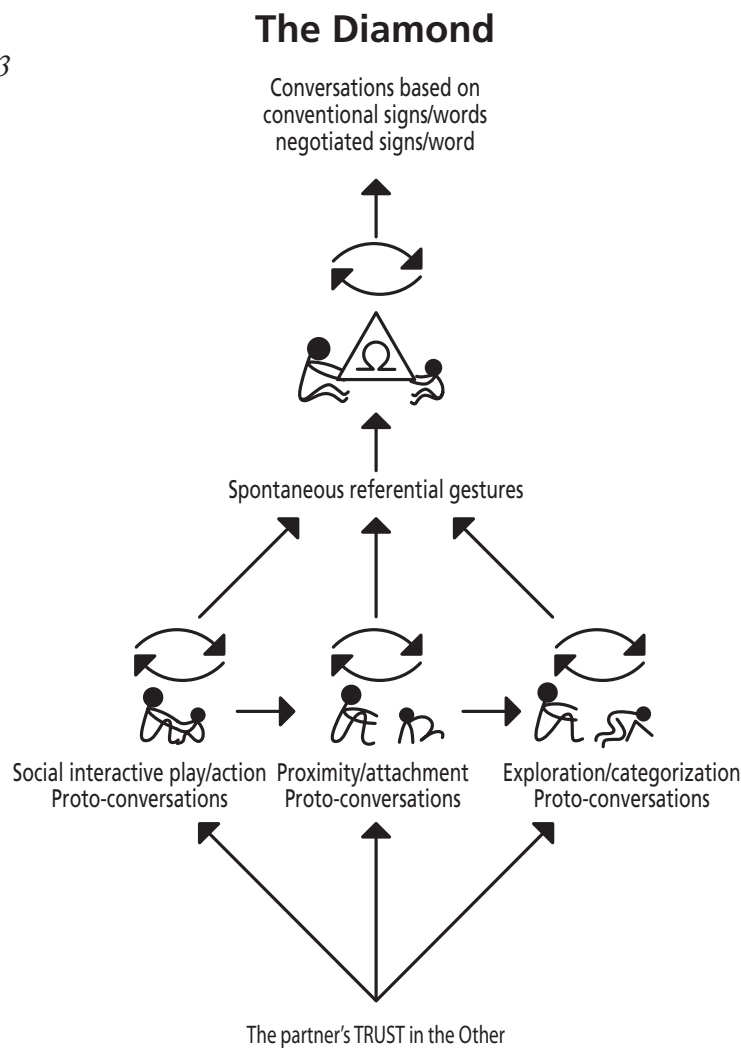
(The example is taken from consultant services at Skådalen Resource Center in Oslo).

The EAT sign is involved in different scenarios for Peter and the consultant. Therefore, they have two different ways of perceiving and understanding (contextualizing) the same situation. In order to arrive at what it can be that is Peter's context, it is necessary for the consultant to consider that his here-and-now concern (project) could be to make sense of an immediate impression of something he explores, and in addition to know enough about his life-world that she can think about what type of scenario Peter is concerned with or thinking about just now. When a partner notices a spontaneous sign from the deafblind person, it becomes possible to tell the deafblind person that one has noticed him signing and believes he is thinking about something

having to do with that sign. It may be possible for the partner to continue negotiating what the deafblind person is thinking about if she assesses which type of scenario he can be concerned with here-and-now. Such negotiating communicative practice enables the partners to avoid merely speaking about what the deafblind person wants to have or do.

Roles and perspectives in the four environmental relations

Illustration 3



The sub-model of *The Developmental Profile* called *The Diamond* illustrates the four fundamental ways in which humans relate to the world – also called the four environmental relations. These four fundamental relations are all viewed as belonging to the domain of face-to-face relations. Each of the environmental relations consists of characteristic roles and perspectives taken in relation to other people and the world. Each relation contributes to organizing developmental processes so that they become adaptive for humans.

Illustration 4



The first environmental relation illustrated in the model is emotionally engaging 'social interactive play/action', in other words playing or acting together only for the fun of it. In this relation, both participants take the role of a playmate or collaborator for the other. The interaction partners are 'two of a kind' who shift between leading and following one another. This phenomenon can be observed when seeing/hearing toddlers are together. They run after one another for example, and shift between being in the roles of the leader and follower, which serves to co-create variations and sustain the social game. The playful relation has a dynamic structure that organizes the children's experience. The game enables the toddlers to practice complementary roles, reciprocation and sympathy in a concrete and bodily manner. Complementarity is learned as a leader can only be a leader if there are followers and vice versa. The shift between roles of leader and follower enables experience of reciprocation, i.e. of reciprocating the role of the Other, which in turn enables sympathy. The partners are each co-experiencing concern with the Other and with what the Other does in relation to what Self does.

With regard to agency (power to act) the developmental result of participating in emotionally engaging 'social interactive play/action' relation can be:

- Agency in relation to being a social being
- Agency in relation to both taking other-directed initiatives and following up on the Other's initiatives directed at Self
- Agency in relation to consciousness of the fact that Self's bodily-emotional expressions can be perceived and recognized by the Other and vice versa
- Agency in relation to recognizing others as Self and vice versa, i.e. identity

Illustration 5



The next relation in *The Diamond* is the other-directed playful affectionate relation. The partners are playing with their mutually other-directed affectionate relation. Both are playing the roles of receiving and giving signs of affection, playing with affect attunement and reciprocation, and both are playing with sustaining sensitive attentiveness to the Other's attentiveness to Self over increasing distance and time.

With regard to agency, the developmental result of participating in 'proximity/attachment' relations can be:

- Agency in relation to building and maintaining fundamental trust (basic trust) in an Other which eventually leads to daring to have trust in strangers.

The example with Elodie and her mother on page 95 describes the category basic trust.

Example

Serge, who has residual vision, enters into an improvised social interactive game with Anne – a stranger. Knowing that Serge enjoys clapping hands, Anne presents herself to him as another clapper and signals through her bodily attitude that she invites him to clap with her. A trusted care-person stands within Serge's field of vision. Her presence makes Serge dare to have enough trust in the stranger so that they can interact. Serge practices his social-emotional agency by following up the stranger's invitation to improvise a shared clapping game, and then he leads the game by demonstrating to the stranger increasingly more intricate clapping patterns. Then he attends to the stranger to check if she is following up on his initiatives, which he in turn comments upon by smiling. The initiatives from both partners bring the variations that challenge the Other and therefore make the game continue. It is likely that his joyful engagement has to do with perceiving the stranger as 'someone like himself', that is to say, someone who both follows him and finds new things to do within, for him, sharable premises.

(Video: Daelman, Nafstad, Rødbroe, Souriau, Visser (1996). Development of Interaction and Communication)

In both examples it is clear that the care-person has the role of a Significant Other, i.e. a person who provides basic emotional trust of such quality that her presence in encounters with a stranger can be used to signal that the situation is a safe context. The role of the Significant Other, in these examples inhabited by a care-person, is decisive for the courage to explore a social game with a stranger. It is also clearly indicated that the deafblind person is not only turning to the Significant Other to check if the situation is safe. He is also, during the game, turning to his Significant Other to share by bodily expressions his pride in the mastery of the game, which in both cases is reciprocated by the Significant Other with similar bodily-emotional expressions of pride in the pupil. The reciprocated bodily-emotional expression of pride serves implicitly as an evaluative comment on the situation.

Example

Andrew, who also has residual vision, enters into an improvised social interactive game with a stranger. The stranger knows Andrew enjoys the rhythmical making of dots with a felt-tip pen on paper. The stranger presents herself to Andrew as another 'felt-tip-pen-dot-maker' and positions herself so as to signal to Andrew that she invites him to share in a game of 'felt-tip-pen-dot-making'. He sits physically near the significant care-person. Her presence makes Andrew dare to have trust in the stranger. The playful interactive co-presence in the game builds as the stranger reciprocates Andrew's activity through engaging in immediate imitation of his initiatives to variations in the pattern. Andrew, like Serge in the other example, contributes with many and increasingly more complex variations that he invites the stranger to follow, thereby maintaining the continuity of the game. At the same time, Andrew's use of sensory and cognitive potentials becomes increasingly clear.

(Video: Daelman et al (1996). Development of Interaction and Communication)

Since this pride is felt by both, it has meaning for both and could be made explicit and verbalized by the adult in a proto-conversation, as would happen effortlessly under ordinary circumstances.

Both video clips are exemplary in relation to the theoretical framework since they illustrate several relations, namely 'social interactive play/action', 'proximity/attachment' and 'exploration/categorization' as well as the connections between these relations. In addition they point towards potential proto-conversations, conversations and language learning.

Example

In another example there is no third person in the role of the Significant Other present in the concrete situation when a deafblind man who is totally blind and profoundly deaf meets a professional pianist he has only met twice before. He dares to follow her and to lead her through his gentle touch of her arms, shoulder, hands and fingers. She is playing in an other-directed manner to him, not for him, modulating her playing in accord with his refined patterns of touch. Being a professional musician, she is not paying attention to the playing activity as such, in dialogical terms she tunes into the attunement of the Other to herself. She shows that she attends clearly to patterns and modulations in intensity and focus of his tactile/vibratory following/listening to her playing. She is demonstrating that she perceives that he is not oriented towards the music as such, but to her playing the music, to her manner of making the music, to the patterns in how she works her body so as to make music happen.

This example illustrates triadic 'social interactive play/action', 'exploration/categorization', and generalized trust in others.

(Annica B. Henriksen/Ragna Ringdal's Day Care Center, Oslo; Video presented at the conference, "The Magic of Dialogue", Paris 2010)



Illustration 6

The third fundamental environmental relation is the exploratory relation. The roles involved in the exploratory relation are:

- The one who is the secure base for exploration
- The one who is the explorer
- The role of the object of the exploration, which can be a person

A partner for a deafblind person will be able to switch between the role as a secure base for exploration, the role of the object of the exploration and the role of someone who participates in or initiates the exploration.

There can also be two partners who play their own separate roles in the same situation. For example, one may be the secure base for the exploration of the deafblind person while the other functions as the object/element being explored by the deafblind person.

The developmental result of engaging in the exploratory relation:

- Agency in relation to gaining knowledge of the world itself, basically through engaging in categorization of impressions gathered during exploration.
- Agency in relation to having trust in the Other in the following roles: secure base for exploration, object of exploration, guide or model of exploration, and source of knowledge about the world.

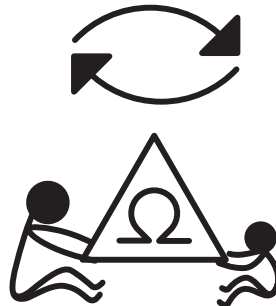
Example

Lasse is an adult, completely deafblind man. He appears very passive and takes almost no initiative to social contact or exploration of the world, probably because of long-term social deprivation. In Lasse's apartment, his partner Joel prepares breakfast. Lasse stands beside his partner. Joel tries to come so bodily close to Lasse that his own engagement in relating to the world in that moment can be transferred to Lasse and potentially tempt Lasse's interest in what is happening. Lasse becomes more and more interested, moves closer to Joel and feels more and more of what Joel is doing. Lasse feels Joel's manner of relating to the world by his touch on Joel's arm and body. Joel is here a model for Lasse in which he shows what is in the world so that he can give Lasse the option to eventually, if he likes, explore it.

(Video: Nyling (2003) Intryck som ger avtryck leder till uttryck [Impressions that leave traces lead to expressions])

Symbolic communication/'conversations'

Illustration 7



The symbolic communication-‘conversations’ is triadic. The third element is a sign, either a sign negotiated from a gesture or a conventional sign. This environmental relation is co-creative in the sense that it is both symbol-making or language-making and meaning-making. The conversational triadic relation is connected to ‘social play/action’, ‘attachment/proximity’ and ‘exploration/categorization’. It is connected in the sense that the symbolic expressivity that can emerge as shared topics within the conversational frame is basically narrative re-enactments of all the roles one can take in these three fundamental dyadic relations. The sign points basically towards a subject’s mental image, which is what makes it symbolic. When communication is symbolic, the partners relate to each others’ utterances, i.e. they relate to each others’ minds via the utterances, which requires ongoing engagement in co-creating and negotiating meaning-making.

In the conversational relation, the following other-directed roles apply:

- The one who speaks directed to the actual Other
- The one who listens to the actual Other
- The one who thinks directed towards himself – i.e. Self in the role of Inner Alter (cf. Markova, 2006)

These three roles can be taken reciprocally from the YOU and I perspectives of both partners. The shifts between conversational roles and perspectives create a kind of movement or dynamic that we describe as recirculation. The concept recycling means here that both partners in the course of a dialogue will gradually hold or re-use something from the assumed perspective of the Other in his own perspective (alterity). Therefore, we can talk about the dialogue becoming multi-voiced and that both partners are part of co-authoring and bringing meaning to the conversation.

Following one another’s attention in communication

A prerequisite for being able to communicate in a YOU perspective with a deafblind person is that in the role of partner, one follows the attention-direction of the deafblind person and share his attention focus. On this basis the partner’s commenting utterance can enrich the shared focus. This kind of attention sharing conversation can be observed in the beginning of the child’s second year of life in ordinary parent-child interaction.

A toddler is with his father on a beach. The child runs after a duck, stumbles across a feather, gathers it up, runs back to his father with the feather in his hand, shows it to his father, gives his father the feather and expects that his father will have something to say about it.

When the child shows his father the feather, he gives him the role of one who has something to say about the feather. The child himself at the same time takes a listening role. When the father receives the role of someone who has something to say about the feather, he will typically think about what he believes the child is thinking about before he says something. This means that the father believes that what he says will match that with which the child is concerned. The father does this because he has been attentive towards where and to what the child has directed his attention. Furthermore, the father has been attentive towards what the continuous focus of the child's attention has been. The father does this while the child runs around and after the child has addressed him. At this point the father will typically comment on something that the child can expand on in the next turn.

The example shows that for such natural learning processes to be possible, the father must be able to follow that to which the child's attention is directed. Beyond this it is important for the father to perceive what the child is particularly attentive towards. The example further highlights how important it is for the father, beyond being able to read the direction of the child's attention, also to perceive the shifts that occur. By this we mean the shifts in attention that occur between what the child from moment to moment is attentive towards. The information the father receives from following the child's attention makes it possible for him to make hypotheses about what the child's here-and-now mental focus is. This is again a prerequisite for the father being able to contribute in a way that is meaningful and meaning-making for the child. It is thus important for the father to contribute something that engages the child in such a way that he learns from the perspectives of others.

As the child learns that his father is interested in his perspective, the child may subsequently become interested in following and sharing the father's perspective on something they share attention to - in other words listen to and eventually imitate to his father's comments. Listening to others' comments on sharable elements in the world is a prerequisite for cultural learning.

Example

Alex is a completely deafblind boy of 2 years. He has a large box of toy animals with which he often plays with his mother or while his mother is close by. Alex sits in front of his mother with his back to her. The toy box is between them. Alex takes an animal from the box, touches it and throws it away. The same thing occurs with all the other animals. When all the animals are gone, he makes a sign he has created himself for a dog's bone. His mother sees this. She answers verbally: "The bone, where is it?" She leans back towards the left and signs BONE HERE? As they sit bodily in against one another, Alex can follow his mother's attention through her movements. The bone is not located to the left, and his mother says vocally: "Not here". The searching gesture is repeated on the right side and mother signs: BONE HERE? Mother: "Yeeeee here is the bone – here is BONE."

It is interesting for Alex to follow if his mother directs her attention towards what he is thinking about - the bone. As Mother knows this she makes the most of the situation by creating narrative tension.

(The example is from the Nordic consultant services supported by NUD in Dronninglund, Denmark)

Lasse from the previous example (page 77) participates in Joel's knowledge of the world by following what Joel is attentive towards while he makes breakfast. Following what an other is attentive towards (alignment) is an important process when one is to learn something about the world. When a deafblind person follows what his partner is attentive towards, this often occurs by his placing his touching/following arm on his partner's arm or body. It can also occur by the deafblind person being so bodily close to his partner that he can follow with his own body what the partner is attentive towards.

Lasse follows Joel's attention by touching/following the movements that reveal where and how Joel directs his attention towards something in the world. In the example with Alex, he directs his attention towards that to which his mother is attentive through a bodily following movement.

Attention and congenital deafblindness

The mentioned example of the father and child on the beach is recognizable from witnessing many interactions with seeing/hearing children. When we try to transfer the pattern to interactions with children with congenital deafblindness, several questions can be raised:

- How does it look when the deafblind person directs his attention towards something in a bodily/tactile manner?
- How does it look when the deafblind person tries to direct the partner's attention towards something in a bodily/tactile manner?
- How does it look when the partner directs her attention towards something which the deafblind person can follow in a sharable bodily/tactile manner?
- How does it look when the partner tries to direct the attention of the deafblind person towards her own focus in a shareable bodily/tactile manner?

All these questions are central and must be explored and tested in every case. Our two examples can only provide a pointer for how this can occur. The challenges arise again out of the problem with deafblindness, the prominence of the bodily/tactile modality and the initial low readability.

Below is a short summary of why and how attention is directed towards someone/something and what the focus of attention is when one of the parties has deafblindness:

- As the expressions of attention of the deafblind person are as mentioned above primarily bodily/tactile, it becomes a fundamental challenge for the partner to develop her gaze for bodily/tactile expressions of attention-directedness and attention focus.
- The partner of the deafblind person need to learn to look at hands and other parts of the body of the deafblind person in order to find cues for what he is attentive towards.

- When the congenitally deafblind person's visual and auditory residual senses function sporadically, the partner's bodily/tactile gaze is disturbed easily by her own dominant visual and auditory perspective. The partner will therefore easily end up on a sideline because the sporadic expressions match her own perspective – especially the visual. Therefore, she easily overlooks bodily/tactile cues for attention directedness.
- Variations in the way in which attentive touching occurs – for example the intensity of the pressure and the accompanying vocal, facial and bodily emotional expressions – can support the partner's understanding of which function the tactile expression may have. The expressions we see for bodily/tactile attention can have several functions or be ambiguous. This means that the partner, beyond perceiving attention directedness must also look for additional cues in the here-and-now context in order to understand what function is in operation. That the expression can have several other functions can be illustrated with the following examples:

A deafblind child touches the partner's arm in an active way.

This active touch can have several functions. It can be that the child follows his partner's attention towards something in the world or that he seeks contact with the partner, or that he is asking his partner for support or help.

In order to decide what the function is and where the attention is directed, the partner must also consider the context and the different qualities in the touching. A manual touch that follows the attention of the Other will be light and may involve the fingertips. A touch in which the child asks the partner for support will be stronger, make use of the whole hand and contain less refined small movements.

Besides, the accompanying emotional expressions and bodily attitudes and postures can support the partner's understanding of the function a touch pattern can have.

A child with deafblindness touches a particular place on his own arm with his hand.

Such touching may be directed towards a bodily emotional trace (BET) left by an impression from an event, for example from a salient touch pattern that the partner is performing during a tactilized singing game.

Summary remarks

It is essential for communicative development to follow each partner's attention-directing gestures and postures from and towards something. It is also essential that one identifies and eventually joins the Other's focus of attention towards something in particular. A special reason why we focus on the cues for the deafblind person's attention-directing is that the extremely different bodily/tactile behavior for attention-directing of persons with deafblindness challenges the partner. The examples we use to illustrate the observational categories within *The Cue Model* will therefore offer the partner alternative cues to support partners in following the attention-directedness of deafblind persons.

Dyad – triad

The concepts of dyad and triad explain how the communication partners' abilities to read and follow one another's attention-directedness are connected closely to the development of communication. The dynamics in which attention-directedness is played out are developed usually from the dyadic form, which is composed of two elements, to the triadic form, which includes three or more elements. Episodes characterized by triadic attention-directedness develop from situations in which the third element in the triadic YOU-ME-THIS/THAT triadic structure is physically present, to the third element no longer having to be physically present. When this is the case, the third element is mentally present and communicated through a symbol, meaning that the third element is some kind of sign. This last feature is characteristic of the conversational context which frames the development of symbolic communication and eventually also acquisition of cultural language.

The triadic and dialogical (other-directed) dynamics that are an intrinsic part of the conversational practice organize the partners' attention-directedness towards one another and towards some third element. This happens in a manner that enables attention directions and attention foci of both partners to be co-ordinated so as to be about the same third element. The triadic connectedness of attention between YOU/ME and THIS/THAT enables the experience of a connectedness between that which YOU are attentive towards and that which I am attentive towards in a certain moment. It is the experience of such a connection that creates the prerequisite for us – YOU and I – to be able to communicate with one another through THIS SIGN about SOMETHING in the world. This means that in order to be able to

communicate through THIS SIGN about SOMETHING in the world, attention must be played out in a triadic dynamic structure within a dialogical conversation space. That is to say, that attention must be able to move in a conversational space between the following three loci.

1. From where YOU direct your attention
2. From where I direct my attention
3. Where SOMETHING, something concrete or the gesture or sign, is located

The third element can as mentioned be a physical locus in a physical here-and-now-space or a gesture or sign-locus in a symbolic signing space.

In order for a person to be able to experience that these three loci are connected, the way in which attention is directed towards the Other about the third element should be recirculated/recycled from various conversational perspectives and positions. The way in which I become attentive towards something from my own perspective can be a recycling of that which I perceive that you are attentive towards from your perspective, and the reverse.

The earlier mentioned recycling of roles and perspectives that is a general characteristic of meaning-making conversational interactivity occurs in other words most basically on the level of attention directing communication. To begin with these dynamics are scaffolded by the tactile conversational practice that the deafblind person is included into.

In order for the recycling to be able to happen, the following must be present: Attention of one person towards a third element must be coordinated with the attention of the second person towards the same third element. The coordination and the fact that the attention of both is directed towards the same point, i.e. towards the locus of the third element, occurs dialogically. To clarify further what is involved in this dialogical mode, we will continue to describe what we mean by intersubjectivity in communication.

Subjectivity – intersubjectivity

In communication, there is an interchange between the partners' striving towards subjectivity and their striving towards intersubjectivity (Markova, 2008). At the micro-level, this interchange occurs in a small, factual communicative sequence. In such a sequence, we can try to discover a balance or imbalance in the tension between the individual's striving after his own understanding of the impressions of the world here-and-now and his opposite striving towards a shared understanding with the Other.

The person's own understanding concerns the continuing categorization of impressions (sense-making). The other strive that occurs almost at the same time is towards a shared understanding with the Other. The tension can be too great, just right or too little. If the tension between striving towards subjectivity on the one hand and towards shared understanding on the other hand is too great or too little, motivation to communicate becomes blocked. This is because the purpose of communicating about something in particular disappears when the content of the conversation is either too similar or too different from one's own understanding. The tension between subjectivity and intersubjectivity is optimal when the conversation goes on.

Sense-making and meaning-making

We assume as mentioned above that there are two oppositely directed dialogical processes in meaning-making. When applied to deafblind communication, we may observe indications that one process concerns the subject engaging in the continuous striving to make sense of impressions occurring in the here-and-now (categorization).

The subjective cognitive process of making sense of/categorization of impressions is a prerequisite for being able to co-create shared meaning in a conversation in a manner that makes one's own voice transparent. This means that if the person does not have sufficient time to build up his/her own understanding, he/she does not have anything to contribute in the conversation. In conversations, this process of sense-making occurs also when one party thinks about/reflects over impressions that the Other has made on him/her. The subjective process of sense-making is in this sense a prerequisite for intersubjectivity. The partner needs to observe these indications of thinking processes and respect the time and space it takes in the dialogue for it to occur.

The power to act and the robustness that lies in the concept of agency is precisely about the experience that one has something to contribute or to invite the Other to share in a conversation. A precondition is that one has had time to get one's contribution in place in the mind. Thereafter one can draw on one's mental image as an utterance – as a contribution uttered in one's own voice. A conversation in which the partner is one-sidedly concerned with striving towards shared understanding will end up giving too little time and space for the deafblind person's own reflections and categorizations. We must presume that the processes of categorization take much more time and energy for deafblind persons than for their partners. It is because of this aspect that offering sufficient time and space for these processes to proceed both within and outside of conversations – but particularly within the conversation itself – is so challenging for partners of deafblind persons.

Primary, secondary and tertiary intersubjectivity

Intersubjectivity can be divided into three main categories (Linell, 2009) which describe increasing dynamic complexity in communicative relations. By primary intersubjectivity, we mean here that both parties strive towards being emotionally attuned to one another. Primary intersubjectivity is strived for and in moments obtained when both parties maintain attunement to the Other and the attunement of the Other to Self. Both take the role of someone who follows the Other and the role of someone followed by the Other. In the course of a sequence characterized by a collaborative striving for primary intersubjectivity, the partners may experience that they can influence each other so as to be on the same emotional wavelength and come to share a basic vocabulary of emotionally charged bodily expressions.

Developmental result: One may experience oneself as interesting and recognizable to the Other, and beyond this that the Other is interesting and recognizable for oneself. In psychological terms: I may experience myself as someone who is worth being seen by the Other. I further experience the Other as someone who is worth being seen by me.

In secondary intersubjectivity, the interest in one another is expanded to include a third element that the Other is concerned with here-and-now. In secondary intersubjectivity the parties have a shared interconnected engagement with a shared physically present object. This means that they both are concerned with the Other's

interest in the same third element in the world which engages one's own interest. In the course of a sequence the attention will thus be able to circulate and recirculate between one's own and the Other's perspective towards the same object.

Developmental result: One experiences that Self's concern with an element in the world is interesting to the Other and *visa versa*. This means that my perspective on the world is interesting to the Other and that the Other's perspective on the same element is of interest to me.

By tertiary intersubjectivity we mean here that the third element is a symbol/symbols. The two parties now share attention to a shared symbol/symbols which in turn enables communication to be about something that is in the mind. Thereby, the third element is present through the sign/s.

Developmental result: Self experiences that one's utterances/thoughts are interesting to the Other and *visa versa*.

In psychological terms:

Self experiences that the Other finds one's voice worth listening to and Self finds that the Other's voice is worth listening to.

Projects

When we are to find a way to talk about development and developmental processes, we choose to use the concept project, inspired by Per Linell (2009).

The reasons for our choice to apply the term project are the following:

1. The term communicative project is applied on a micro-level of analysis: The analysis described in chapters 4 and 5 becomes directed towards this co-creation process and towards the signs, utterances and components of shared meaning which are co-created. This contrasts with a view of communication in which meaning is already found in one party and is to be decoded from its coded form by the Other. In such a case, the focus of the analysis is onesidedly on the product(s) of communication.

2. In a project one knows that there is a shared striving towards a goal. One knows that the goal is to co-create meaning about something or to find knowledge about something. One does not know beforehand exactly which meaning will be created or which knowledge one will get. In our understanding, this is because all projects are dialogical. That is to say that they are multi-voiced (at least two-voiced) and co-created in a given here-and-now situation. Projects cannot, in other words, ever be reduced to something 'one-voiced' or removed from the context in which they are created.
3. It is important for intervention to be able to analyze what the deafblind person is doing here-and-now and whether this is somewhat similar to what the partner is doing. What we mean is: Do they have a shared project, or are they concerned with their separate projects?
4. Projects can be large or small, one's own, or shared. In communicative projects, we must also be able to see the striving of both partners towards a shared goal.

Concluding comments about the conceptual framework

In chapter three we have emphasized and commented the concepts that form the basis of *The Developmental Profile*. The concepts are selected because they concern processes that are central to all natural communicative development. However, they are also chosen because the meaning-making processes described by the concepts may be hindered when congenital deafblindness is present in one of the partners.

In chapter 4, we will give a more detailed explanation of *The Developmental Profile's* two sub-models *The Diamond* and *The Cue Model*, used as analytical tools in planned communicative intervention.

4

The sub-models in The Developmental Profile used as analytical tools

Introduction to chapter 4

Chapter 4 describes in detail the two sub-models that comprise *The Developmental Profile*. The first part of the chapter, section 4A, covers the sub-model *The Diamond*, which defines the basic environmental relations (organism-environment relations) as prioritized target areas in planned intervention. *The Diamond* illustrates how these environmental relations are connected in development and intervention. The second part of the chapter, section 4B, describes each of these main target areas in a *Cue Model*. *The Cue Model* is constructed in order to support the partners when they analyze the possible relational function that the activity of the deafblind person may have/take on in each environmental relation. In *The Cue Model*, each target area of intervention is conceptualized and described in terms of a developmental perspective. A developmental perspective focuses on increasing complexity in the interactional dynamics that sustain the developmental process. The model can help the partner identify the ZPD. Thereby the model can suggest how the partner may relate to the activity of the deafblind person in such a way that she may support/scaffold the communicative development further.

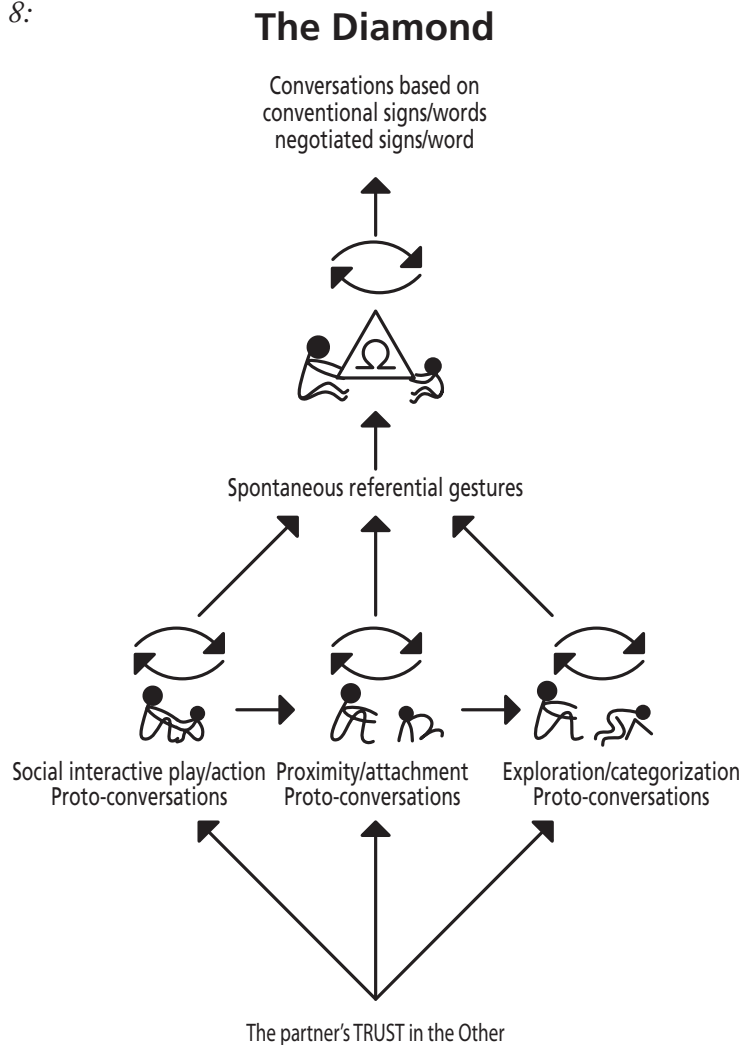
4A. The Diamond

The Diamond focuses especially on the relational prerequisites for deafblind persons to develop communicative agency. By communicative agency we mean to speak in one's own voice in spite of hardship and sustain efforts to make known to the Other what Self is thinking about (cf. Nafstad, 2009). The idea that lies behind the way *The Diamond* is constructed is the following:

Both developmental theory and dialogical theory understand the person's psychological development, i.e. the development of person-hood and self-hood in a relational perspective. Here, the individual's development of self-hood and person-hood is viewed as taking place within the fundamental environmental relations that are pointed to by *The*

Diamond. Dialogical theory helps specify these fundamental relations as self–other relations, having to do with how socially directed attention is organized or patterned beyond particular modalities. As the problem of readability disturbs reciprocal social directedness, the co-creation and further development of the fundamental self–other relations is also disturbed. Therefore, *The Diamond* focuses on precisely these relations, how they are constructed and how they are further developed. In sum, self–other relations are understood as the primary social contexts within which self–hood and person–hood develop.

Illustration 8:



The Diamond is illustrated by drawings, brief texts and arrows that foreground the fundamental self-other environmental relations as different facets of the face-to-face-relation and point at the connections between the different facets. The model should be read from the bottom, up and from left to right. At the bottom of the model is the following text: The partner's TRUST in the Other.

'The partner's TRUST in the Other'

A fundamental prerequisite for a deafblind person to access any facet of the face-to-face relation is that his partner has trust and belief in his ability to take on all the basic roles of which these relations are composed. This concerns the following roles:

- One who is an equal playmate
- One who explores/plays with reciprocal sensitive responsivity to emotional signals and with co-regulation of proximity
- One who explores the world, makes sense of impressions derived from interacting in it and constructs knowledge about the world as explored and experienced by Self.
- One who can express himself to others about what he is thinking about, feels and is interested in
- One who participates in the ongoing communicative co-creation of shared signs/shared language and shared meaning.

The partner's trust in, belief in and expectations about the participation of the deafblind person in living these roles is revealed in the partner herself taking on the role of the Other in the same relations. This concerns the following roles:

- She who is an equal playmate
- She who explores/plays with reciprocal sensitive responsivity to emotional signals and with co-regulation of proximity

- She who plays the role of secure base for exploration
- She who supports the voice of the deafblind person through her other-directed listening and acknowledging attitude, no matter how his voice is expressed.

The most fundamental dimension of the partners' engagement in each other is that they both take an acknowledging attitude towards one another. Such an attitude is achieved through the dimension of reciprocity that is built into the basic environmental relations pointed to by *The Diamond*. This means that the intervention focus in *The Diamond* is the establishment, stabilization and further development of the basic relations that comprise its different facets. When reciprocity on the level of observable interactivity is strong, this quality will indicate reciprocal acknowledgment of the Other and point towards the agency of the deafblind person. It must be pointed out that this subjective power of action and expressivity can continue to become more robust no matter what outer form it takes. In other words, the purpose of intervention according to this model is not to constrain behaviors to the culturally conventional, but to cultivate the basic environmental relations that in turn enable robust agency, in particular robust expressions of subjectivity.

Dyadic relations

The trust the partner shows in the deafblind person is a precondition for her as partner to be able to play the roles comprising the dyadic relation. This concerns the following roles:

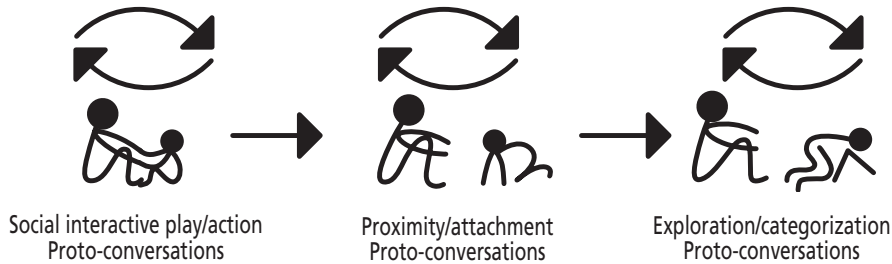
- Equal playmate
- One who plays with reciprocal sensitive responsiveness to emotional signals and with co-regulation of proximity
- A secure base from which the Other may explore the world
- One who makes aspects of the world accessible for the Other's exploration
- One who allows herself to be explored by the Other

The dyadic relation is characterized formally by two interacting, more or less other-directed subjects YOU and ME. As the two subjects direct attention more or less towards or away from each other, there is a rise and fall in the intensity of reciprocal attunement and tension builds up and is released. The tension that arises is necessary to maintain other-directed attention here and now and for further developing socially directed attention towards more complex triadic forms.

Being able to attune to and co-ordinate one's attention with someone else's attention is developed initially in a dyadic form, according to developmental theory: From the beginning, the baby shows other-directed attention in the sense that he is sensitive to variations in other persons' attentiveness to Self. In that phase, it is not possible for the care-person to establish shared attention to a third element, such as a toy. The child may direct his attention to the toy, but then the dyadic interconnected relation to the Other is temporarily disrupted or eventually collapses.

Example

The teacher Sophie plays a hide-and-seek game with little Peter who is completely deafblind. Peter knows the game and always finds it fun because Sophie creates dynamics in the game. She does this by varying the tempo, intensity and rhythm. Beyond this, Sophie introduces into the game a dimension of surprise by varying the timing of when she plays and when she is not playing. After a bit, Sophie thinks that something new should happen. This is in part because she has begun to get bored or because she has run dry of ideas to continue the dynamics in the game. She takes a small teddy that she wants to use in the game and shows it to Peter. He becomes confused and immediately loses interest in Sophie, the game and the teddy.

Illustration 9

The dyadic relations shown in *The Diamond* are three in total: 'social interactive play/action', 'proximity/attachment' and 'exploration/categorization'. In dyadic relations, 'proto-conversations' will normally occur as the partner will tend to accompany interaction-sequences with commenting use of language. In the illustration, the three dyadic relations are placed along a line and connected by horizontal arrows. The horizontal arrows indicate the direction of the intervention. This means that one begins the intervention process with the partners entering the roles of social play-mates. In these roles the partners develop reciprocal engagement in the Other as a consequence of the experience of similarities between Self and Other. This experience leads to recognition of the Other as somebody similar and interesting to Self. If the deafblind person experiences the Other as someone interesting to himself, he may initiate proximity to the Other and initiate and engage in play with the dimension of proximity and with the reciprocal sensitivity and responsiveness to emotional signals. As a consequence, he may come to trust the availability of the Other over increasing distance and assign to the Other the role of secure base from where he himself may take on the role of one who explores the world.

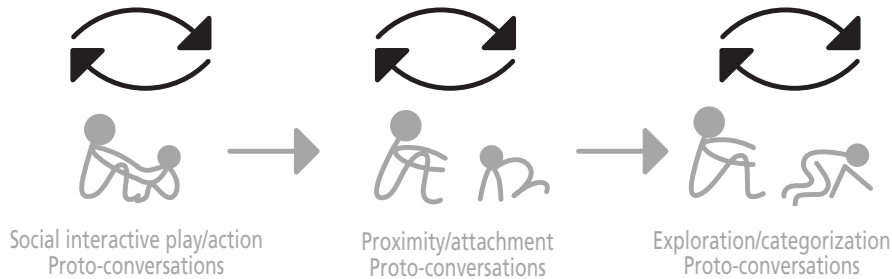
The good quality of the social emotional relation has a positive transactional effect as the deafblind person assigns the role of secure base to the Other and tests Self in the role of one who explores the world on his own. This requires that the Other has accepted the invitation to play the role of secure base for exploration in a way the deafblind person can perceive (see illustration 1 – *The Life-Space Model* page 35).

Example

Elodie is with her mother. The close emotional relation between them makes it possible for Elodie to play with shifts between being close to her mother and venturing out into the world. This game is about the co-regulation of proximity and about reciprocal sensitivity and reactivity to emotional signals. The improvised playfulness with the relation serves to strengthen the partners' reciprocal trust in one another.

(Video: Daelman et al (1996). Development of Interaction and Communication)

In the illustration of the dyadic relations in *The Diamond* it can appear as though communication does not exist in the life of the deafblind person before 'social interactive play/action' is established and fully developed. This is not the case. In all these dyadic relations, the deafblind person should – just as other children – experience himself as one who participates in conversations. Such scaffolded participation creates the prerequisite for the deafblind person to be able to make an intentional address to his partner with an utterance in a conversation. In such dyadic relations the seeing/hearing child will access the adult's accompanying use of language. The spoken or signed use of the adult's language is mapped onto the ongoing activity and to the variations in and between emotional waves that are part of it. Through such mappings, the child's experience with use of language and with being in a conversation is meaningful. The child gains experience with being in conversations before he/she participates as an equal partner in conversations in which communication happens on the basis of both partners using symbolic signs. These pre-stages to conversations ('proto-conversations') are concerned with and map on to the immediate contact and relation. The conversations contain no shared signs/symbols that point towards something outside the here-and-now, which would require meaning negotiation.

Illustration 10

The arrows over the drawings of the dyadic relations indicate that the exchanges are reciprocal. By reciprocity, we mean that the partners are directed towards one another. The arrows do not indicate the attention of the partners being coordinated about or through a third element (see illustrations on pages 95 and 101 for triadic relations).

Triadic relations

Experience with interacting in the different other-directed roles that are created in dyadic relations as well as experience with maintaining reciprocal other-directed attention will gradually create the conditions for the partners to enter into more complex relations. These are triadic relations where attention can be played out between three elements without being broken. These three elements are YOU- I- IT. In the most concrete triadic relations, the deafblind person takes the role of one who gives/accepts a physical object to/from the Other. Experiences with taking on both the role of one who gives and of one who accepts are usually initially described as interaction with a shared object. Such concrete interactions with shared physical objects are most often regarded as fundamental to the ability to move further into symbolic interactions where both take the role of one who gives or accepts 'the word' to or from the Other in a conversation.

However, in *The Diamond*, the game that typically consists of giving and accepting a shared physical object is not portrayed as a necessary precondition for triadic symbolic interactivity. Within the practical field around deafblindness there are several examples indicating that the development of symbolic communication does not emerge out of more concrete experiences with interactions with shared physical objects. Interactive play with shared physical objects is understood in the model as a variation of the triadic relation. This form of triadic interactive play can occur but is as mentioned not regarded as a precondition for the development of symbolic triadic interaction in conversations.

Experiences with the dyadic interactivity form the background for the person's mastery of turn-taking and of mastering shifts in roles between the one who gives and the one who accepts a turn. Triadic relations have an additional characteristic which consists of reciprocating perspectives. Such reciprocation of perspectives happen in the way that one subject can follow the other subject's attention towards a third element, share his attention focus and subsequently relate himself to the same shared focus. In ordinary language we talk about this phenomenon as taking the perspective of the Other. Such perspective-taking interactivity requires that the partners relate to each others' attention to third elements in a conversational manner. In the tactile modality, the partners relate to each other through conversational hand-positions. To relate in a conversational manner implies that the partners relate to each other about a topic, in a manner that is mediated by a third symbolic element (for example a sign). The third element in the relation is in this model an element of joint attention and is symbolic in the sense that it points towards something mental - a thought, a category of events, an idea, a mental image of a scenario.

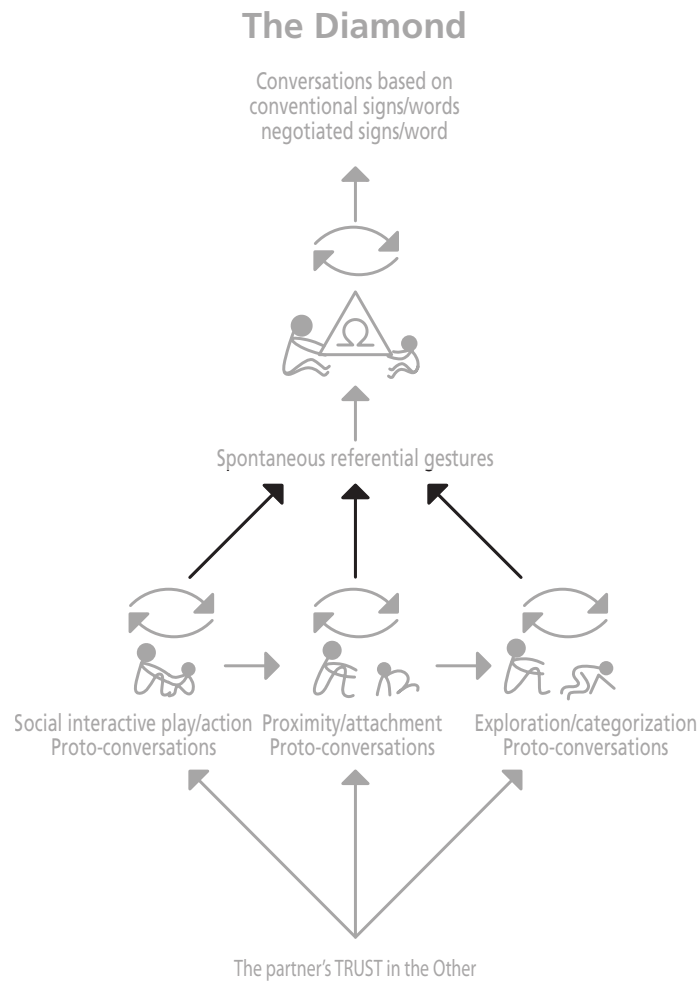
Illustration 11



Spontaneous referential gestures

Triadic relations are illustrated in the models by inserting a triangular figure into the drawing of face-to-face relations. An inserted triangle with an alpha sign inside as shown in the drawing above illustrates relations where the partners can share attention about a topic through a third element - a symbol. This drawing illustrates that the partners' relation is now based on use of a shared symbol/symbols.

Illustration 12



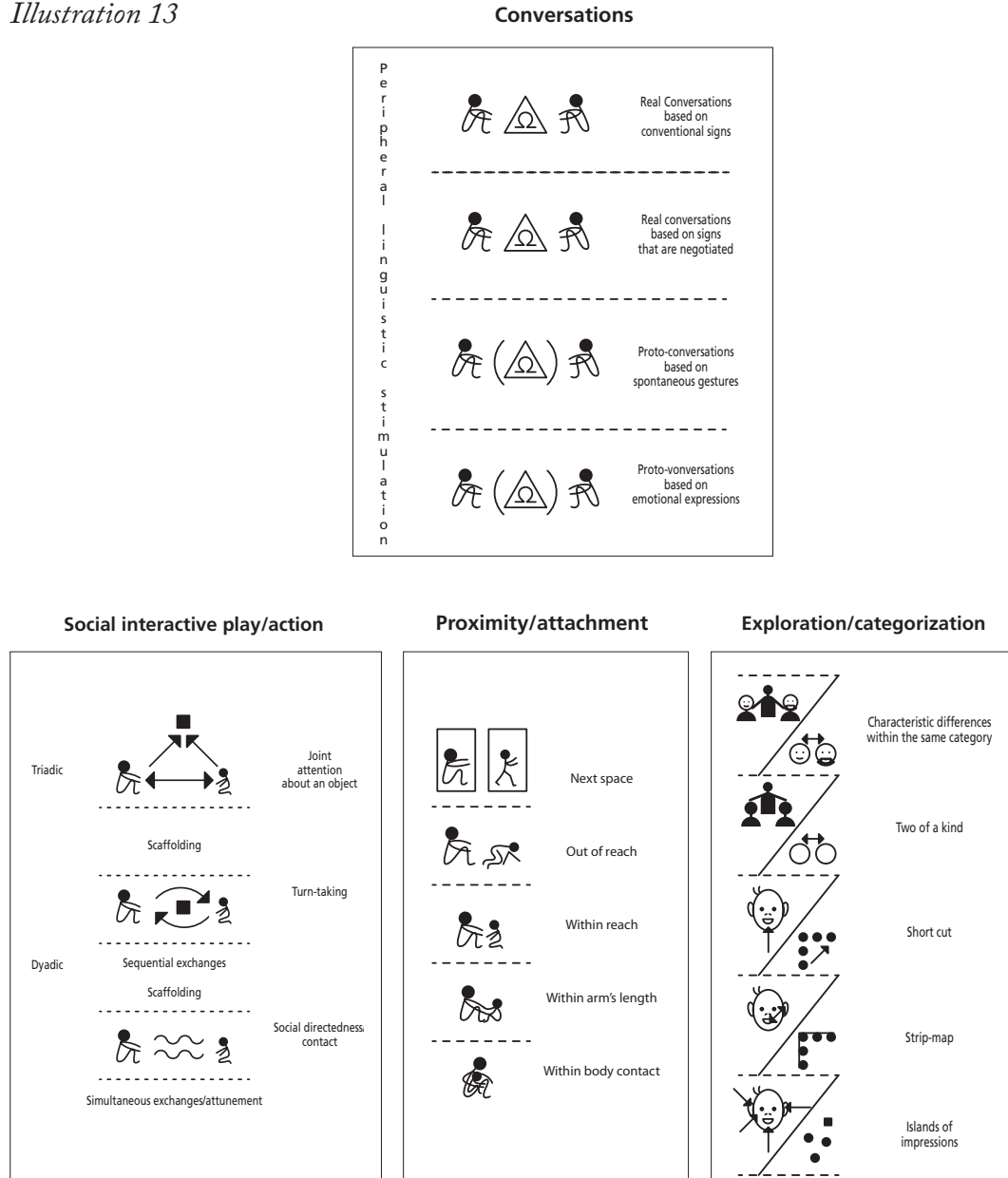
The illustration of *The Diamond Model* shows that the symbolic gestures/signs that are recruited into triadic conversational relations typically come from the dyadic relations. This origin is indicated by the arrows that point from each of the drawings that illustrate the three dyadic relations towards the text line in the model that says 'spontaneous referential gestures'. Such creative gestures can originate in the process of recycling interaction experiences. The gestures will typically indicate that the deafblind person is engaging in the creative cognitive process of making sense of impressions that to him are experienced as outstanding; i.e. impressions that have left bodily-mental traces. The spontaneous creative gesture indicates that the deafblind person is engaging in making sense of the impression by characterizing and/or categorizing the impression. For example, a child who touches his/her own cheek can be in a world of thought in which that which he/she touches is the bodily-emotional trace (cf. Daelman et al 2004) of the mother's caressing touch on the same place on his cheek but from a prior moment. In the example the cheek contains for that particular child a trace that has been left by a recycled reciprocally affectionate ritual, such as a greeting ritual. The gestures are not originally used by the deafblind person with communicative intention. They are originally spontaneous creative gestures that indicate that the deafblind person is engaged in thinking about or making sense of his experiences. Such spontaneous gestures are proto-symbolic in the sense that they can be noted and related to by the partner in such a manner that they can be transformed into shared signs. Such transformations can be planned for. When the process is planned for it involves the partner setting out to discover the gestures and then relate to the detected gesture in a conversational manner. This means that the partners need to scaffold the deafblind person's spontaneous and originally self-directed gesture as an other-directed utterance within a conversational frame. The partners need in other words to relate so that the deafblind person becomes more and more aware that his gesture is perceived by the Other. This means that the partner is aware that the deafblind person is engaged in thinking about some topic and also suggests to her what he might be thinking about. Within the conversational frame the gesture can, in other words, progressively be negotiated into taking on the function of a shared sign which can be used intentionally in symbolic communication by both. A person with congenital deafblindness may also acquire some cultural/conventional

signs/words from his social environment. When he has only a very limited vocabulary of conventional signs, he is likely to use the few signs he has in non-conventional ways. Creative and non-conventional use of conventional signs put high demands on negotiation of possible here-and-now meaning for the partners. Without such negotiation, there is a high risk that the communicative use of conventional signs will be perceived by the partners as expressive of very few, and always the same meanings.

We have now described all the four environmental relations that comprise the main analytical units in the sub-model *The Diamond* just as we have shown how the different environmental relations are connected in an intervention perspective. We will now move on to describe the second tool - *The Cue Model*.

4B. The Cue Model

Illustration 13



The Cue Model is primarily intended to help reduce the problem of readability. Because the contributions of deafblind persons in basic face-to-face relations are so difficult to discover and recognize for the partner, there are four challenges in particular that can contribute to unnecessary hindering of developmental processes. The challenges are that:

- The partner may overlook the contributions of the deafblind person
- The partner may project a specific meaning onto the activity of the deafblind person's meaning which is not supported by the actual contributions he has made
- The partner may find it difficult to plan the intervention that is relevant to support the deafblind person in his further development. When the intervention is relevant, it falls within the ZPD
- It is difficult to stabilize the developmental conditions to a sufficient extent across persons and environments.

Planned intervention is concerned with meeting the challenges listed above. The planning requires that certain areas of development be emphasized and prioritized before others, so that interventions may be channeled to affect central target areas. This involves maintaining a continuous focus on the intervention areas that are critical for the onset of the relational developmental processes. All the challenges listed above relate to the basic problem of readability. The way the partner relates to and answers the activity of the deafblind person will hardly be sufficiently sensitive to variations if the partner's responsiveness is guided only by the cues that the deafblind person immediately presents.

The Cue Model is meant to reduce the problem of readability and its consequences. The model deals with the problem of readability in the following ways:

- It shows the critical areas of development by accentuating the four environmental relations

- It contains schematic illustrations that illustrate how the contributions of the deafblind person are organized by progressively more complex inter-connecting patterns within each of the four environmental relations
- It shows practical examples that illustrate what the contributions may look like when the person has congenital deafblindness (see the examples and photograph series in the book).

The Cue Model is applied in planned communication intervention to target and maintain intervention areas, so that developmental conditions can be made sufficiently stable and last long enough. It is a considerable challenge to stabilize intervention so as to affect a sufficient number of partner relations in enough life-arenas throughout the life-span. The Cue Model helps to emphasize the importance of stabilizing the communicative relations and thus provides arguments for cooperation between the different persons who are in the role of partners across life-arenas and over time.

The Zone of Proximal Development – ZPD

The problem of readability makes it hard for the partners to discover the initiatives of the deafblind person as contributions within the ZPD. A partner who wants to support the deafblind person's developmental processes should have an idea of and an assumption about what potential relational function the deafblind person's here-and-now activity may take on, given optimal environmental conditions. Optimal environmental conditions mean here that the deafblind person may develop a sense of mastery of a certain relational function prior to his actual mastery. Such a sense of mastery is enabled by the manner in which the partner supports his development. The partner may, for example, perceive and respond to a gestural expression as if it were a signed utterance. The deafblind person may as a consequence experience himself as one who can express his thoughts to the Other through gestures/signs. The experience of being a communicative agent happens prior to the person's intentional communicative engagements. The concept of ZPD can in this manner contribute to explain how for example intentional communication is motivated. The sense of agency before actual mastery is grounded in experiencing Self as seen and perceived

by the Other, through the Other, in the Other's eyes. The ability to communicate intentionally with gestures/signs is in other words dependent on the deafblind person experiencing that his partner perceives him as someone who can communicate symbolically through gestures/signs.

The Cue Model is constructed in such a way that the partners may be supported to view the particular engagements of the deafblind person in the context of the ZPD. The columns in each environmental relation are to be understood in such a way that each category in the column opens for the possibility of the next category, placed higher up in the same column. The most advanced form will thus be a form that contains and builds on all of the previous and more fundamental relational patterns.

The columns are designed to suggest that the direction in which developmental processes move can be illustrated as bottom-up. The notion of a bottom-up direction is applied both to longer-term developmental processes and to building a relation in a short-term perspective, for example in a here-and now encounter between two persons. With increased and more stable development, the process of building up the environmental relation in the here-and-now encounter becomes faster and faster. For example, during the process of exploring a new object, the deafblind person may build up the here-and-now relation to the object in a manner that moves through all the phases illustrated in in the column 'exploration/categorization'. However, with a more stable development of the explorative relation to the environment, the process of building up the relation here-and-now may become quite fast. In the same way, the partners must always begin a conversation by making contact with one another.

We have now described the general idea behind *The Cue Model*, how the model is constructed, and to what it can be applied. Now we will describe each individual environmental relation in greater detail.

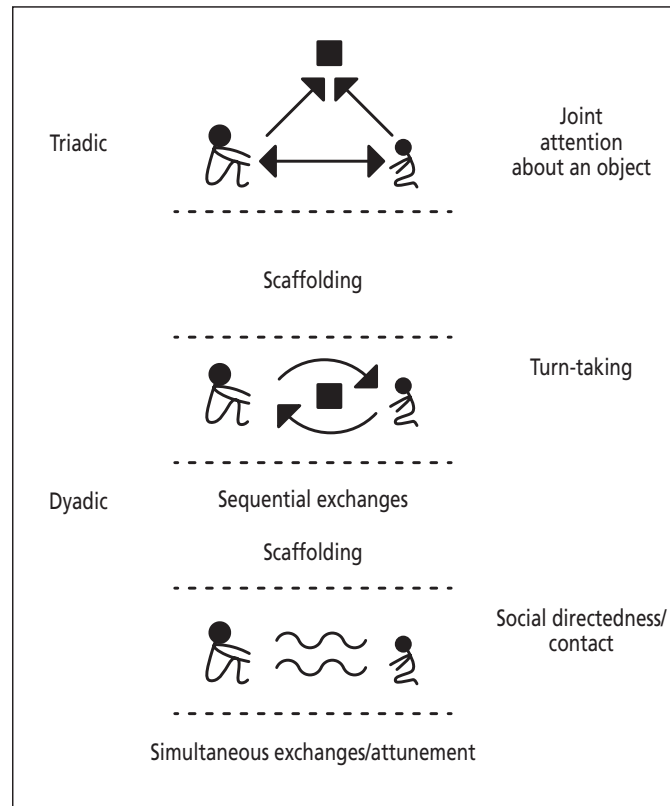
The environmental relation 'social interactive play/action'

In the following we will describe the column in *The Cue Model* that illustrates the face-to-face relation 'social interactive play/action'. In the context of clinical practice the column is used analytically to be able to target and tailor intervention.

In real life, such clear distinctions between types of activities as those given in the profile's different categories of environmental relations are often absent. 'Social interactive play/action' may for example occur within the frame of 'proto-conversations' or 'conversations' and/or within the frame of 'exploration/categorization'. The categorizing distinctions are made to enable analysis and interventions to focus on the basis qualitative dimensions of attunement and reciprocity. Attunement and reciprocity are vulnerable in all environmental relations.

The idea behind 'social interactive play/action'

As illustrated in *The Diamond*, the face-to-face relation 'social interactive play/action' is emphasized for intervention purposes. This is illustrated by the category 'social interactive play/action' being placed first when reading the model horizontally from left to right, as the direction of the horizontal arrows suggest. The idea of a prioritized placement in the model for this environmental relation is that it is primarily in 'social interactive play/action' that the reciprocal directedness towards the Other is established and further developed. This reciprocal other-directedness of attention is regarded in the model as the foundation for all social and communicative relations. The reciprocal other-directedness of attention must be stable in order for the partners to later be able to develop a lasting conversation. The development of reciprocal other-directed attention is understood in the model as a dimension underlying the development of expressivity, reciprocal trust, enthusiasm, shared experiencing and social agency in the deafblind person and in his partner. In many cases, this relation and all it contains need to be supported in a planned way through intervention.

*Illustration 14***Social interactive play/action**

In the illustration, the column 'social interactive play/action' is constructed so that it is read from the bottom up. Between each layer in the column there is a stippled line. The stippled line is to show that each layered phase contains opportunities for the next phase so that the previous phases are contained in the next one. The column is comprised of three main categories: 'social directedness/contact', 'turn-taking' and 'joint attention about an object'. These three main categories are concerned with the development of increasingly complex patterns that organize the dynamics enabling reciprocal other-directedness of attention. The first two categories point to phases that are dyadic; reciprocal other-directedness is played out between two elements; i.e. be-

tween two interacting subjects. The first phase is characterized by simultaneous dyadic exchanges and the second by sequential dyadic exchanges. The third category points to a phase where joint attention is organised by a spatial triadic pattern. The graphic illustration suggests a physically present object as the third element. Some deafblind persons establish joint attention where the third touchable element is a symbolic gesture, and the first triadic relation they enter into may well be a conversation, rather than social interactive play with a shared object. Therefore, the establishment of 'joint attention about an object' is not necessary to be able to enter conversations in which the third element can be a touchable symbolic sign.

Between the first and the second category and between the second and third category, the text indicates that the partner supports or scaffolds the transition to the next developmental phase. The deafblind person may in this manner experience the earlier mentioned sense of agency which transcends his actual mastery. Such sense of agency is enabled by the partner's ability to engage the deafblind person within interactional frames that have a somewhat more complex dynamic structure than the frame the deafblind person can initiate. Besides, the partner will play the parts in the game on behalf of the deafblind person that he cannot yet master alone. The partner's scaffolding support is indicated by the text that describes each category.

'Social directedness/contact'

Keywords: Activity from the deafblind person – attunement – reciprocal social directedness/contact – co-creation of a shared repertory of social-emotional expressions

The intervention begins by focusing on giving the deafblind person a basic social experience of himself being interesting for other people and of other people being recognizable to him, in terms of experiencing 'like-me-ness' (cf. e.g., Meltzoff and Moore, 1994). The intervention strategy is to focus the spontaneous engaged activity patterns of the deafblind person. Any activity pattern of the deafblind person regardless of form can in principle create the basis for the activity pattern to be reciprocated by the partner. For example, the rhythm of breathing, of clapping hands or jumping up and down, in which the deafblind person engages spontaneously in expressing vitality, can be a starting point. If spontaneous patterns lack dynamic emotional contours, a possible alternative starting point may be the rigid rhythmic patterns that characterize stereotypical behavior. Such rigid patterns may be broken up when mirrored (reciprocated) by the Other.

Illustration 15

When the partner reciprocates an activity-pattern she primarily relates to the rhythm and the movement when emphasizing or adding an emotional and motion contour or frame. This she does in such a way that the expression of the emotional dimension becomes more and more foregrounded, so as to create dynamics in the movement patterns and the patterns of emotional expressivity.

Progressively, reciprocal attentive attunement becomes apparent, which in turn gives the opportunity for improvising variations without breaking the contact. This concerns variations the partners improvise here-and-now as both become inspired to maintain the playful togetherness. Such variations will typically be modulations in rhythm, intensity, melody and tempo, originating in a shared register of musical dimensions (Halland Tønsgberg & Strand Hauge, 1997; Halland Tønsgberg, 2010; Malloch & Trevarthen, 2009).

One consequence of experiencing being perceived by the Other is that the person with deafblindness directs his attention towards the partner. Hereby, reciprocal social directedness of attention is established.

Since the deafblind person has accessed the experience of being perceived by the Other, he may now experience that the Other is recognizable to him, as this partner/the Other is experienced as someone like himself. An additional consequence may be a co-created shared repertoire of gestural expressions. This shared repertoire has its origins in the spontaneous activity-patterns of the deafblind person. The shared co-created repertoire is however expanded, nuanced and loaded with emotions. Such feeling-laden expressions function now as other-directed utterances, created as a result of the reciprocal directedness of attention, the partner's expanding additions and the content co-created during episodes of improvised playful togetherness. The socially directed emotionally expressive agency of the deafblind person is now being strengthened as he repeatedly experiences the shifts and variations in the emotional dimension of his own expressions being perceived and reciprocated by the partner.

Example

Hannah is sitting so as to be in close contact with her teacher Astrid. By reciprocating the tempo, rhythm and intensity of Hannah's activity, composed, for example, of breathing patterns and coughing, they reach reciprocal attunement and direct their attention towards one another. The variations that create dynamics in their togetherness are created by both of them. Hannah's expressivity is foregrounded as she indicates through head and hand movements that she wants to continue the social game.

(Video 1A.1: Janssen and Rødbroe (2007). Communication and Congenital Deafblindness: Contact and Social Interaction)

Example

Hans is a completely deafblind man who has lived his whole life in an institution for people with mental retardation. Hans remains in his own world, he never makes contact with others and the staff never reports that they experience contact with Hans in the course of daily routines. The staff describes Hans as extremely passive, even though he now and then displays violent behavior in which he tries to harm both himself and the staff.

One day Hans is sitting on the sofa alone –a frequently occurring situation. A consultant for the deafblind has arrived for a visit. She takes on a partner role and sits down gently but closely next to Hans and waits a bit while carefully observing if Hans is engaging in any kind of activity. Hans begins to rock backwards and forwards while vocalizing loudly. The partner reciprocates both the movement pattern and his vocalization. Suddenly, Hans stops this activity. He directs himself in a bodily manner towards the partner, becomes still and smiles then turns away again.

The staff witnesses how the consultant is successful in making a moment of contact. Thereafter, they discuss several planned intervention strategies that focus on establishing basic social togetherness between Hans and each of all the staff members.

Example

Anne – a visiting stranger – and Serge together co-create a shared improvised clapping game. The shared composition of the game is enabled by Anne using the strategy of immediate imitation as a form of reciprocation. It is likely that Serge's experience of Anne's participation in the clapping game, originally a favorite of his, leads him to discover that he has encountered another person who reciprocates, and thus perceives and acknowledges his manner of playful engagement – one like himself.

Serge's readable, emotionally charged gestural expressivity increases dramatically during the course of the episode. It looks as though he tries to check whether Anne is really trying to follow any variation he can conduct. Anne expands the game as well by adding variations. During the course of the episode, the emergence of reciprocally directed attention reaches a peak when Serge, with his seriously reduced vision, takes the initiative to look towards Anne's face. We may also note that Serge at a certain moment during the course of the game directs his attention towards a third person who is also present, apparently to find out whether she may also be one of the kind who can be brought into his orchestra.

(Video: Daelman et al (1996). Development of Interaction and Communication)

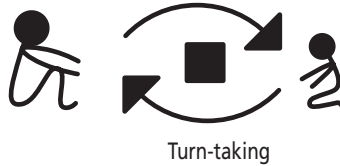
Emerging new functions

Social agency has to do with a sense of being able to make oneself interesting to an Other as a playmate – an Other who is recognizable as 'one-like-Self'. This dimension of agency contains the possibilities for further development of fundamental trust, emotional expressivity, empathy and sympathy in relation to the Other.

'Turn-taking'

Keywords: Co-creation of shared activities – giving and taking turns/reciprocating roles – alternating attention between person and object.

Illustration 16



In order for social togetherness to be further developed, remain interesting and in motion, something new must be added to it, SOMETHING added to YOU and I. What the partners develop together is a shared interest in a shared involvement in a shared activity.

The shared activity can be a game that is co-created through improvised play episodes, where the deafblind person and the partner consolidate the rule that whatever activity pattern the deafblind person directs towards the Other, the Other follows (mirrors). Also, play formats that are imported from the culture and scaffolded by the partner may enable shared engagement in an activity such as for example peek-a-boo games. An activity that enables shared engagement can also consist of a format in which both partners interact with a shared object that functions as a toy, or the play format can originate in an everyday activity and be transformed into a game about finding food in the cupboard or putting clothes into the washing machine. The point is that it should be an activity that occurs over and over again, as a ritual with a narrative structure that prevents it from becoming boring. The recycled participation in the game enables the deafblind person to extract the turn-taking pattern of the game. The deafblind person may then show his participation in the game by requesting his turn and take on the role of the one who leads the game or bring variations that make the game go on. Engaged participation may also be expressed as the deafblind person requests an object involved in a shared game from the partner in order to move the game on. As the playful interactivity format is recycled in the playful game, the deafblind person will progressively identify with the role of an agent who takes the initiative and contributes to maintaining playful interactivity sequences. He may also identify with the role of an agent who decides where and when the game/playful interactivity sequences start and stop.

Example

Carsten and Jonna engage in a shared activity that consists of putting clothes into the washing machine together. Carsten's participation is to a great extent supported or scaffolded by Jonna. She is adapting her tempo and tempting Carsten's participation by trying to vary the action patterns to make them feel fun, while scaffolding Carsten's turn-taking. Carsten subsequently presents emotional expressions that indicate that he enjoys engaging in a shared activity with Jonna and that he is proud that he was offered and accepted the role of one who could lead the shared activity further.

(Video 2B.2: Janssen & Rødbroe (2007). Communication and Congenital Deafblindness: Contact and Social Interaction)

Such experiences as those exemplified above contribute to strengthening the deafblind person in building up a basic sense of social agency. The social agency develops further as the person with deafblindness starts to focus more on the Other, i.e. his partner's contribution in the interactivity. The deafblind person will then not only request his turn and take his role, but will also offer the partner a turn and actively give him a role in the game/shared activity. The deafblind person's expanded social agency may also involve directing the partner to offer new variations that in turn enable the deafblind person to maintain his engaged interest in the shared activity/game. Progressively, it is possible to not only alternate roles, but also reciprocate the role previously taken by the Other within a game/shared activity.

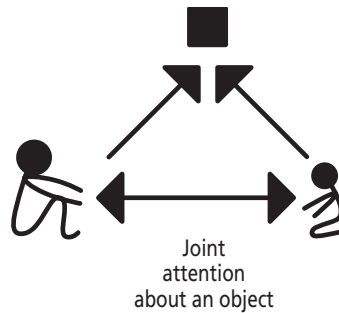
Emerging new functions

The experience of alternating and reciprocating roles in playful sequences of shared social activity is at the same time the possibility to develop communicative agency within conversational formats. The conversational format or game is characterized by shifting between the roles of speaker and listener. Further development of social agency requires that the playful social interactivity is stable, which in turn requires new elements and variations. The novelty and variations maintain the partners' interested engagement in the shared activity and thereby also maintain the deafblind person's alertness.

'Joint attention about an object'

Keywords: Triadic interactivity – alternating attention between the partner and something in the world – joint attention in relation to an object

Illustration 17



In the next phase the deafblind person contributes to expand his social agency by beginning to bring attention to potential third elements into the already established dyadic social space. These potential third elements originate as something that captures his attention in his subjective space, i.e. outside the dyadic intersubjective space. The deafblind person begins to share his enthusiasm, curiosity and wonder about something he discovered in the world with the partner. When the attraction to something in the world outside the dyadic space combines with the desire to share that interest with the partner, the established space of togetherness/intersubjectivity starts to change from a dyadic to a triadic one. An initial indication of such a change is that the deafblind person is alternating his attention between the potential third element and the partner, which in turn allows the partner to follow, join in and scaffold the next phase of coordinated attention to the third element.

Subsequently, the deafblind person and the partner may share the focus of attention towards a shared physical object in the world while they are attentive to one another's attentiveness towards the shared object.

Example

Jonas and Henriette engage in a shared jumping game on the trampoline. Jonas demonstrates his sense-making cognitive agency by creating spontaneous gestures representing the movements in the game – but they are unnoticed by Henriette. Now and then, the play takes a small break and then the game starts again. Jonas is here both in the role of the one who follows and the one who leads. During pauses in the social directed game, Jonas directs his attention towards a toy. After a short period, Jonas again directs his attention towards Henriette who is a socially available playmate. Jonas is here alternating his attention between Henriette and the toy. As Henriette now knows that Jonas is interested both in the toy and in continuing playing with her, she may now scaffold joint attention to the toy transforming their dyadic space into a triadic one.

(Video 1A: Souriau, Rødbroe & Janssen (2008). Communication and Congenital Deafblindness: Meaning Making)

Example

Anna, who is totally blind is using touch to follow with interest that her teacher Bo is blowing up a large balloon, which she immediately begins to explore: How big is it? What does one do with it and not least, what sounds can one make on it? Bo 'sees' what Anna engages in with his hands touching her hands, and he answers Anna's explorations and enriches her initiatives by showing her new ways to explore the balloon through touch. This coordinated attention to the balloon and how one may play with its different dimensions occurs through the use of conversational hand positions. Bo and Anna have a joint attention focus on the balloon at the same time as they are both interested in following, joining in and eventually reciprocating the manner in which the balloon is explored by the Other.

(Video 2A.2: Souriau, Rødbroe & Janssen (2009). Communication and Congenital Deafblindness: Meaning Making)

In interaction with deafblind persons, joint attention is mediated by the sharable tactile modality, which requires the use of conversational hand positions. This is a cultural practice that scaffolds and enables the partners to follow, join in and reciprocate each other's attention perspectives in relation to the same attention focus/third element. We have therefore chosen to describe relations that have a coordinating triadic structure on the level that enables joint attention mediated by use of symbols as belonging to the environmental relation 'conversations'.

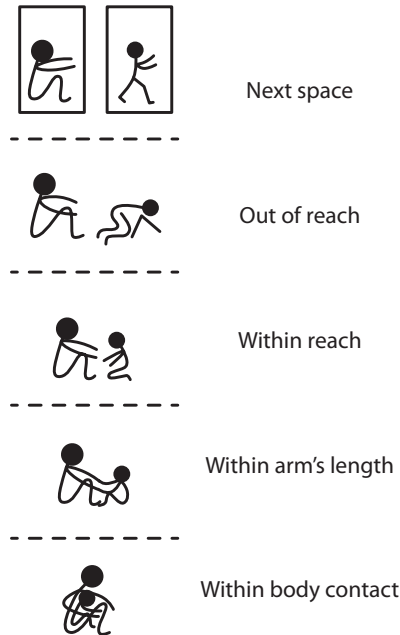
Concluding comments about 'social interactive play/action'

As described in the theory chapter, one distinguishes in dialogical theory between primary, secondary and tertiary intersubjectivity (Linell, 2009). As concerns the environmental relation 'social interactive play/action', the difference between two of the three layers of mental interconnectedness is pointed at by observational cues that can help partners recognize, develop and stabilize social-interactive patterns that enable primary and secondary intersubjectivity. The third layer, tertiary intersubjectivity requires that the partners relate to one another and to the world through shared signs/symbols. Tertiary intersubjectivity will therefore be addressed under the environmental relation 'conversations'.

The environmental relation 'proximity/attachment'

In a positive attachment relation the partners are not merely involved socially with one another but they also engage emotionally in showing and receiving other-directed emotional trust. Given that the deafblind person has had positive experiences of social togetherness in episodes of 'social interactive play/action', he may as a consequence become increasingly interested in the Other. He may show increased interest through seeking proximity to the Other and then engage in exploring whether a dimension of trust may be added to the social relation.

Illustration 18

Proximity/attachment**The idea behind 'proximity/attachment'**

The sub-categories within the 'proximity/attachment' relation mentioned above make sense in terms of increasing complexity when read from bottom up. 'Within bodily contact' means that the deafblind person can only initiate proximity to the Other when he is already in a physical position of bodily contact. The sub-categories placed above indicate that the deafblind person can initiate proximity from an increasingly expanded physical distance from the Other. Such expansion of the 'proximity/attachment' space may occur within one and the same event. Expansion requires that the deafblind person knows the physical location of the partner and that the partner is able to remain physically accessible and emotionally available to

the person with deafblindness. Given such accessible availability, the deafblind person may engage in exploring that he can shift between closeness and distance to the partner. The experience of being able to maintain a sense of emotional proximity to the Other across expanding distance enables the deafblind person to assign trustfulness to the Other. Such trustfulness is required in order to give the partner the role of a secure base for one's own exploration of the world. The sub-categories that are proposed as observational cues within the 'proximity/attachment' relation foreground the dynamic relation between attachment and exploration that is focused upon in attachment theory. This dynamic relation is illustrated by *The Life-Space Model* (see illustration 1, page 35 which foregrounds how a stable accessibility of a trusted partner gives the deafblind person the opportunity to expand the space within which he feels both secure and free to explore.

The dialogical perspective and 'proximity/-attachment'

Dialogical theory contributes to enrich the understanding of the psychological processes involved in human attachment relations, i.e. when attachment relations are viewed in the light of YOU-I relations and the development of self-hood and agency. The experience of the Other as 'one-like-me' – which may arise in the context of 'social interactive play/action' – opens up the opportunity for a basic sense of identity where being together is about seeing and being seen by the Other, about feeling acknowledged by the Other and acknowledging the Other. When the partners acknowledge one another, this may lead to reciprocal engagement in the Other and thereby also to reciprocal trust in the Other. From the perspective of dialogical theory the concept of trust is concerned with a subject's sense of how he/she is perceived by the Other. In other words, a basic sense of trust in the Other is grounded in the sense that the Other is one who sees me as I am and acknowledges all my sides, no matter how I appear or what I do.

The partner's availability for the deafblind person does not then merely concern being physically accessible but is about being available in an other-directed manner, so as to provide the deafblind person the opportunity to experience the

Other's acknowledgment of himself and thereby see himself as worthy of the partner's attention, interest and engagement. The experience of being uplifted in the eye of the Other is basic to a sense of emotional agency and strength that enables oneself to see the Other/Others.

Example

Sofus, who is deafblind, is out with his mother to buy ingredients for the chocolate cake they have planned to bake together. They have done this many times, and Sofus understands and uses signs for all the ingredients they are to use. In the shop, Sofus signs what they are to find and his mother guides him to the items so that he can put them into his shopping basket. When they come to the chocolate, Sofus makes small lip-smacking movements directed to his mother who does not react to this expression. The mother overlooks the potential communicative function of lip-smacking because she trusts that Sofus can express himself in a more advanced way. Eventually, Sofus acts in accord with his perception of his mother's trust in what he can do and she answers him immediately, thereby contributing to lift his sense of agency.

Emerging new functions

Engagement in fundamental positive affectionate relations is a contextual premise for a person's development of sympathy (awareness of the Other's feeling) and empathy (imagining the Other's subjective situation). Many persons with congenital deafblindness have certainly received much attention and love. However, the sense of being lovable in the eye of the Significant Other does not in itself imply the sense that one's subjective agency is being acknowledged in an uplifting manner.

The categories in ‘proximity/attachment’

The column in *The Cue Model* which focuses on the environmental relation ‘proximity/ attachment’ is constructed in such a way that the observational cues indicate how the spatial-temporal spaces within which the ‘proximity/attachment’ relation plays out are progressively expanded. The initial contact space, and the premise for expansion is body-to-body contact. Given this premise, the space within which the deafblind person can initiate proximity to the Other on his own may be expanded into the next phase and so on. The expansion may proceed until, in principle, the contact can be played out in a space within which the accessibility of the Other cannot be directly perceived by any of the senses. Instead it is built on the deafblind person’s idea about the Other’s whereabouts here-and-now. This progressive distancing process thus promotes trust/distrust related to how the deafblind person’s imagines the Other’s accessibility and emotional availability to Self. Co-regulated distancing can trigger the deafblind person to present spontaneous motivated signs. Such signs are grounded in the deafblind person’s embodied memories of for him characteristic and emotionally charged bodily postures in reciprocally affectionate greeting rituals. Examples of such signs are the child stretching-arms-out, arms-up or turning-a-cheek-toward. Signs that approximate or function as the conventional MOTHER or FATHER sign may also occur and have a similar origin in co-created greeting rituals.

While thematizing the ‘proximity/attachment’ relation, we will briefly explore the concept of ritualization. Rituals have great importance in maintaining, expanding and stabilizing all the environmental relations which create the fundamental psycho-social contexts for further development.

Ritualization

Ritualization means here that the partners organize manners of relating to one another and to the world into patterns. These patterns have a narrative structure and are recycled in the daily life of the deafblind person. The rituals should occur sufficiently often and be characterized by elements which enable the deafblind

person to recognize the rituals, and thereby the actualized type of relational context, across different situations and across his different life-arenas. With regard to the environmental relation ‘proximity/attachment’ the most essential rituals focus upon the co-regulation of proximity; i.e. temporary separation from one another and reunions. When the rituals are in the process of their construction, they are used to say “Hello” and “Goodbye” in a concrete, mutually loving way in the here-and-now context of face-to face play, which enables many recyclings. Aspects of the same rituals such as for example the kiss of greeting, may progressively be used more symbolically, as a shared sign of reciprocal affection. The shared symbolic use of parts of the ritual as signs serves to build up re-assurance that the reciprocal affectionate YOU-I relation is stable and robust even though the partners are separated for a short period. The co-created greeting ritual¹⁷ becomes a shared reference to the reciprocal affectionate and trustful relation. The collaborative making of the greeting ritual enables the partner to recognize and join in when the deafblind person re-enacts parts of the ritual outside the original context. Components of co-created greeting rituals are often transformed into the first parts of a shared symbolic language.

Ritualization is generally important in the lives of all children, as rituals enable the social co-creation of a sufficiently stable sharable world that can be talked about. With regard to persons with congenital deafblindness it is important to be aware how rituals can be built up. Ritualization helps reduce the problem of readability as components of the ritual become cues that can support the partner’s understanding.

17 The partner plans particular rituals that she uses both when she separates from the person with deafblindness and when she reunites with him.

Example

We have previously described Elodie's play with the social availability of her mother. This game is built up with recycled components from both the greeting and leave-taking rituals. In the game, when Elodie reunites with her mother, her mother kisses her on the arm, the neck and on the cheek, and then over a distance blows on Elodie's neck in order to signal that she remains physically accessible and socially available for her. When feeling mother's breath on her neck, Elodie hesitates in her motion and touches the place where she felt this trace of her mother's presence. Such traces are fundamental sketches to a shared language.

(Video: Daelman et al (1996). Development of Interaction and Communication)

The nature of deafblindness makes it difficult to develop ways in which partners can maintain a sense of closeness over distance. Without sufficient residual vision or hearing, the sense of the Other's available presence for Self can disappear for the deafblind person, when the Significant Other is physically located outside his immediate reach. The experience of the Other's accessibility is in general easily distorted for persons with congenital deafblindness. A stable sense of access to a Significant Other must therefore be planned for, most fundamentally through ritualized play where the theme is a sustained sense of affectionate closeness and reciprocal availability across temporary separation and distancing. Examples of such games are different forms of peek-a-boo games. The peek-a-boo game is a play-format which frames playful recyclings of temporary separation and reunions. Joint engagement in the peek-a-boo game grounds in other words a reciprocal sense of accessible availability and a sense of being perceived by and perceiving the Other.

Concluding comments about 'proximity/attachment'

In sum, the environmental relation 'proximity/attachment' concerns the experiential preconditions required for the Other to function in the role of secure base for exploration. The role taken by Self as one who explores and discovers the world is therefore related to the role of the Other as trustworthy with regard to emotional availability and physical accessibility and as one who trusts that the deafblind person can manage to shift his directedness dynamically between aspects of the outer world and towards the Other.

Emerging new functions

The dynamic shifts of attention towards the Significant Other and aspects of the outer world create conditions for the emergence of communicative agency, as the shifts between subjective and intersubjective orientations are patterned in a concrete and embodied manner. The subjective orientation concerns the person in the role of one who is interested in the world – in being in the world – and in understanding new impressions by relating them to his previous experiences. The intersubjective orientation concerns the person in the role of one who strives towards shared understanding with the Other.

In the following we will focus on 'exploration/categorization', the next environmental relation in *The Diamond*. This environmental relation concerns how the subject makes sense of impressions and gains knowledge about something in the world through his own engagement in exploration.

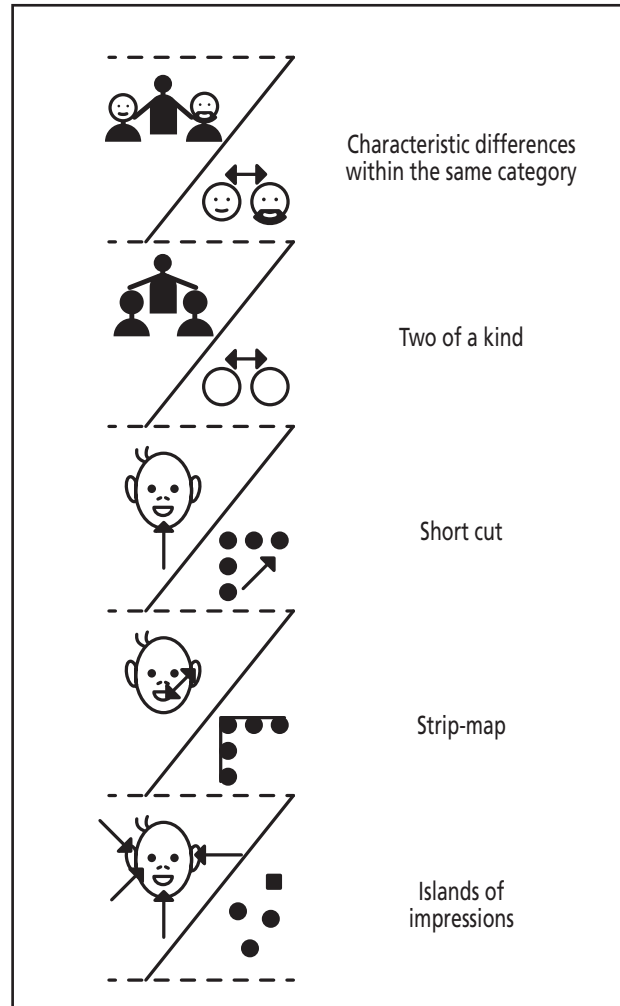
The environmental relation 'exploration / categorization'

In the previous section, we have explained how 'proximity/attachment' relations point in two directions. On the one hand, the 'proximity/attachment' relation has a background in 'social interactive play/action'. On the other hand, it points towards relating exploratively to the world in a manner that is motivated by the search towards understanding and knowledge. In terms of dialogical theory, meaning-making is motivated by two oppositely directed strivings. One fundamental striving concerns experiencing the world and making sense of impressions for oneself (the subjective). The oppositely directed force strives towards shared understanding with a partner (the intersubjective). The tension between these oppositely directed strivings creates motivation and interest in further exploration and in new conversations. In such conversations, the partner may enrich the subjective understanding of the deafblind person.

Example

Ingerid, who is completely deafblind, is with Gunnar out on a pier by the water. Gunnar presents a crab to Ingerid. This is a completely new and exciting, but slightly frightening experience for Ingerid. When a crab runs up both Ingerid's and Gunnar's arms we see how, with deep concentration and without visible signs of enjoyment, she first seems to try to make sense of the bodily/tactile impressions she is experiencing. Both during and after the experience, Gunnar and Ingerid talk about the event. In the narrative and re-enacting conversation that follows, Ingerid demonstrates enjoyment that indicates that she finds it enriching to share the experience with Gunnar. The smile on her face may indicate that she senses that Gunnar sees and acknowledges that she has dared to explore in order to understand what was going on and that she has subsequently managed to share the memory of the event with Gunnar in a conversation.

(The video Traces: Vege, Bjartvik & Nafstad (2004))

*Illustration 19***Exploration/categorization**

In *The Cue Model*, we wish to foreground how the manner in which one explores something in the bodily/tactile modality connects to concept-creation. Theory about embodied cognition (cf. Lakoff 1987; Johnson 1987) may contribute to explain that deafblind persons may engage spontaneously in making sense of interactional experiences by ordering impressions with overlapping embodied schematics into the same basic category.

The idea behind 'exploration/categorization'

The idea behind the column in *The Cue Model* which describes development within the environmental relation 'exploration/categorization' is the following:

Planned communicative intervention requires of the seeing/hearing partner that she can imagine how the deafblind person understands and stores his experiences of interacting with the world. The challenge for the partner, in other words, is to be able to set aside her own understanding of the world/her own categories to a sufficient extent. The partner may imagine the deafblind person's way of understanding the world. This imagining needs to be supported by theory. Theoretical understanding helps replace the partner's intuitive understanding which has a specific relation to her seeing/hearing and culturally linguistic background. This replacement must be comprised of an understanding that is more relevant in relation to understanding the world from a bodily/tactile and less culturally linguistic perspective.

The construction of 'exploration/categorization'

The column in the illustration of *The Cue Model* which shows the observational cues with regard to 'exploration/categorization' is constructed in the following way:

The column is to be read from the bottom-up as for the other columns. Cognitive complexity increases higher up the column. The column illustrates the process that occurs when a fundamental concept in the form of a basic category is created. Whenever a new concept is being created, the same construction process will be repeated, but the process will be faster over time and with increased mental developmental age.

The process of exploring and understanding primarily through the use of the bodily/tactile modality is extremely time-consuming and mentally demanding. The complexity increases further when the cognitive process of categorization occurs without help from language in the cultural linguistic sense. The demands on sequential construction are considerable. Sequential construction processes occur when a person perceives an object by attending one by one to non-connected impressions, which he thereafter must put together into an image of a patterned whole. Engaging in such a complex cognitive constructive process is demanding with regard to motivation, attention and memory. Seeing/hearing persons receive information simultaneously from several senses, and engagement in concept formation is much

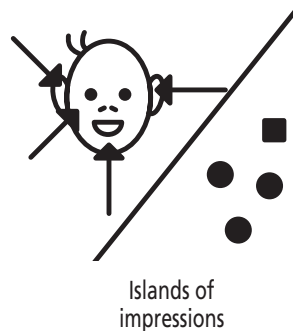
aided by the use of conventional language. In ordinary circumstances this process is simpler and therefore much faster and less mentally demanding.

Each sub-category of observational cues in the column is divided into two parts by a backslash. The left side illustrates how aspects of the world are explored in a tactile way. The right side illustrates with abstract figures how categorization of this tactile exploration is created, that is, how the deafblind person understands what he is exploring.

'Islands of impressions'

When the deafblind person begins to direct his attention to the world in a tactile way he will begin by touching, for him, an interesting aspect of a whole. We call this aspect an island. The island is a salient detail that attracts the deafblind person's explorative attention. This can be a detail that we from a visual perspective completely overlook unless we follow the attentive focus of the deafblind person as he is exploring.

Illustration 20



From a visual perspective it appears as though the attention of the deafblind person is directed towards one or several 'islands of impressions' which are not connected to one another but which have attracted attention due to outstanding sensory characteristics. The islands of impressions that are explored will be stored and remembered as significant bodily/tactile locations. Such places carry potential meaning for the deafblind person as they function as bodily traces on the places on the body or in the physical world in which something interesting was experienced.

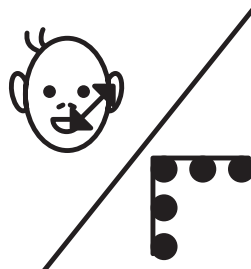
Example

Arjan is out for a ride with his teacher Ben. Subsequently, Arjan begins to explore the horse. This explorative process is extremely time-consuming when compared to the time it takes to create a visual mental image of a horse. Arjan uses his whole body to get an impression of the horse and of how one aspect of the horse is connected to another aspect. He studies the details carefully with his fingertips. The details that, from Arjan's perspective, stand out from the whole and are especially interesting are the small, stiff hairs on the horse's back. Ben perceives what Arjan is especially interested in as he carefully follows Arjan's foci of attention during the exploration. From a visual perspective, one might not tend to focus in particular on the same detail. Ben would not have had access to how Arjan is making sense of this part of the world if he had not tried to follow the exploration of the horse from Arjan's experiential perspective.

(Video 2 F: Rødbroe & Janssen (2006). Communication and Congenital Deafblindness: Congenital Deafblindness and the Fundamental Principles of Intervention)

'Strip map'

Illustration 21



Strip-map

Given that the initially unconnected parts of the environment that function as islands of particular interest continue to be of interest to the deafblind person, he will try to connect the islands with one another by putting them together on a line into a 'strip map' pattern. The pattern in the observable behavior indicates the person uses a basic cognitive schema of a 'strip map' pattern as he starts to create a more holistic mental

image of what he is in the process of exploring. The active cognitive use of 'strip map' schematics by the deafblind person is indicated by systematization. The deafblind person will in other words recycle the exploration of the path by moving back to the starting point and follow the pattern again. When the deafblind person stops recycling the pattern, it indicates that he has succeeded in the first phase of building up a coherent mental image of how the initially unconnected islands are connected. The basic schematics of creating coherent images of some part of the external world that is being explored seems then to be a cognitive 'strip map' pattern that helps create a mental image of a path where each island is transformed into a landmark located in relation to the other landmarks along the same path. Forming such images of sequential-spatial patterns is an indication of the operation of embodied cognition, and of the use of the source-path-goal schematic (cf. Johnson, 1987). We may then assume that the pattern is experienced by the deafblind person in accord with what we observe him doing; i.e. as traceable with the hands, fingers or toes, walkable with the legs or reenact-able with the whole body from one starting point moving through all the islands on the path to a goal.

Example

A teacher makes her face available for Kaja – a deafblind girl – to explore. Kaja moves her tactile attention systematically, continuously recycling the tracing with her fingers and hands of the path that connects the felt 'finger-into-ness' of the teacher's mouth, to the felt 'grabability'¹⁸ of one of her ears, to another variation of felt 'grabability' of the hair to still another variation of felt 'grabability' of her nose.

(The example is from the video collection by Liv Holmen)

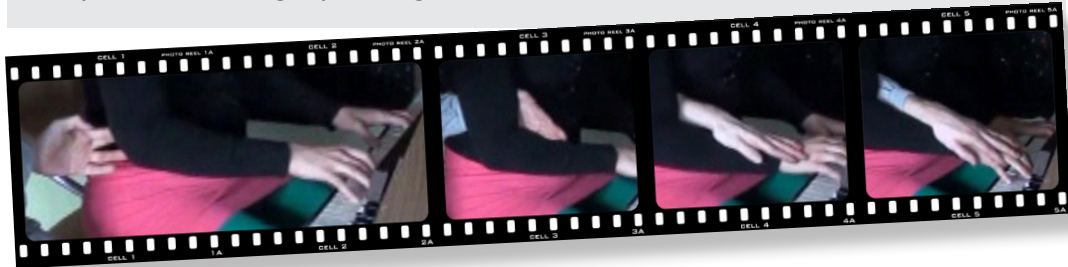


18 Grabability is here the experience of different body parts that you can grab with your fingers.

Example

Peter¹⁹ – a deafblind man without residual vision or hearing – is sitting with a pianist who plays the piano to him, in a manner that is directed to make her playing accessible to him through the bodily/tactile modality. She plays in an improvised manner while engaging in and following up his bodily/tactile attentiveness. She is enabling him to explore how she moves her body, her hands and her fingers to make the music which he is likely to experience as patterns of rhythm and vibrations. Peter is clearly attentive to and interested in what happens when she plays the piano. He is completely quiet and still with his vocalizations and his body, which indicates that he is highly concentrated. It is only his one hand that moves systematically and in a continuously recycling manner on the part of the pianist's body that is most active during playing. He moves his tactile focus of attention to and fro between her fingers, hand, underarm and overarm.

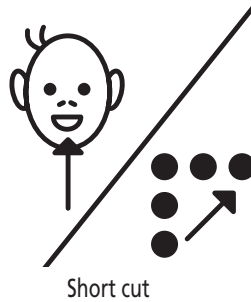
(Annica B. Henriksen. Ragna Ringdals Dagsenter, Oslo: Video presented at the conference 'The Magic of Dialogue', Paris 2010)



19 The example of Peter and the pianist is looked at again with a different analytical focus.

'Short cut'

Illustration 22



The process of building up coherent mental images of something explored will in a subsequent phase of exploration add the dimension of space as area or ground which contains the already explored figure of the strip-map pattern. This may indicate that the basic embodied cognitive schematics of containment is added to the initial use of the source-path-goal schematics (cf. Johnson, 1987). Each landmark in the already established strip-map pattern is now being touched and identified from different bodily/tactile perspectives and with different qualities of explorative touch. On this basis the deafblind person may create a three-dimensional mental containment image of the whole area/object as explored in a bodily/tactile manner. When the deafblind person has fulfilled the creative cognitive project of constructing a three dimensional area map/model of what he is exploring, this is indicated by his observable ability to orientate back to the whole area/object on the basis of touching any landmark in the already established 'strip-map'. The deafblind person can thereby make crossover connections between any of the landmarks. The term crossover connection is used here to foreground that the mentioned type of observable explorative pattern indicates that a deafblind person may mentally be imagining a three-dimensional whole when touching any landmark in the 'strip map'.

In other words; when the deafblind person can make crossover connections between landmarks, this indicates that an iconic concept has been created. Iconic means that the mental image shines through (is transparent) in the observable form of the gesture (cf. Taub, 2001).

Example

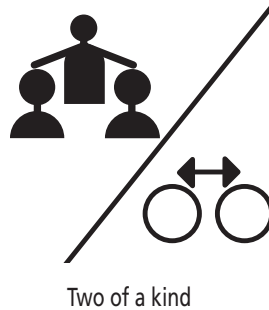
Kaja often makes face-to-face contact with her teacher. She does this by touching and now and then pulling carefully on her teacher's necklace. This touch is often confirmed in a tactile way by the teacher so that the touch of the necklace takes on the function of an other-directed contact sign. By this process the touch of the necklace becomes a shared symbol of the meaningful face-to-face contact between them as shown in the last sequence of the illustration.

(The example is from the video material by Liv Holmen)



'Two of a kind'

Illustration 23

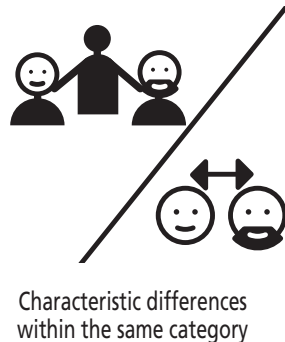


We may assume that impressions that from the perspective of the deafblind person are experienced as similar can be assigned to the same basic category. The category can thereby become enriched in content with an increasing number of experiences that the deafblind person finds to be of the same kind.

The iconic gesture that we can observe points by some dimension of its external form to a basic conceptual structure, i.e. a mental construction that we cannot observe. The iconic conceptual structure is grounded in the deafblind person extracting schematics or patterns during exploration of the world, and thereby also perceiving variations as belonging to the same pattern. The iconic gesture indicates a conceptual structure which the deafblind person has constructed on the basis of recurrent patterns in several explorative projects. The external form of the gestural expressions may however re-enact or imitate a part of a particular case, which serves as exemplary in relation to the category. The spontaneous use of such creative basic level categories (cf. Lakoff, 1987) by the deafblind person adds to the challenges the partner faces with regard to reading the iconic gestures of persons with congenital deafblindness.

'Characteristic differences within the same category'

Illustration 24



We may assume that when the deafblind person has created a coherent mental image of something explored through understanding that several different cues or landmarks point to the same whole, he will progressively discover that new objects or events that he finds similar to a stored mental image are of the same kind or belong to the same category. He may experience such similarity or family likeness even when the two (or more) objects or events are quite different on the external plane from our sighted and hearing perspective. The deafblind person may thus be forming a basic category/concept. Given that he has constructed a basic category

regarding kind, he may begin to notice differences and similarities between different units within the same category. The deafblind person can for example act so as to indicate that he understands that 'two of a kind' – for example a woman and a man – are similar to one another with respect to such an extent that they belong to the same category. Subsequently he may notice they are also not quite the same, there are characteristic differences between them – some have harsh-skinned faces (men) while others have soft-skinned faces (women).

Example

Andreas – a deafblind boy – is with his mother and father on a visit to the regional center from which they receive guidance and support. During the visit many observations are made that indicate what parts of the environment engage Andreas, which in turn give direction to further intervention. One day the consultant places several different chairs in a very small area and creates in this manner a compressed space that invites Andreas to explore. All those present watch how Andreas becomes very active in his bodily/tactile exploration of the chairs. He compares the chairs, tests whether they can all be concretely related to in a similar bodily manner and 'sees' them from different perspectives of touch. During the course of the explorative episode one may observe that he compares both the similarities between the chairs as well as the characteristics that make one chair different from the other. The observation demonstrates that Andreas has, or is in the process of creating a basic category of 'sit-able' objects.

(Video from consultant services at the Regional Center for the Deafblind, Bergen)



Emerging new functions

When observing that the deafblind person directs his attention towards a characteristic difference between two elements from the same category, we may assume that a characterizing gestural component is being created, in the form of a creative iconic referential/symbolic gesture. When the gesture is perceived and answered communicatively by the partner as if the referential gesture were a negotiated/shared sign, the gesture may come to be used intentionally as a sign. Such co-created signs may function as a pathway to a shared first language, which subsequently may add to the foundation for the acquisition of cultural language.

Concluding remarks about exploration/categorization

The column in *The Cue-Model* that concerns the environmental relation 'exploration/categorization' contains the observable cues that show how the deafblind person relates in an exploratory way to the surrounding world. The same cues suggest how the deafblind person builds up coherent mental images of that which he explores, i.e. by storing bodily and tactile impressions and categorizing the impressions in accord with the schematics of embodied cognition (cf. Johnson, 1987). This environmental relation concerns primarily the cognitive prerequisites for creating a theme and symbolic signs in communication. Such contributions to collaborative sign creation and collaborative theme creation come from the deafblind person himself. When addressing the next and last of the four environmental relations in *The Diamond*, 'conversations', we will describe how the contributions by the deafblind person are met, answered and enriched by the partner's contributions. We will also describe how these co-created components of communication are brought together when framed by cultural conversational practice. A shared conversational practice will in other words frame the communicative co-creation of sharable meaning and sharable aspects of language. The focus on sharable dimensions of communication may in turn strengthen the communicative agency of the deafblind person.

The environmental relation 'conversations'

'Conversations' is the most complex of the four environmental relations illustrated in *The Diamond*. The relation is concerned with the partners' conversational engagement with one another ABOUT SOMETHING via an utterance, which is a third element. *The Diamond* shows that the conversational relation builds on the more basic dyadic environmental relations. However, triadic relatedness has its own characteristic relational pattern, which makes it more complex than the sum of the more basic relations. It is demanding for both parties to engage in the conversational relation when one of the partners has congenital deafblindness. Deafblindness implies increased complexity as 'conversations' needs to be realized fully or partly in the bodily/tactile modality. 'Conversations' has a basic spatial dimension, which concerns reciprocal coordination of attention with each other to a third symbolic element in shared conversational space. The dominant bodily/tactile modality makes coordinating attention to the locus of a third symbolic element in a shared conversational space concrete and explicit. Beyond attending to a shared symbolic locus, both partners need also to communicate to the Other their awareness about the Other's attention to the third shared locus. 'Conversations' requires therefore also that both partners maintain other-directed attention over a conversational sequence of several turns.

One major characteristic consequence of congenital deafblindness concerns the dynamics of attention that organize communicative exchanges: If only residual vision and/or hearing are used, it will be very hard to engage in coordinated rapid shifts of attention loci and maintain coordinated attention to shared loci during the course of a conversational episode. Supportive compensation will be required. For many deafblind persons, such compensation will consist in partial or full conversational use of the tactile modality. For deafblind persons with usable and better functioning residual visual and/or hearing, compensations can take the form of reduced tempo, many repetitions and clearly marked shifts in attention. Persons with congenital deafblindness will have particular difficulty in participating in face-to-face conversations under conditions that have not been adapted to fit the deafblind condition. It is not sufficient merely to take account of deafness/reduced hearing and/or blindness/reduced vision.

The idea behind the environmental relation 'conversations'

Communication and language are extremely broad terms. There are many different perspectives regarding understanding language and communication and many different variations of communicative and linguistic practices. We will focus on conversational relatedness in the domain of face-to-face interaction. The term 'conversations' here means a fundamental type of communicative practice, i.e. a concrete manner of relating characterized by a certain dynamic pattern. This is a conversational practice, i.e., the rules or pattern of the game come from the cultural environment. Conversational relatedness originates in the child's life as a scaffolded manner of relating brought to the child by its care-giving partners. Engaging in conversational practice is not related to reaching a certain developmental stage nor is it an inborn ability that progressively unfolds. The term 'conversations' means here the patterned or rule-governed manner in which people relate to one another's utterances ABOUT SOMETHING in the world. The individual person learns to relate to an Other in this conversational manner from other already enculturated people. Children are included in conversational practice in different ways in different cultures. Our assumption is thus:

One cannot learn to engage in conversational practices unless one is included into such practices by already enculturated Others.

For persons with congenital deafblindness there is a risk that they are not included in conversational practices at all or that inclusion is too poor to be sustainable. The problem relates in parts to the earlier mentioned and central issue of low readability. The partner will oftentimes lack cues from the deafblind person, which makes the partner invite him into a conversation. The partner will be to an even greater extent at risk of missing the cues from the deafblind person that can make conversational interactivity last over a sufficiently long sequence of turns. The deafblind person will for his part easily miss access to the cues from the partner that inform him about the partner's availability for entering into a conversational relation. In addition he is at risk for missing access to cues from the partner that contribute to drive the conversation forward and make it last.

The problem of readability is, in other words, reciprocal and comprehensive in conversational interactivity, which in turn can be a barrier to participation. Another aspect of the problem is that the partners may not know how to translate conver-

sational relatedness to the tactile modality. Deprived access to the conversational context can have serious negative consequences for the deafblind person's learning and psychological development. Intervention should therefore aim towards better access to engagement in conversational interactivity. Conversational interactivity is a context that frames the development of characteristically human activity, such as:

- Natural signs/natural language
- Shared understanding of the world and thereby shared knowledge
- Shared meaning
- Development of the Self: self-worth, own voice, robustness, agency and motivation to engage oneself in social and cultural learning.

There is a risk for the conversation to be too dominated by the sighted and hearing partner's modality-specific and culture-specific voice and perspective, i.e. by the partner's way of experiencing the world, her way of expressing herself and her way of understanding the world. Such an imbalance or lack of symmetry and reciprocity will result in the deafblind person losing motivation to engage in conversations with his partners. The deafblind person's development of agency and self-hood may as a consequence become hindered more than necessary.

Professional teachers and professional care-persons play many important roles in the lives of persons with congenital deafblindness. However, the role of a conversation partner does not come naturally; it requires planning. Such a conversational partner role requires genuinely interested listening to the Other's voice, which implies a communicated curiosity about and respect for his perspective. When the partners engage in conversations with one another they can come to share one another's perspective on the same topic; thereby they can both enrich their own and the Other's perspectives. Something new is added which comes from listening to the perspective of the Other.

By perspective, we mean the individual's subjective way of experiencing the world. By voice, we mean the ability to be able to formulate what one is thinking about and interested in, in one's own manner.

A focus on narratives

Since *The Developmental Profile* focuses on participation in characteristically human meaning-making activity, we will emphasize participation in 'conversations' that have narrative structure and content (cf. Bruner, 1990). Narratives or stories support the development of many dimensions of self-hood, such as the formation of identity and understanding the roles and actions of other persons. Narratives also scaffold language acquisition and acquisition of knowledge about the culture of which one is a part.

The deafblind person's participation in co-authoring narrative conversations can be planned in a manner that takes account of the aspects listed below:

- In a developmental psychological perspective, the deafblind person's engagement in conversations begins as his conversational partner enables him to experience being able to tell an Other about some event that attracts his interest, that he feels something about or has an opinion about. The point is that the partner relates to the deafblind person's spontaneous use of referential gestures or signs in a manner that gives the spontaneous utterance a story-telling function, as if the story-telling intention were already in place.
- Another fundamental aspect is that the emergent co-authorship of shared stories builds on shared memories of shared events; i.e. events in which both parties have participated.
- An advanced aspect is that the partner can relate something that the deafblind person can recognize himself in, even though he has not himself taken part in the particular event.
- In order to scaffold expansion further, the partner may organize the situation in a manner that makes the deafblind person recognize his own role in stories he overhears being told about himself to his partner by a third party (cf. e.g. Lundqvist, Klefstad, & Seljeseth, 2012)
- Finally, the deafblind person can identify himself with and imagine himself in different roles played by different characters in stories that live in the surrounding culture, such as fairy tales.

Stories have the same fundamental function in all cultures. This fundamental function is to support shaping identity as a human being belonging to a certain group of people, a family, a society, and a culture in which particular ethical and social rules are used and acknowledged. They are acknowledged, because they are grounded in a long, shared history.

Conversational practice

Conversational relatedness means here to relate to each other face-to-face in a particular other-directed or dialogical manner. The dialogical mode has to do with the dynamics by which the partners co-ordinate attention to utterances about something in the world.

A conversational practice is conducted in a conversational space similar to what one in the context of sign language calls a 'signing space'. The conversational signing space is a mental space mapped on to a shared physical space between two partners. In such a space, the two partners can talk about what they are thinking about with one another. They can do this when their thoughts are expressed in symbolic gestures or signs that are located in the shared conversational space. We are thinking about this conversational practice in a way that is inspired by the natural sign languages of the deaf. However, when applied to the condition of congenital deaf-blindness, our way of thinking about signed conversational practices is comparably broader and fundamentally bodily/tactile rather than visual with regard to modalities. The approach is also more open with regard to creative gestures that function as signs, and not bound by culture specific linguistic rules and conventions with regard to grammar and vocabulary. This way of thinking about a bodily/tactile conversational practice is primarily concerned with an emerging language; i.e. a language in the early process of its collaborative making. This contrasts with taking as point of departure a fully-fledged, already existing, cultural linguistic practice that is in the process of acquisition by the learning individual.

Conversational hand positions

The dialogical relatedness that characterizes the social form of togetherness that we call 'conversations' is clearly marked in the tactile form by the use of tactile conversational hand positions (often called hand-over-hand). In the tactile modality, the speaker's signing hands are in light touch with the listening hands of the listener and vice versa. Partial or temporary lack of touch contact may indicate that the individual has turned mentally inward for a moment in the subjective dialogical position of thinking. Thus three different other-directed dialogical positions: 'speaking position', 'listening position', and 'thinking position' can be differentiated when the conversational modality is tactile. The shifts between these positions are observable as shifts in tactile conversational touch patterns and tactile hand positions. The positions and position shifts can be more or less synchronized, more or less complementary and more or less reciprocated between the partners. It is important to plan communication intervention to make sure that deafblind persons are included in a conversational practice in which tactile conversational hand positions are used. Such inclusion tends not to happen unless it is planned for.

Proto-conversations

The tactile conversational practice as such is initially learned by the deafblind person as he is included into tactile proto-conversations. As he becomes familiar with the conversational way of relating to the Other he can progressively make the discoveries that are fundamental to human symbolic communication, which we will address throughout the rest of this chapter.

The proto-conversational frame can to begin with be a re-framing of an established ritual of togetherness. A mother can for example frame the greeting ritual with her deafblind child as if it were a conversation. The conversational hand-over-hand pattern, the turn taking and the reciprocity will in that case for the child be a part of the ritualized 'hello game'. A greeting ritual is recycled many times each day and therefore serves to help the child extract and incorporate the conversational patterns long before he will use them in a real conversation.

In the example on p 130 where Peter explores how the pianist plays music, conversational hands are used by the pianist when she listens to Peter's explorative activi-

ties. This is another example of how the conversational pattern can be introduced and used repeatedly in daily activities.

The basic rules involved in relating in an attention directing conversational manner to one another face-to-face can be described as follows:

The tactile conversational hand positions mark that the partners have co-created a shared symbolic conversational space. Attention directing gesturing or signing going on within that space is (proto) symbolic.

Within the shared conversational space, there are two perspectives from which attention can be directed: YOURS or MINE.

From either MY perspective (or from YOURS), I (or YOU) can shift between three different dialogical positions or roles in relation to an utterance. These positions are:

- The one who speaks
- The one who listens
- The one who thinks

The dialogical dynamics that is driving the conversation forward is played out in a YOU-ME-WE other-directed space. This means that either partner can at different points in the dialogue be directed towards the other partner (YOU), towards Self (ME) or towards each other (WE/US). The relation between the speaker and listener position is complementary, as a speaker relates to a listener and vice versa. The listener position can be acted out by a physically present Other or by Self in the role of listener to Self in imaginary inner mental space. As the dialogical thinking position is observable when conversational interactivity is going on in the tactile modality, we call the third mentioned position a conversational thinking position²⁰.

²⁰ The notion and identification of the thinking positions as a third position in tactile conversational interactivity is inspired by dialogical theory, in particular by Ivana Markova's article: On 'The Inner Alter' in dialogue, 2006.

The complementary relation between the listening position of a Self and the speaking of an actual Other is marked by the hand positions. In tactile conversations, the listener places his listening hands lightly over the Other's speaking hands and vice versa. However, there are many individual variations of these tactile conversational hand positions, as well as partially tactile conversation practices. It might be functional for the adult to speak with atypical hand positions with small children and with deafblind persons who cannot motorically manage the hand shifts. Sometimes adults may find it better to place their speaking hands over the listening hands of the child. Sometimes a deafblind person will speak with his partner's hands when addressing the partner and with his own hands when addressing himself; i.e. when visibly signing/gesturing ('speaking aloud') in subjective thinking space.

The conversational thinking position is a role that we wish to emphasize. It is so important that the partner recognizes and respects this position when trying to empower the engagement of the deafblind person in the conversation. The thinking position creates the foundation for the communicative agency of the deafblind person. The thinking position gives the deafblind person the space and time he needs to engage in imaginative processes from where he can formulate his utterance in his own voice. One's own voice comes from the inside – from one's own creative thinking. If the deafblind person is disturbed in the thinking position, he will be hindered in formulating his own contribution to the conversation. A thinking position will often be observable for the partner. The indications of self-addressed thinking are recognizable on a micro-level of conversational interactivity: The person with deafblindness will at certain moments engage in gesturing while letting go for a little while of the partner-directed positions of body and/or head and/or hands without leaving the shared conversational space, i.e. while remaining within it. He will on his own shift back from thinking space when the process of formulating an idea or a thought for Self is over and resume and eventually intensify conversational partner-directed touch. He may subsequently try on his own initiative to formulate again his utterance while addressed to his partner.

It is more difficult to observe clear indications of the thinking-position when the conversation is only partially tactile because the self-addressed gestures (thinking gestures) tend not to be as visible.

The thinking gestures may also, as in the example below, come about in such a way that the person with deafblindness 'freezes' fragments of gestures or signs.

Example

Lasse plays the famous interactive nursery rhyme ‘Round and round the garden like a teddy-bear’ with his mother. The rhyme is accompanied by a bodily/tactile narrative contour performed by the mother on parts of Lasse’s body. Lasse contributes by his receptive bodily attitude. Mother’s narrative story-line starts with ‘round and round the garden like a teddy bear’ gestured with circling motions into his open palm, continues in building suspense with ‘one step, two steps...’ up along his outstretched arm and ends with the climax ‘tickle you under there’ under his armpit. The nursery rhyme is recycled and Lasse presents a spontaneous referential gesture to himself by touching (pointing for himself to) the *place*²¹ in his palm where the bodily tactile narrative made an impression. There are several instances during the course of the play in which Lasse shows that he is reflecting on the impressions he gets, both during pauses between repetitions of the nursery rhyme, and during the co-active performance of it. The one hand participates in mother’s story-telling gestures on his body while the other hand freezes at certain fragments of the story or expresses online a spontaneous gesture. Lasse is thereby expressing with one hand that he is reflecting on/thinking about the impressions of the story that he also follows/listens to with the other hand.

(Video: Daelman et al (1999). Development of Communication)

21 *place*: Transcription of a bodily/mental trace referring to an experienced event that happened in that place.

Example

Magnus - a deablinde boy - is wandering without guidance back and forth in an empty corridor at his school. He likes the corridor since he does not bump into anybody, so he does not have to focus on orientation and the physical environment. While wandering he is directed inward, into his inner mental space; inward directedness is indicated by his spontaneous creative gesturing to himself, using his own face as signing space: Magnus uses the forefinger and thumb of one hand to stroke the contours of his chin as if attending to the feeling of stroking the surface of the skin. His personal assistant observes his gesturing to himself and tries to invite conversational touch-contact with him about the gesture. He carefully brushes the inviting touch away and carries on walking back and forth while repeating the same gesture to himself. After a while, as the assistant addresses him again, he permits her to present to him the gesture she perceived him make. This conversational act of reciprocation, transforms the potential function of the spontaneous individual gesture to a socially sharable sign. The potential function is changed even though the form of the gesture is unchanged and the partners still have not negotiated what the gesture-as-sign means.

Magnus' mother reports later that Magnus' father has grown a beard recently. Following up on this shared knowledge, Magnus' partners negotiate the gesture to mean both 'dad' and 'dad-like' i.e. 'dad-the-beard-grower' and other 'beard-growers-like-dad'.

(The example is taken from the consultant services at Skådalen Resource Centre in Oslo).

Emerging new functions

A person with congenital deafblindness needs to make sense of impressions he gets while engaging in episodes of 'social interactive play/action', 'proximity/attachment' or 'exploration/categorization'. He needs therefore to be allowed to distance from ongoing bodily/tactile interactivity on the outer plane long enough to engage himself in noting the traces recent impressions have left in his body/mind. He will mark such traces as meaningful places on Self's body, on others' bodies or in the physical world. A premise is thus established which, further on, enables the person to take a temporary thinking position during conversations. The thinking position enables the person to formulate thoughts in his own voice and to reflect on and relate to other persons' utterances with his subjectivity.

Within the shared conversational space the deafblind person himself can point to a trace/place when addressing himself in the thinking position and he may subsequently point to the same place when addressing his partner in the speaking position. When the trace/place is pointed to in the speaking position, it is recruited into the shared conversational space where attention to it can be shared. In this manner, pointing by touch to the embodied trace/place gesture takes on the same meaning-making function as a sign.

Planned proto-conversations

In order to be able to scaffold optimal conditions for the development of conversational relations it is necessary to plan for proto-conversations. Participation in proto-conversations benefits the deafblind person in the way that he incorporates the conversational manner of relating to each other's utterances. He may likewise discover that- and how his other-directed attention takes on the function of showing intention to the Other. He may also discover that- and how his spontaneous gesturing takes on the function of a signed utterance, enabling him to make known to/tell the Other that he is thinking about something particular on a certain moment. Planned proto-conversations take their starting point in everyday rituals. Such rituals consist of a course of events with which the deafblind person is already familiar.

These rituals can for example be:

- The pattern of orienting oneself with the hands in relation to the table and the food during a meal.
- The pattern of orienting oneself to different places on one's own or others' bodies during dressing or undressing.
- The pattern of finding a knife, fork or spoon in a drawer
- The pattern of following in a tactile way what the partner is doing
- The pattern of greeting and taking leave of one another
- Other well-known patterns in social games and interaction rituals.

Example

Bengt, a deafblind man – and Anna are about to bake ginger cookies together. In this case, Anna invites Bengt several times into a proto-conversation in which she talks about what they are making and have been making in a conversational manner using clear hand shifts. The utterances in the proto-conversation consist of emotional expressions and mimetic gestures that accompany here-and-now baking interactivity.

(Video 1D: Souriau et al (2008). Communication and Congenital Deafblindness: Meaning Making)

Example

Kaja – a deafblind girl- and her teacher are together discovering the world within sharable reach. During a meal, this might involve the light from 'above-the-head-place' and the plate and the peach down 'there-on-the-table-place'. The teacher shows and comments through her bodily orientation, her engaged voice and her tactile pointing gestures that she notices and appreciates the same things that Kaja notices and that she values them too.

(The example is from the video collection by Liv Holmen)



Even though Kaja in the example above cannot perceive the teacher's words, she relates to the teacher's enthusiasm and to the tactile conversational manner of sharing interest to something in the outside world. As the conversation frame is charged with enthusiasm, shared comments of wonder are recycled in relation to tiny everyday events that occur in the here-and-now. The events accessible to both partners within sharable reach are jointly discovered, and once discovered, the context can be re-framed as a conversation. Within the conversation frame, wonder can be recycled in the form of comments about the sharable world.

Sign making – different types of gestures/signs

Persons with congenital deafblindness engage as already mentioned in creating their own referential gestures when they dwell on bodily traces of impressions from interaction with the surroundings. The observable indications are gestures that serve to direct the person's own hesitating (reflecting) touch-attention towards the particular place on his own body where an impression has left a trace. The gesture may alternatively be one that leads attention to the characteristic *manner* or *shape* in which a certain movement was experienced in a bodily way. Forward motion such as that involved in train travel may, for example, be experi-

enced in a bodily way as being shaken rhythmically and rapidly from side to side. These spontaneous creative gestures express how the deafblind person engages cognitively in making sense of his experiences and in ordering impressions with overlapping embodied schematics into basic types or basic categories. A stone may be called 'chair' because it can be experienced as 'chair-like' on the basis of the embodied impression of its 'sit-ability'.

Spontaneous gestures can take on the function of symbolic gestures or signs if they go through a certain transformation process, often called a negotiation process. The partner is responsible for planning and scaffolding such transformation processes. The transformation process can be described more concretely as a re-framing process. Re-framing changes the potential function of the originally individual gesture into a socially constructed sign, even if the outer form remains unchanged. The new frame is the conversational frame, characterized by reciprocal other-directed relatedness to and about the sign through conversational hand positions. Such conversational re-framing enables triadic attention/joint attention to the gesture to be recycled many times. The transformation process begins by the partner reciprocating attention to the gesture within the conversational frame, relating to the gesture as if it were a sign in an utterance. The partner can interpret the utterance to mean that the deafblind person is telling that he is thinking about something. The point is to demonstrate this potential to the deafblind person; that the gesture has a potential sign function in a potential declarative utterance. However, the partner needs to refrain from over-interpreting the content of the utterance. In the next phase, the deafblind person may add more cues regarding content, enabling the partner to start the progressive negotiating of co-authorship of what the utterance can mean. The partner brings suggested interpretations that the deafblind person can accept or cannot accept. If the deafblind person does not follow (rejects) the partner's particular suggestion, the partner may bring a new suggestion. To the extent that the partner-suggested meaning is accepted and followed up by the deafblind person, the spontaneous gesture is progressively transformed into a shared symbolic sign. (cf. Nafstad & Vonen, 2000)

The referential gestures the deafblind person creates himself come from the deafblind person's own cognitive imaginative engagement in making sense of impressions from ongoing interaction. They are basically recognizable as

- Mimetic gestures
- Iconic gestures
- Pointing gestures/deictic touch gestures

The spontaneous creative gestures that are potential signs can originate both inside and outside the conversation itself.

When these gestures are noticed and reciprocated by the partner in the conversational mode described above, they become functional signs that can be used to co-author shared utterances and negotiate shared meaning in emerging symbolic communication.

Mimetic gestures/signs

In general, mimetic gestures/signs represent an action and its accompanying mental state by imitating characteristic bodily motion, bodily position and emotional mode. The mimetic gesture is in other words bodily and holistic, and represents the perspective of the gesturing person. Mimetic gestures appear after an action is finished or in a different context than the original one. Mimetic gestures are as-if gestures or make-believe gestures that do not require learning from others. The gestures can be created by the deafblind person during spontaneous re-enacting of events that are stored or in the process of being stored in memory. Mimetic gestures are fundamental to symbolic communication as they enable persons to store, understand, re-enact or dramatize and share experiences. (cf. Nelson, 1985; Donald, 1991)

A congenitally deafblind person may be helped to discover that he can use mimetic gestures communicatively in telling about actions and events. He may for example initially make-believe that he is still playing a game he has played earlier with a teacher. The imaginary mimetic representation of the game lasts for less time than the interactional game itself. The (proto) conversational re-framing of the same gesture by the partner may help the deafblind persons discover that mimetic gestures can be used communicatively in a narrative conversation about the event or about similar events. The mimetic gestures of the deafblind person's have a pretend-play-form which is important both for cognitive and communicative development. However, spontaneous mimetic gestures can be difficult to perceive

and understand for the partner, as the outer form of the gestures can be fleeting and unclear and difficult to recognize from the partner's visual perspective. Intervention will therefore require the partner's awareness and participation related to the following issues:

- The person with congenital deafblindness may spontaneously create and use mimetic gestures when engaging spontaneously in imaginary scenarios
- Mimetic gestures are holistic bodily units. Mimetic gestures therefore often include emotional dimensions (facial expressions and vocalizations) that contribute to the gestures becoming easier to read/understand.
- The partner should try to detect the deafblind person's spontaneous mimetic gestures. Having detected a possible gesture, the partner may imagine the experiential perspective of the deafblind person to identify for herself which scenario in the life of the deafblind person the gestures may be re-enacting
- The partner should engage with the deafblind person in his type of mimetic gesturing, contributing to making it into a sharable dimension of symbolic communication. The partner can expand on the use of the mimetic mode in communication by taking the initiative to use mimetic gestures that she believes the deafblind person can follow and make sense of from his perspective. The partner can also take the initiative to create relevant make-believe games with the deafblind person.

When the partner masters the mimetic narrative style as related by the deafblind person, the conversation can be maintained over time even with a tiny vocabulary of shared signs.

Example

Emil – a deafblind boy – is engaged in conversational memory-talk with his mother about when they visited a playground previously in the day. In the playground there was, among other things, a slide. However, this particular day at the ‘slide-place’, Emil met a girl who like him had a CI (Cochlear Implant). During the conversation, Emil’s contributions consist of mimetic, iconic and deictic gestures/signs accompanied by mimetic emotional vocalizations. In this manner he tells his mum about how it was for him to slide; i.e. he shares the event from his engaged bodily/tactile perspective. As the mother was present in the original event, she can understand the scenario he refers to and join him in co-authoring the narrative highlight on the moment when he was made aware that the girl was someone like him. The co-authored story also highlights that although the girl in the playground was another person with CI – she was also different from him, as her CI was behind her back and not in front like Emil’s CI.

(Video 2D: Souriau, Rødbroe & Janssen (2008). Communication and Congenital Deafblindness: Meaning Making)

Iconic gestures/signs

Iconic gestures and iconicity are usually described from a visual perspective. In such cases iconicity means that the underlying mental image/concept shines through in the gesture’s outer visual form (cf. Taub, 2001). Such visual iconic transparency is as a rule readable and easy to understand. An example of an iconic visual sign is the sign DRIVE that refers to a schematized visual image of someone holding onto a wheel when steering a car. From a bodily/tactile image perspective it is hardly the person holding the steering wheel that is experienced as characteristic. It can be something completely different and particular for the individual person with congenital deafblindness. The particular outer gestural expression of the underlying mental imagery, i.e. the bodily/tactile iconicity will depend on the person’s bodily/tactile impressions of the experience, i.e. on the bodily tactile traces left by these impressions (cf. e.g. Vege, Bjartvik & Nafstad, 2004). A deafblind person may, by spontaneous touch on a particular place on his own body,

be pointing out a place where the impression of the car-belt left a trace or be re-enacting the shaking motion manner that characterizes the bodily impression of traveling by car or train.

The issue of iconic gestures/signs of a deafblind person actualizes again the problem of readability. Partners of a deafblind person need to know the biographical origin of the iconic gestures and the biographical history of how they have been used until now. Given such knowledge, the partner has the opportunity to make an appropriate hypothesis about to what the gesture/sign may refer. The spontaneous and creative iconic gestures/signs of the deafblind person often refer to the place on the body of Self, Other or in the immediate surrounding physical space where the impression of some emotionally charged event left a trace. Whereas mimetic gestures can be referential by imitating the characterizing holistic pattern of bodily action, iconic gestures point by a partial expression to an underlying mental image or concept characterizing where and/or the manner in which some event was felt. It is more demanding for the partner to recognize and understand the potential meaning of iconic gestures compared to mimetic gestures. The reason is that the characteristic mimetic holistic bodily action patterns can be quite similar and recognizable from a visual perspective, whereas the characteristic bodily/tactile impression of an event foregrounded by the deafblind person may be one that is unnoticed from a visual perspective. (See example with Ingerid and Gunnar p 153).

A deafblind person may be scaffolded to initiate a conversational topic if he presents a spontaneous and creative iconic gesture that the partner reciprocates and thereby gives the potential status of a sign. This process has, as mentioned earlier in this chapter, to do with the partner recognizing the possible sign function of the deafblind person's gesture without having yet negotiated a shared meaning. The deafblind person may on this basis experience himself as acknowledged as an intentionally communicative agent, even though there is not yet or only partly a shared topic. The sense of the Other's acknowledgment of Self's communicative intention may be sufficient for the deafblind person to continue communicating. He may sense that the partner intends to understand but does not quite understand. He may then progressively be presenting a for the partner more understandable mimetic gesture accompanied by a readable mimetic expression of *feeling* characteristic of the event in his mind.

Example

Ingerid - a deafblind woman - and Gunnar have been out in the garden to gather apples and are now having a tactile memory-talk conversation about this event. It is clear that Ingerid is involved in what they are talking about even though her own contributions are few and for the most part scaffolded by Gunnar. During the conversation, Ingerid presents an iconic gesture that Gunnar reciprocates (mirrors) repeatedly enabling her to perceive that he has perceived her gesture as an intended communicative utterance directed at him. These recycled (repeated, but with slight variations) reciprocations by Gunnar of Ingerid's utterance maintain for both the sense of his continuous active listening to her - he is at the same time searching within his own memory of the event - looking for what type of bodily/tactile impression this gesture may refer to. After a short time, Gunnar finds out that it is about the rake with which they tore the apples down. Ingerid's iconic gesture for the rake is finger movements that show the *motion-manner* in which she felt the teeth of the rake. Ingerid places the gesture in the middle of her own body-space and not down in the ground-space where the event had actually occurred. Both the placement and form of the gesture made it difficult for Gunnar to find a possible meaning for the gesture. However, the fact that Gunnar had been attentive to Ingerid's tactile manner of feeling the rake's characteristic 'teeth' made him able after a time to arrive at the tactile impression to which the gesture referred. On that basis he could present an interpretive suggestion with sufficiently overlapping conceptual structure, so that co-authorship of a shared meaningful utterance was possible.

(Video: Daelman et al (1999). Development of Communication)

Example

Kirsten – a deafblind woman – and Helga are having a conversation while waiting for some pancakes to be ready. During this shared waiting, Kirsten presents an iconic gesture which Helga reciprocates/mirrors, while she presents several interpretative suggestions. After many unsuccessful attempts to understand the iconic gestures, Helga is able finally to understand that Kirsten's 'breaking-something-small-up-with-her-hands' gesture has something to do with a mental image, i.e. a scenario. From Kirsten's perspective this scenario is characterized by an embedded script that starts with breaking up hard chocolate into pieces with her hands, continues with the making and finally the drinking of hot chocolate. Helga's successful interpretative suggestion regarding which scenario Kirsten was expressing is further supported as Kirsten contributes with additional mimetic and iconic gestures/signs and some conventional signs that all make sense in relation to the same kind of scenario. Kirsten is likely to sense and trust that Helga intends to follow her, and she has experienced many times before that her utterances have been understood by Helga.

(Video 1A: Rødbroe, Janssen (2006). Communication and Congenital Deafblindness: Congenital Deafblindness and the Core Principles of Intervention)

The pointing gestures

The pointing gestures presented spontaneously by deafblind persons look different from visual pointing gestures. However, bodily/tactile pointing gestures occur often and spontaneously and it is therefore important that partners detect and answer such gestures. Detection requires of the partner that she recognizes the pointing gestures by their function and not by their ordinary visual form. The bodily/tactile pointing gesture can occur in many different and exceptional forms. The function pointing gestures have is to lead one's own or the partner's attention towards a *place* on one's own body, the partner's body or in the surrounding physical space (cf. e.g. Ask Larsen, 2003; Ask Larsen & Nafstad, 2006). The pointing gesture can be (re) framed by the tactile conversational space so that it points to a symbolic *place* aspect within a shared signing space. The sharable bodily/tactile signing space is usually

not projected into the air between the interlocutors as in the visual sign languages of the deaf. More often, the bodily/tactile signing space is projected on to a physical spatial space and/or to the physical body space of Self and/or Other. By way of the bodily/tactile pointing gesture, the deafblind person can be directing attention to a particular place, for example on the body of Self where there is nothing physically happening in the immediate here-and-now. However, something in the past that was of importance to, or made an impression on the deafblind person may have occurred or happened on this place. The place is potentially symbolic (proto-symbolic) and therefore as mentioned earlier in this chapter a potential place aspect of an iconic sign when occurring within a potentially sharable bodily/tactile signing space. The deafblind person may for example point towards a 'greeting-kiss-place' on the cheek, an 'eating-place' (the mouth), a 'tickling-place' under the arm pit, a 'drinking-place' (down the throat) a 'pain-place' on the body, a favorite 'pudding-place' (on the table in front of him) or to 'light-source-place' (above herself) and so forth.

The external forms that the spontaneous bodily/tactile pointing gestures of the person with congenital deafblindness may take on can be exemplified as follows:

- Move over to the partner and pull one's partner over to a particular place in the room
- Point by leading a partner's hand to a particular place on body of Self
- Point with one (several) touching fingertip(s) (e.g. the thumb) towards a particular place on the body space of Self and Other.
- Point with a flat hand in touch-contact with a place or oriented towards place
- Point with foot in contact with place or oriented towards place
- Point with head oriented towards place
- Point with forehead, mouth or cheek in contact with place
- Point with whole body oriented towards place

As mentioned, deafblind persons often present pointing gestures spontaneously. This is why such bodily/tactile symbolic or proto-symbolic pointing gestures are privileged contributions to initiate topics in declarative and narrative conversations (i.e. show, share and tell-about conversations). By privileged contribution, we mean that the gestures as such do not require learning as they are created spontaneously by the deafblind person himself. Thereby learning can focus on the conversational function, i.e. on the co-authorship of shared narrative conversational topics that in turn can maintain conversational interactivity over many turns. Maintained conversational interactivity in turn functions as the privileged context for social and cultural learning. It is therefore important that the partner perceives referential pointing gestures as signs and answers them accordingly to make the gestures take on a socially sharable symbolic sign function as referential deictic pointing in conversations.

Example

Robin – a deafblind girl – is sitting with her partner Caroline at the table while eating. During the course of the meal, Robin takes Caroline's hand several times and points with it towards a particular *place* on the table in front of her. Caroline does not understand what it is Robin means by this pointing gesture because there is nothing located on the place pointed at on the table in the here-and-now situation. It turns out in subsequent analyses of the possible meaning of the utterance that Robin with her pointing gesture is likely to be referring to a *place* on the table where her favorite cheese is usually located, i.e. to the 'cheese-*place*'.

(Video: Daelman et al (1999). Development of Communication)

Creative use of idiosyncratic or conventional signs

Persons with congenital deafblindness often seem to comment about how they experience the mood of some event to the partner they are with. If the deafblind person lacks conventional words or signs for moods, he may use conventional or idiosyncratic signs in creative ways to characterize the *mood* of the here-and-now context, as for example pleasant, fun or boring. For the partner, it is important to maintain attention on linking non-conventional utterances to the sharable here-and-now context and not be lead astray by the conventional sign's lexical meaning. An utterance that contains a sign that initially does not fit the cultural expectation of its use in a certain context may fit when considering the here-and-now sense-making contextualizing perspective of the deafblind person. Spontaneous use of signs that initially seems strange or unfit in the context can often be comments about how the person experiences or perceives a situation with regard to the *feeling* or the *mood* it brings about in him.

Creative use of conventional signs

Many persons with congenital deafblindness have a limited repertoire of conventional signs. However, as pointed out above they may use the signs they know in various extraordinary ways in utterances that express a spontaneous thought, an opinion, or an issue of particular interest in the here-and-now. The need for conversational negotiations about shared meaning is generally in the foreground, also when conventional signs are used in creative ways and when the shared vocabulary of conventional signs is very limited.

A person with congenital deafblindness may, for example, use the conventional sign ICE CREAM or COFFEE in utterances that occur in contexts where it is relevant to express the desire for ice cream or coffee. However, he may also use the same signs in contexts in which the relevance and therefore also the possible meaning of the utterance is different and connected to the comment that the *feeling* or *mood* of an event is pleasant or delightful, i.e., just as pleasant as 'ice-cream-events' or 'drinking-coffee-events'. Thus the signs ICE CREAM and COFFEE can also occur in utterances where the intended meaning is to make known to the Other one's wish to experience relaxed togetherness around some event, as is characteristic of the mood in 'coffee-' or 'ice-cream' events.

Example

Tina – a deafblind woman – is on a horse and buggy ride with her teacher Rikke. They are enjoying themselves while they roll along the forest trail. Suddenly Tina addresses Rikke with a signed utterance that contains the conventional signs ICE CREAM and SWEET. Rikke considers that Tina with this spontaneous utterances in that particular context is unlikely to be expressing a sudden and immediate request for ice cream or sweets. Rikke answers Tina with an utterance containing the signs ICE CREAM/SWEET/FUN since she assumes that ICE CREAM and SWEET are fun for Tina and that Tina's focus is on commenting the *mood* of fun that the here-and-now ride arouses in her. Tina looks content with Rikke's contribution to co-author the meaning of her spontaneous utterance.

(Video 1E: Souriau et al (2008). Communication and Congenital Deafblindness: Meaning Making)

Co-creating shared meaning (intersubjectivity)

In the context of conversational interactivity, each partner will direct his/her attention both towards formulating his/her own thinking (the subjective orientation) and on that basis orient towards the partner in order to make known to the Other what he/she is thinking about (the inter-subjective orientation). The partner may get an idea about what the deafblind person is thinking about as she takes a listening attitude to the deafblind person's partner-directed utterance. The partner may subsequently express the relevance of the utterance by acknowledging, expanding and enriching it. The partner's contribution to co-creating shareable meaning and co-authoring shareable utterances can thereby expand the shareable and shared perspectives beyond that which the deafblind person is able to formulate himself (Ask Larsen & Nafstad, 2003). The foregrounded interactivity of co-creating shared meaning and shared realities contrasts with a practice that views conversational interactivity to be primarily about questions and answers. The emphasis is on maintaining conversational other-directed speaking and listening attitudes or positions that enable shared engagement in meaning-making communicative projects.

Utterances

The authorship of an utterance is initiated by a Self in a particular context and is directed towards an Other. Utterances are different from and more than signs, words and sentences. The notion of an utterance is closely connected to the activity of meaning-making. Conventional words or signs have lexical meanings, utterances not. Words are spoken, signs are signed. Both can be used to construct sentences which may or may not be used to create utterances. Utterances do not require use of language in the linguistic sense - a piece of art can be seen as an utterance. When signs or words are used to create utterances, grammatical construction is not a requirement. Utterances are authored by one or co-authored by several authors and do not have a fixed meaning. The meaning is co-authored anew in the conversation between the parties who participate in it each time an utterance is (co) created. The potential meaning of an utterance varies with many contextual dimensions, such as:

- Who initiates the utterance and to whom the utterance is directed
- What topic the utterance is related to
- What the here-and-now intention or relevance of presenting the utterance is
- Where and when the utterance is presented
- What the origin of the utterance is in its bibliographical history
- How the utterance has been used in the life of its author(s)
- The relationship of the utterance to other utterances and to the narratives/stories of which this and similar utterances are a part.

The utterances of deafblind persons can be very difficult to understand

The notion of co-authorship and the way we apply it in *The Developmental Profile* is inspired by dialogical theory. The notion of co-authorship is preferred here to the more general negotiation metaphor in order to foreground not only the collaborative but also the creative dimensions of conversational meaning-making processes. Co-authorship processes are especially prominent in improvised conversational interactivity where the partner follows and expands on the spontaneous utterances of the deafblind person. Thereby the partner contributes to co-authored utterances which in turn can function as co-authored comments or parts of co-authored stories.

However, the deafblind person's spontaneous utterances can be very difficult to understand. The partner's contributions to co-author sharable utterances, sharable parts of language, and sharable themes in a conversation will in many cases require use of theoretically grounded analytical tools which can make co-authorship easier. The scientific field of cognitive semiotics is concerned with making theoretical models of the cognitive imaginative processes that are activated during meaning-construction. Both cognitive semiotics and the neighboring scientific field of cognitive linguistics model these processes in terms of mental spaces that are activated and combined in certain ways during creative meaning-making. It is further assumed that this fundamental process is universal for humans, which means it is shared by the deafblind person and the partner. There are several mental space-models. A model developed by Brandt & Brandt (2005) is modified and developed further by Ask Larsen (2003) to be applicable to the characteristically very difficult and frequently non-linguistic communicative circumstance of congenital deafblindness. Ask Larsen's model – called *The 6-Space Model* – is a useful analytical tool when applied within the overall theoretical framework of dialogical theory. Partners can be trained to use the analytical tool as a guideline to the analysis of processes of meaning-making during professionally chaired video analysis sessions. Progressively, the guidelines may become more incorporated in practice. The partner's engagement in co-authorship of utterances with sharable meaning may then be disciplined both by the model and by the spontaneous utterances from the deafblind person. Inspired by *The 6-Space Model*, we will suggest some questions that one as partner can ask oneself when trying to co-author utterances that have meaning-potential that is sharable with the person with deafblindness. The questions take as point of departure a particular video-taped event, such as an utterance by the deafblind person that is very difficult to understand. The questions can guide the radical decentration process required to find out what is conversationally sharable in a particular context between

two persons living in two different worlds. The result of analysis is a suggestion with regard to the possible meaning that can be ascribed to the utterance. *The 6-Space Model* which guides the questions is described by Ask Larsen (2003).

The analysis begins by asking if there are observational cues in the video footage that tell us if the deafblind person and the partner are directed to and relating to each other in a conversational manner. If so, then we can make further assumptions about the shared conversational context:

- Both the person with deafblindness and the partner experience the Other as physically accessible and socially available for shared conversational interactivity.
- Both partners are more engaged in other-directed conversational interactivity than in other kinds of projects, such as solitary activity, play or exploration

In as much as it appears that the deafblind person and the partner are involved in a conversational manner with one another we focus further on one utterance that the person with deafblindness addresses to the partner. Analysis can proceed by focusing on the particular external characteristics of this utterance:

- What is the form of the utterance? In other words: Does the utterance consist of mimetic/iconic/deictic elements/conventional signs/or a combination of these components?

The type of symbolic (referential) component(s) the utterance consists of indicates the manner in which the utterance expresses mental images, which in turn is one of several dimensions that has consequences for the potential meaning that can as result of analysis be projected to the utterance.

In letting further analysis of possible meaning be guided by *The 6-Space Model*, we need in the next analytical phase to recall the scenarios in our own memory which may be shared with that of the deafblind person, and list the possibilities.

- Is there something in this here-and-now context that may remind the deafblind person of an event/type of event; i.e. that may trigger the memory of a distal scenario?

Examples of such mappings may be:

- A sound pattern in the here-and-now situation reminds of a sound we know the deafblind person has related to in a distal scenario
- A pattern of touch, posture and/or motion in the here-and-now reminds us of similar patterns we know the deafblind person has marked in distal scenarios.
- The bodily-emotional mood reminds us of a mood we know the deafblind person was expressing in a distal scenario.

Analysis may then proceed to focus on relevance:

- Is there a mapping between components in a scenario in memory and components in the here-and-now context that is more relevant than another mapping?

To make an assumption about relevance, we need to hypothesize what type of cognitive or communicative meaning-making project the deafblind person is engaging in here-and-now.

- Is he trying to make sense of/categorize the circumstance he finds himself in here-and-now? Is he trying to direct the attention of his partner to some particular aspect of his own utterance? Is he trying to add another component to a chain of already co-authored components during co-authorship of a complex utterance? Is he trying to make an evaluative comment about the emotional mood of a shared conversational theme? Or is he trying to ask about something?

The different main questions above belong to the different mental spaces in the model, and the mappings between the content of these spaces make content from all the spaces blend into each other, so that the potential meaning of the utterance emerges from the blend. The use of the model makes the otherwise implicit and subjective process of projecting meaning onto the utterance explicit, sharable in a group and discussable. Another major analytical purpose of the use of the questions derived from *The 6-Space Model* is that it is possible to identify where there is asym-

metry in the contextualization between the deafblind person and the partner. Such asymmetry will hinder the process of co-creating shared meaning.

During the course of such analysis sketched above we have been considering how an utterance presented by the deafblind person here-and-now might connect to particular components in a particular referential mental image or scenario. The result of the analytical process is that we can make a reasonable interpretative suggestion that can be tested out in a communicative negotiation process with the deafblind person. Such a subsequent occasion can happen when similar utterances may be presented in similar contexts. The person with deafblindness will relate to the suggestion in a manner that indicates that he either accepts or rejects the partner's suggested interpretation. As long as the deafblind person perceives the partner's intention to understand he may remain in conversational interactivity in spite of many misunderstandings and hard negotiations about shared meaning (Nafstad, 2009). The deafblind person can indicate that he rejects the interpretational suggestion by formulating the same utterance over again. When the deafblind person perceives the Other's intention to communicate, he may eventually present a new component that adds more cues for interpretation. Additional components may express the associated felt mood and/or he may present more deictic, mimetic or iconic gestures or signs that function as cues that increase the readability of his utterance.

Example

In the previously described example (see page 154 in which Helga tries to understand what Kirsten's gestures refer to, Kirsten contributes the following additions:

- Repeats the creative iconic gesture as if 'breaking-chocolate-into-pieces' and variations of it
- Adds conventional signs
- Uses bodily deictic gestures to direct Helga's attention towards the 'cooking-*place*'

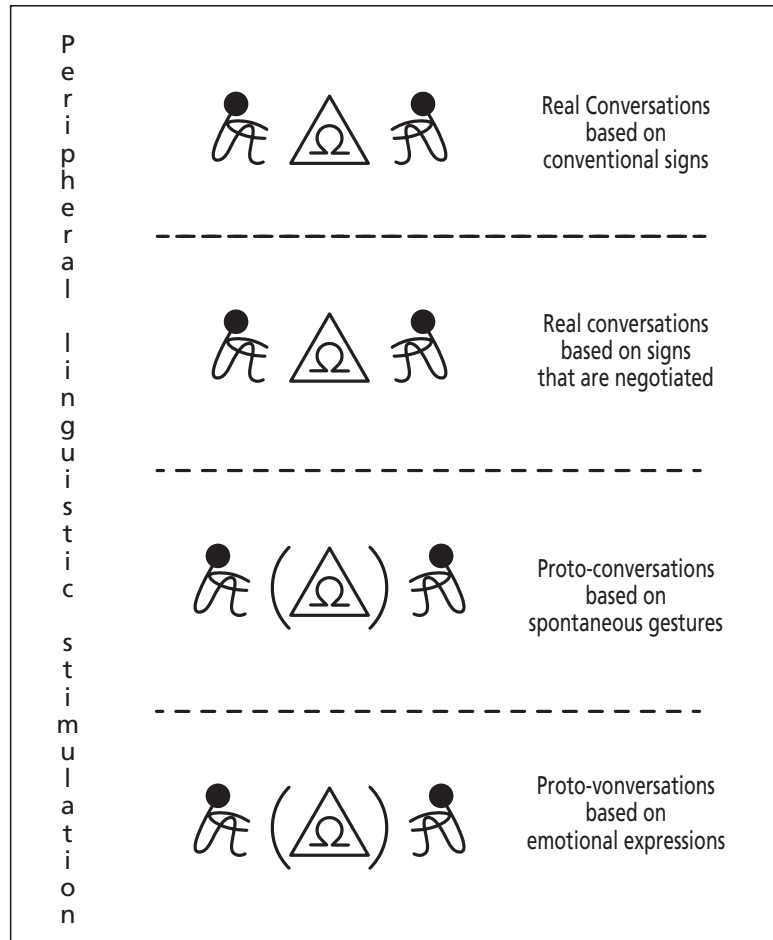
As mentioned a communication partner may be successful in maintaining the negotiation process about shared meaning over a long conversational sequence even if shared meaning as a product is not arrived at. We may expand on the already mentioned point regarding the reciprocal perception of the Other's communicative intention as follows: the continuity of the negotiation process indicates that the deafblind person's perception of his partner's engaged effort to stay in a collaborative co-authoring process about sharable and shared meaning empowers and motivates his own contribution. The conversational relational practice is in sum first and foremost about staying in conversational interactivity. It is about maintaining the frame within which collaborative language-making, co-authorship of shared utterances and conversational themes and negotiations about shared meaning can go on. The continuity of the conversational frame provides opportunities for the deafblind person to experience himself as acknowledged and listened to in the role of co-author of shared utterances and shared conversational themes and negotiator of shared meaning. Beyond this, such a frame empowers the deafblind person to speak in his own voice, i.e. about matters of his concern in the, for him, least demanding manner. The deafblind person and the partner may progressively both experience that it is possible to maintain the tension of not understanding each other's utterances immediately. They may both come to trust the possibility to arrive at co-authorship of shared utterances, co-authorship of sharable conversational themes and shared meaning. For the deafblind person it is obviously important that the partner becomes someone who contributes to authorship and contributes to formulate and make explicit what he is trying to say. A partner role as co-author of shared meaning and co-author of utterances that lift the deafblind person's own voice is very different from a partner role concerned with decoding messages.

It is often the case that it takes video recordings and repeated micro analytical efforts in focus groups (see chapter 5) to figure out how the deafblind person constructs his utterances, and what his contributions to shared meaning might be. In video analysis situations, the questions described above with reference to *The 6-Space Model* can be applied by the whole group. Participation in such a shared process in which the whole network of partners and consultants collaborate to find relevant interpretive suggestions will help each individual participant become a better co-author during a conversation process with a deafblind person. This is to say that the time spent without direct contact with the deafblind person, for video analysis purposes, pays off in the long run in terms of becoming a better equipped communication partner.

Construction of the column: 'conversations'

Illustration 25

Conversations



The column is constructed on the basis of a relational understanding of conversations. The tactile conversational practice makes concretely observable that the partner maintains reciprocal directedness towards the Other in relation to the utterances that are presented in the conversation space. They maintain other-directed conversational interactivity. This type of interactivity is fundamentally dialogical in the

sense that it consists of directing, following and reciprocating attention perspectives between Self and Other in relation to shared utterances. In conversations the partner may direct the Other's attention to what he/she is thinking about through the use of a shared vocabulary of signs. The roles and perspectives of the conversation are, like the conversational themes, to begin with scaffolded by the partner. Sharable conversational themes will at first be few and closely related to ongoing here-and-now interactivity, such as interactive play. Progressively, conversational interactivity can be freed from the scaffolding touch by the partner. Themes will become diverse, so will utterances. Spontaneous utterances will take on increasing complexity with regard to potential meaning. Utterances will, as they become increasingly more symbolically communicated, also be free from the physical context and relate to the deafblind person's thoughts or mental images. The conversational manner of relating will, if it is made sustainable, enable a steadily increasing diversity of symbolic roles and perspectives to be expressed in a sharable bodily/tactile manner.

Whereas linguistic practices are culture specific, the conversational practice as such is more fundamental and the basic pattern is shared by all cultures. This means that partners of deafblind persons must scaffold the conversational frame within which the deafblind person can be active. The conversational frame is superior to the other environmental relations in *The Developmental Profile* in the sense that it contains relational components from the three more fundamental and dyadic environmental relations. Interactive engagement within conversational frames enables the co-creation of sharable utterances, sharable parts of language and shared meaning. Conversational interactivity enables shared curiosity about and interest in getting to know the surrounding world. Conversational interactivity enables encounters that set the surrounding culture in touch with the voice of the deafblind person and vice versa. On the psychological level conversational engagements enable the co-authorship of biographical narratives that are basic to understanding others and to development of self-hood and identity.

In sum, this intervention model emphasizes participation in conversational interactivity because it is engagement in conversations that has the greatest potential for empowering the psychological development of the Self of the deafblind person. The emphasis on conversational interactivity likewise broadens the scope of the partner so that she is able to recognize, listen to, and expand on the voices of the deafblind

person. These voices are for the most part expressed in non-conventional ways in utterances composed creatively over patterns of movement, positions and touch.

The categories in the column called ‘conversations’ are composed of drawings and some few keywords gathered from the text describing the four sets of observational cues in the column. As for social interactive play, the proximal developmental processes create the driving power throughout all four relational layers described in the column. Further development is nourished by the quality of the proximal exchanges between the deafblind person and his partner. High quality is accordingly indicated by the following observable cues:

- High activity regarding utterances presented by the deafblind person
- Reciprocity in the conversational relational pattern
- Maintained reciprocity in conversational interactivity throughout the sequence
- Increasing complexity in the sharable topic that is building up
- Stabilization of conversational relations with relevant complexity across different partners and life-environments.

We will now proceed to describe how the engagement in conversations can develop further focusing on how the deafblind person’s engagement can be supported in planned intervention. We begin by describing peripheral language stimulation which should be a continuous dimension in the deafblind person’s developmental environment.

‘Peripheral linguistic stimulation’

We begin by regarding conversation as a fundamental environmental child-caretaker relation. (Proto) conversation is characterized by a type of communicative togetherness in which the adult accompanies the ongoing non-linguistic reciprocal acknowledgment of one another’s utterances with a layer of linguistic expressions. The accompanying layer of culture-specific linguistic expressions is tuned to the ongoing non-linguistic proto-conversation, so as to be in accord with shifting levels and foci of attention and shifting emotional moods in the interaction. A typical linguistic expression

accompanying the baby's other-directed smiling face will be "You are loooooovelyyy" – and accompanying other-directed pauses in his otherwise explorative engagement "You are so clever". An accompanying expression to other-directed attention following decreasing interest in an explored object could be "Are you bored with that?" The child does not understand the linguistic dimension but he can perceive that the utterance is directed to him, involves him and is about how he is feeling in the moment in relation to his here-and-now engagement in the environment.

We know that it is important to acquire impressions of communicative use of language in a coherent and non-distorted manner early and consistently. The question for us is how the deafblind person can be engaged as early as possible and as consistently as possible in coherent and non-distorted impressions of the environment's cultural- linguistic practices.

There are several barriers that make it hard for the partners of deafblind persons to accompany proto-conversations with cultural linguistic utterances. It is difficult to know whether the layer of accompanying linguistic expressions should be vocal speech, sign language or combined forms. The solution to the problem requires that the partner develops the skills that enable her to translate impressions of linguistic practice to the deafblind person through patterns of movement and touch. The difficulty has to do with finding a mode that does not distort the deafblind person's ongoing engagement or divert his attention. It is however the case that many children and young persons with congenital deafblindness have access to impressions of living cultural language through use of residual hearing often aided by a hearing aid or cochlea implant (CI). This access to impressions of vocal speech in the surrounding environment through hearing can be quite good even though most deafblind persons tend not to develop spoken language as their preferred expressive modality, but rather variations of more or less tactile signing. In order to give access to an accompanying peripheral layer of linguistic expressions it is important to be open to the possibilities of both spoken vocal language and sign language. However, as mentioned, access to the linguistic layer of communication needs to be offered in a manner that does not divert the deafblind person's attention and distort the flow in the meaning-making that is going on in the more fundamental conversational processes. In other words, we claim that that the reciprocal communicative engagement is at the core of all conversational interactivity whereas the framing and accompanying use of cultural language can be seen more as peripheral stimulation patterns.

The partner's accompanying non-distorting use of combinations of spoken and signed linguistic practice is necessary for early language stimulation of persons with congenital deafblindness in spite of there being clear grammatical differences between the two languages. The partner may for example accompany the communicative interaction with providing bodily/tactile impressions of spoken linguistic utterances directly on the skin of the deafblind person, on the face or elsewhere on the body. Bodily/tactile impressions of prosody (linguistic rhythm and melody) can become more salient by being dramatized and recycled. The contours of tactile signing may also be placed haptically on the body surface of the deafblind person, as tactile signing performed with the hands of the person can, but need not, be distortive. Language stimulation when not planned for is often understood as learning to communicate by using formal signs. There is a risk that such an approach will reduce communicative development to learning only a small number of conventional signs with which one can only communicate in repetitive manners about very few themes. The approach suggested here is not to choose between communication or language stimulation. One suggestion is to frame conversational interactivity so as to give access to tactile impressions of linguistic patterns that are mapped onto meaning-making patterns and thematic dimensions in non-linguistic conversational interactivity.

Partner competence and continued language stimulation

The practice to which we point here is dependent on a diversity of linguistic skills in the social environments of the deafblind person. An optimal learning environment is composed of persons who have linguistic skills both in sign language and vocal language. Beyond this, the partners of the deafblind person need to use these skills in a way that maintains and develops meaning-creating communication further. In addition, partners need to make the language use of the surrounding culture interesting for the deafblind person. The direct face-to-face communication with deafblind persons who are tactile for communication purposes will often be a form of signing, more or less linguistic. The signs that the person can use in an improvised manner in meaning-making conversations tend to be a variation of home-signs, i.e. signs negotiated from the deafblind person's own spontaneous gestures. Such gestures may be supplemented with some conventional signs that the deafblind person has adopted from the partner and uses in non-conventional/creative ways.

However, the deafblind person cannot come to understand how language works to share knowledge between persons unless he accesses the impression of how language lives in the cultural world outside the dyad. In many cases the deafblind person will be interested in overhearing in a tactile manner other persons having a conversation about a theme that concerns him. Thematic elements of other persons' more fluent linguistic conversations will be recognizable to the deafblind person if the central theme builds on a story from his life. A story that is foregrounded in a narrative style, may be recycled and formulated in a manner he can recognize. An underdeveloped and/or non-conventional condition with regard to Self's role as narrator in conversational interactivity should not hinder attempts to give access to overhearing other people's more conventional cultural-linguistic use of language (cf. Lundqvist, Klefstad & Seljeseth, 2012).

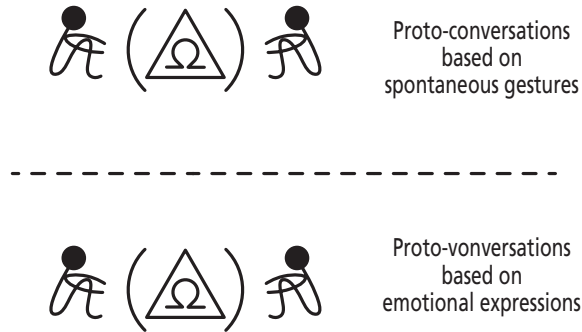
A person cannot acquire a cultural linguistic practice to which he has no access. How to provide access to the cultural linguistic dimension of communication in a planned way that is adapted to the individual deafblind person is a considerable challenge.

In sum, the notion of proto-conversations as we have thematized it above, specifies a basic dimension of face-to-face communication. These conversations constitute engagement in conversational frames that also contain peripheral access to impressions of linguistic patterns in use. To get a feeling of how language lives 'out there', tactile overhearing can be meaningful for the deafblind person. Peripheral access means that the deafblind person has access to impressions from the patterns of language use as part of the surrounding environment without taking part directly himself as a speaker, and without necessarily focusing his attention on these impressions. Peripheral access should not distort the deafblind person's attention. The point is to give him impressions of recycled dynamic patterns, in particular narrative contours. This contrasts with impressions of repeated rigid patterns of something perceived as noise. In proto-conversational settings, language use should also take on dramatizing narrative contours which are in accordance thematically and emotionally with the deafblind person's own thematic focus.

We will now move on to look more closely at how the utterances of the person with congenital deafblindness develop from their origins in proto-conversations. However, we need to keep in mind that 'peripheral linguistic stimulation' continues to be relevant alongside the deafblind person's increasingly more developed contributions to conversational interactivity.

'Proto-conversations based on emotional expressions and spontaneous gestures'

Illustration 26



The illustration begins with 'proto-conversations' that initially build on the immediate emotional expressions by the deafblind person and transform them into other-directed utterances. Such immediate emotional expressions from the deafblind person may in other words be perceived by the partner and reciprocated back to the deafblind person as an uttered comment about how he is doing/feeling in that moment. The point is that it is not enough that the partner perceives the deafblind person's expression as an other-directed utterance about how he is doing or feeling at a certain moment. It is not enough that she imitates his emotional expression, confirming that she has perceived it. The point is to keep in mind the principle of the PZD (The Proximal Zone of Development). In addition we need to keep in mind the principle of dialogicality of mind, which helps specify how the PZD works in the domain of face-to-face communication. The principle of dialogicality (other-directedness of minds) here has to do with constructing one's image of Self as one who perceives oneself as perceived by the Other. The partner needs accordingly not only to perceive the Other in this confirming manner, but also communicate to the deafblind person her perception of the Other as one who by way of his utterance comments on and has a feeling about his situated circumstance. If not, this perception remains within herself, as private. In ordinary circumstances the proper way tends to go by itself, we need no theory about it. In the case of congenital deafblindness, dialogicality can fall apart unless it is planned for. The partner therefore needs to reciprocate her perception of him as a story-teller, of him as one who can tell the story about how he

feels in that moment, otherwise his sense of a socially communicative Self will be reduced to that of a social playmate. The partner needs to make explicit the conversational framing of the utterance in her way of answering. She needs to make explicit that she was in the role of a listener to his utterance and that she in the role of speaker relates to him the utterance she heard him say. She does not need to interpret the content of the utterance itself, simply to imitate it but give it a more clear narrative contour and reflect it back as a fully-fledged but simplified other-directed utterance that is a comment on his feeling about (opinion about) his situated circumstance.

Progressively, as the communicative relations that the deafblind person participates in develop, 'proto-conversations' with improvised themes and utterances will also build on spontaneous and creative referential gestures that are presented spontaneously by the deafblind person. As conversational frames becomes more and more sustained and stable in his life, the deafblind person will progressively be able to use his energy to both co-create and acquire symbolic signs in a motivated way while co-authoring shared utterances and shared meaning.

From the 1960's and to the present day, many scientists have been interested in the in-born and early social competencies of the infant which seem to make him ready to engage in a conversation with a partner. In a previous section in this book, we addressed the notions of high and low readability. We mentioned there how parents of seeing/hearing children become influenced by their children's spontaneous activity quite intuitively, i.e. without reflecting on it. Parents in our culture will, as we have mentioned, perceive the child's spontaneous expressions as other-directed meaning-bearing utterances in a conversation. The explanation is that the child's activity, biologically determined, is so similar to parents' cultural expectations. Shared engagement in conversations can be immediately established and easily developed further. It is obvious that deafblind persons have limited access to the Other's facial expressions, even with residual vision and/or hearing. Access to the Other's gaze, mimicry, vocalizations is under ordinary circumstances effortless, but is seriously hindered by congenital deafblindness.

Face-to-face situations, which are characterized by reciprocal accessibility between Self and Other, will tend not to get established effortlessly when one of the part-

ners has congenital deafblindness. The hindrance is there, even though each partner in principle is ready to direct his attention to the Other, even if they both desire it. Planned intervention builds in *The Developmental Profile* on the knowledge that face-to-face situations are characterized by the partner identifying with the infant, in the sense that the infant's other-directed expressiveness is perceived and related to with reciprocation and projection; i.e. as if it were her own. She can easily join the child's spontaneous expressiveness and answer in a way that the child recognizes. This reciprocal recognition of the Other's expressiveness and of the Other's utterances is at the same time a reciprocal acknowledgment of the Other as 'someone-like-me'. Reciprocal recognition and acknowledgment of sameness between Self and Other in spite of considerable difference is the experiential core in all the four environmental relations in *The Developmental Profile*.

Planning participation in proto-conversations

Conversational frames enable shared engagement in meaning-making in relation to any aspects of the action/interaction that is going on within the frame. Persons with congenital deafblindness do not have effortless access to participation in conversational relations, therefore participation should be planned for by the communication partner. Access to participation in conversational interactivity should be frequent enough to frame all daily routines and rituals in all of the deafblind person's life arenas.

Functional vision and/or hearing make it possible for partners to comment on the child's relatedness to an ongoing action on line. The comments are picked up on and add more meaning to what the child is attentive to and interested in. Such expanding commenting tends under ordinary communicative circumstances to proceed by itself. With persons with congenital deafblindness, the partner must plan such commenting and consider how, where and when to comment in a non-distortive manner. There is a risk that the deafblind person's bodily/tactile concentration will be broken if the partners relate with tactile conversation hands.

The partner may alternatively use haptic communication to make more or less linguistically formulated comments that connect to the here-and-now context and to the deafblind person's ongoing action. The partner can, for example, provide information about the direction in which one should walk or what and whom one might

pass by during a group outing. The partner can give such supplementary information by placing haptic²² signals and signs on the deafblind person's back, shoulders or upper arms. The haptic communication practice is mainly used by communication partners with the purpose of informing about crucial components of the here and now context that the deafblind person himself misses. In that manner haptic signals can also inform about the context during an ongoing conversation (Lahtinen & Palmer, 1997).

A third route to access impressions from use of cultural language is through vibro/tactile perception of vocal speech, or Tadoma. Tadoma is a natural linguistic communication practice for some deafblind persons. It is the tactile equivalent of visual lip reading among deaf persons. Tadoma consists of feeling the Other's face with the hand and fingers in certain positions that make it possible to extract and combine the contrastive patterns of which spoken language consists when perceived in the vibro/tactile modality. There are not many examples of persons with congenital deafblindness that take naturally to Tadoma but there are a few that use aspects of the method. The following is an example of a private variation and use of Tadoma.

Eksempel

Santeri – a boy with congenital deafblindness – is sitting in the lap of Kirsi, who is his care-taker. Kirsi is naming the different parts of the body with reference to a doll, Santeri's body and her own body. Santeri is very engaged in this naming game and when he has grasped the sign FOOT he asks Kirsi to pronounce the word for foot on his cheek so that he can feel the impression of the vibro/tactile pattern of the spoken word.

(Video 2B.4: Janssen & Rødbroe (2007): Communication and Congenital Deafblindness: Contact and Social Interaction)

22 Bodily/tactile signals and signs placed on available parts of the body i.e. shoulder, arm or back.

Dialogicality and the conversational frame

A fundamental contribution to proto-conversations from the deafblind person is the direction of his attention towards his conversation partner. Other-directed attention does not tend to happen by itself in the case of congenital deafblindness. The partner needs to make a conscious effort to make the deafblind person perceive her as accessible, interesting and available to him in her role of conversation partner. In order to trigger the deafblind person's other-directed attention, the partner may relate in a manner that gives the deafblind person the experience of encountering an Other who is someone like himself. An effective strategy consists in the partner imitating the spontaneous expressions of the deafblind person, thereby giving the expressions the function of other-directed utterances which she reciprocates. In this manner the partner becomes a recognizable and understandable Other for the deafblind person. Once the attention of the deafblind person is directed towards the partner, she needs to act so as to make it interesting for the deafblind person to maintain other-directed attention. There are no specific guidelines with regard to the challenge of maintaining the deafblind person's other-directed attention within conversational frames. However, while being aware of the aim and of the hindrances, the partner can apply an explorative practice. She can discipline her own other-directed attention so that small variations in accordance and less accordance with the attention of the deafblind person build up just enough tension to make him active in contributing to maintaining reciprocal other-directed attention.

In proto-conversations the deafblind person learns to relate in a conversational manner by experiencing himself in the different complementary roles which characterize conversational practice. The most fundamental pair of interdependent roles (adjacent roles) is that of listener and speaker. Beyond this, are the roles of someone who thinks while the Other waits for resumed socially directed availability. As one conversational partner shifts into a listening role in relation to the Other's speaking role, this is marked by shifts in the conversational positions of the hands. The tactile conversational hand positions mark the reciprocity that enables dynamics in tactile conversations, and the patterns need, as mentioned, to be taken over from the adult through her scaffolding practice.

When a conversational frame is established it is characterized by maintained and reciprocal other-directed attention indicated by coordinated shifts in tactile conversational hand positions. The conversational frame transforms the deafblind person's spontaneous expressions; i.e. his bodily posture and orientation, his vocalizations and gesturing into signs and thereby into symbolic components of meaning-making utterances in a conversation. The other-directed listening position taken by the partner gives the deafblind person in a speaking position a sense of being perceived by the Other as an acknowledged speaker.

We may assume that a sense of conversational agency is emerging within conversational frames so that the deafblind person's utterances will be more clearly addressed to his conversation partner. Increasingly clear addressivity is indicated when his hand-positions indicate that he expects the Other to relate with listening hands to his own speaking hands. We may further assume, with reference to dialogical theory, that the sense of being someone who is worthy of the Other's listening attitude is crucial for the development of Self's communicative agency (Nafstad, 2009). To become stable, the experience of relating to one another with conversational listening and speaking hands must be recycled in all the life environments of the deafblind person. While conversational relatedness is in the process of becoming more stable, the partner should also support socially directed attention so that it can be maintained for longer periods and become progressively less fragile. Increasingly robust conversational relatedness requires the partner to contribute to expanding the vocabulary of sharable forms of expressions and initiate thematic variations that are of interest to the deafblind person. On that basis the deafblind person's other-directed attention becomes increasingly more sustained.

Given that other-directed attention is sustained within conversational frames, we may expect that the deafblind person will begin to be interested in what the Other is interested in. If we look at how the arm, the hand and fingers of the deafblind person are in touch with the arm, hand and fingers of the partner, we may discover that the deafblind person is seeking to follow the bodily tactile attention direction of the partner. Thereby the deafblind person is trying to discover and eventually share what it is that engages the partner at a certain moment.

When applying a micro-analytical perspective based on video-recordings we may discover variations of the following kind of pattern:

A point of departure is that the deafblind person becomes informed by touch about the partner's bodily/spatial attention direction as indicated by the orientation of her body, and her arm. He may continue to build a mental image about what it is that engages her by feeling the manner in which she relates to that object/place by moving his light touching hand further down her underarm until he feels the motion pattern in the wrist and on the backside of her hand. The deafblind person has now been informed about spatial orientation. He may continue his aligning light touch to feel how the partner positions and moves her fingers until he eventually is in touch with the same object or locus. Variations of this pattern are the tactile equivalents of when a child follows his mother's gaze direction and identifies her focus. Eventually the partners will communicate with each other, more or less non-linguistically, their shared interest in the same focus.

Sequences such as that described above, which lead up to the partners communicating their interest in the Other's focus as being the same as his own, are what we call here 'joint attention sequences'. In visual dyads, such triadic interconnectedness of attention is enabled by triadic coordination of visual gaze. The equivalent triadic function in the tactile modality requires shared and coordinated use of tactile conversational hand positions. The coordinated shifts in hand positions indicate coordination of bodily/tactile attention directions and attention foci in relation to third elements. The third element has a locus in space, which can be the locus of an object or a sign.

In sum, coordinated use of conversational hand positions may indicate a striving on the part of the deafblind person towards obtaining joint attention to a third element. In other words, something pointed at by one will interest the Other and vice versa. Proto-conversations can then be re-framed as full conversations where utterances are about something cued by the third element that is pointed at; i.e. by the element of joint attention.

Example

The photographic strip below illustrates another small sequence in a video-taped encounter between Peter who is profoundly deaf and totally blind and a sighted and hearing pianist. In the strip we can see that Peter (in blue) with one hand follows the pianist's finger movements in relation to the keyboard. In the original video tape one can hear how the pianist relates back in an improvisational manner with musical other-directed attunement. As the pianist gives Peter the role of a listening co-player, Peter is enabled to get in touch with basic dynamic dimensions in the music. The way the pianist relates to Peter can be viewed as an answer to her perception that he is addressing and following her in order to understand how the body works to make that kind of music.

(Annica B. Henriksen/Ragna Ringdals Daycentre, Oslo. Video presented at the conference, "The Magic of Dialogue", Paris 2010)



In the example with Peter and the pianist the partners cannot address each other through conversational hand positions without distorting the shared involvement in the playing activity. The partners cannot therefore comment on what is happening. An accompanying (proto-) conversation would likewise distort the ongoing shared activity. However, the reciprocally other-directed manner in which the tactile attention to one another is joining in relation to the playing could have the same pattern in a (proto-) conversation. Real conversations and proto-conversations differ with respect to joint attention. Contrary to what is the case for a real conversation, a proto-conversation does not require co-referential joint attention

to the same third element; i.e. to the sign/the signed utterance. A second differentiating characteristic has to do with the continuity of dialogical/other-directed relatedness. In a real conversation the continuity requires ongoing meaning-negotiation. In proto-conversations the partner is responsible for the conversational envelope, while the deafblind person's participation is fully scaffolded by the adult; it is an 'as if' participation. The continuity of a conversation-like dialogical form of shared interactive involvement does not require meaning-negotiation. Variations in musical dimensions of rhythm, tension, movement, force make it possible to maintain an improvisational form of reciprocally other-directed interactivity, as the example of the piano music above illustrates (cf. Hallan Tønberg & Strand Hauge, 1997).

'Real conversations based on signs that are negotiated'

Communication is fundamentally going about directing attention (cf. Tetzchner & Martinsen, 2000). Real conversations are basically building on attention directing interactivity. In real conversations, the role taken by the partner is the role of someone who is curious about and wants to share what the deafblind person is thinking about at a certain moment. What the deafblind person is thinking about is mediated by a symbolic utterance, basically an intentionally other-directed act of pointing to a third element, a place in a shared conversational space/signing space. Communicative intentionality involves the deafblind person's awareness that the Other's attention direction and attentive focus can diverge from one's own and on the other hand that it can be shared. We use the notion of joint attention here to point at an observable practice that is characterized by both partners being collaboratively engaged in coordinating attention directions and attention focus in relation to a third locus, which function as a sign locus.

Illustration 27



Real conversations
based on signs
that are negotiated

The opportunity is opened for participation in real conversations when the deafblind person masters both monitoring the Other's attention direction and aligning with the Other's attention direction in relation to a third element. The deafblind person participates in proto-conversations without mastering the conversational reciprocal manner of directing and following attention. By contrast, in real conversations he shows such mastery. On this basis the deafblind person will be ready to engage with his partner in the signs, the utterances and themes of the conversation. The deafblind person may then take the role of one who, in an improvised manner, initiates and contributes to co-author sharable conversational themes and to co-create a sharable vocabulary of signs. Such conversational agency from the deafblind person requires however an open invitation from the partner. The partner should note a third element which the deafblind person is attentive towards as a potential sign locus, which makes it relevant to engage further in the co-authorship of sharable conversational topics. The partner can do this by presenting to the deafblind person several presumably relevant suggestions as to what the referential gesture might refer. When the partner thus varies her suggestions, the deafblind person may indicate that he finds certain interpretations more appropriate than others. The deafblind person may then experience that the partner has an intention to understand what he is talking about, even though she does not understand immediately. When the partner does not understand immediately, the deafblind person can take on the role of someone who can help a shared understanding on its way. His subsequent utterances may add topical cues which are at the same time implicit rejections of unreasonable suggestions from the partner. It takes a reciprocal trustful and robust fundamental communicative relation to endure the hardship of understanding and building on one another's utterances. Such relational robustness is possible as both partners enjoy the negotiating and co-creative conversational relatedness as such, even though –with a small vocabulary of shared signs. It is demanding to hold on to co-authoring a shared topic for the conversation and obtain sufficiently shared understanding for the conversation to go on.

Given that the partner perceives and answers the spontaneous gestures of the deafblind person as signs, she will be able to make further conversational use of these negotiated signs along with conventional signs with negotiated meaning. The partner should take on the role of one who demonstrates how the signs can be used in expanded and new ways that enrich the sharable understanding of the world. The deafblind person can contribute with new gestures as he is discovering the communicative function of signs. The new gestures open new possibilities to expand the sharable conversational topics and the sharable vocabulary of signs further.

'Real conversations based on conventional signs'

Illustration 28



We may view the socially negotiated signs that build on the spontaneous referential gestures of the deafblind person as his first or natural language. This first negotiated language can create a basis for learning (parts of) culture-specific sign language. Progressively, as conversational practice gets established, the partner can shape her role towards that of a social mediator of cultural linguistic practice. Acquisition of (parts of) cultural linguistic practice can occur if the partner expands the deafblind person's spontaneous conversational use of co-created signs with cultural linguistic forms of expression that map on to the joint attention focus and to the ongoing negotiation of shared meaning. Such radically adapted cultural linguistic frames may when planned for lead to the deafblind person picking up conventional signs and language use from the partner. Increasing contact with and understanding of an Other's cultural linguistic practice may have a positive effect on expressive language in the sense that it approaches more conventional use. Many persons with congenital deafblindness are blind with residual hearing. Functional residual hearing provides the possibility to be exposed to the sounds of spoken language in a manner that maps on to the ongoing conversation in socially negotiated signs. Better impressive language may support the development of expressive language, even if expressive language takes a different form than the impressive. The emerging expressive form can be a combined form of signs, finger spelling and augmentative manual or computer-assisted communication. It is necessary to explore and be open to a variety of forms and to combined forms, both with regard to impressive understanding and expressive use of cultural linguistic practice. However, in many cases, acquisition of the cultural linguistic form of communication will be difficult. For that reason it is vital to accept symbolic communication in negotiated signs that originate in the deafblind person's spontaneous gestures as an acceptable form of communication, even if it is a difficult and non-conventional form.

Sharable topics in conversations with deafblind persons

It can be difficult for partners to know what to thematize in a conversation with deafblind persons so that the conversational topics are meaningful to the deafblind person and inspire him to contribute. A general prerequisite is that the conversational topic is mapped on to the here-and-now focus of shared attention. This is similar to the way in which, under ordinary conditions, parents follow their child's directional gaze and comment directly on what the child is focusing upon. The adult can also direct the child's attention towards something particular in the environment that she presumes is of interest to the child. Given that the child follows and shares her attention focus, she can map her comment directly on to the shared focus.

It is obviously demanding for the partner to continually make sure that the conversational themes are mapped on to the deafblind person's mental focus. Partners should therefore pay particular attention to the deafblind person's attentiveness and to the sharedness of the mental focus on which she wishes to comment. Even the mere arrival at a joint attention focus can take considerable negotiation and time to achieve. The partner's particular challenge lies in the fact that the gestures and signs, the deafblind person uses spontaneously in order to direct attention, tend to be non-conventional in form and/or use and therefore difficult to perceive, follow and understand. It is however a prerequisite for developing thematizing conversations that the partner perceives and relates to the spontaneous attention directing utterances of the deafblind person. Given that the partner is attentive to what the deafblind person attends to during the course of a joint action or event, she may comment upon the shared foci on line. By this procedure, she will have marked out the units of meaning that are sharable in subsequent conversational memory-talk.

It is a central pedagogical strategy to plan what elements to focus upon and how to focus and comment in line with the shared experience of a concrete event. One implication is that the partner should plan for events to have a narrative structure; something should happen which captures the interest of the deafblind person. A narrative approach requires decentration. The partner needs to be attentive to and

discover what components of an event are of interest to the deafblind person, and these can be different from what would ordinarily capture her own interest. Further, the partner should ask herself how the deafblind person stores interesting events and components of these events in his memory. On subsequent occasions, in different contexts and types of events, the deafblind person may recognize one or several components as the same as in a referential scenario. He may spontaneously express that something here-and-now reminds him of or seems similar to something he has experienced before in a different situation.

We may assume that the deafblind person can think about situations in terms of scenarios. As in the case of theatrical scenes, scenarios are stripped of that which does not have meaning. Scenarios are mental image structures created by a deafblind person, and they will be stripped of elements which have no meaning in his experiential perspective. A here-and-now situation may have some elements in common with an already represented type of scenario, i.e. with a referential scenario. On the basis of those elements that are perceived as similar, the deafblind person may be categorizing the here-and-now situation as a certain type of scenario. Such categorizing and sense-making cognitive engagement may be indicated as the deafblind person is spontaneously presenting a sign or a gesture that belongs to the referential scenario. The partner needs then to consider that it is a highly relevant engagement for the deafblind person to make sense of (categorize) the impressions he gets from being in the world. The partner may perceive the deafblind person's ongoing sense-making mental project. She may subsequently attempt to make her perception of his here-and-now sense-making engagement known to the deafblind person. She may in other words try to transform what she perceives to be the deafblind person's here-and-now cognitive sense-making project into a sharable conversational theme. The partner may initiate to talk about that, which the deafblind person thinks about here-and-now as similar to events in the past and/or in a different place.

The prerequisite for the partner being able to co-author conversational themes with the person with deafblindness is a disciplined and decentered, other-directed perspective, building on detailed knowledge of the deafblind person's life-world. The knowledge should be good enough to imagine the scenarios he has stored in memory and hypothesize which elements from the experience stand out as especially interesting or meaningful in a particular scenario.

Example

Erik – a totally blind deafblind boy with residual hearing – is having a tactile conversation in a classroom with his teacher. Erik's expressive vocabulary consists of socially negotiated tactile signs, many of which emerge from his spontaneous gestures. When he lacks negotiated signs to express what he is thinking about, he invents gestures on line which he uses as signs. He uses his vocabulary creatively and without grammatical constructions. He accompanies his tactile signs with nonverbal vocal expressions which function equivalent with facial expressions. His impressive communication is spoken Norwegian supported by tactile signs and is much more culture-similar than his expressive communication. The teacher is highly sensitive to Erik's spontaneous expressions and she takes care to ensure that Erik can develop his sense of an expressive communicative agency in spite of the hardship this implies for both. The teacher uses every occasion to take a curious and interested listening attitude to Erik, motivating him to share his mental focus and his thoughts and contribute to co-author stories from his life.

So, in the shared here-and-now of this example, another student suddenly makes a high-pitched shrieking sound. Erik makes a spontaneous utterance addressed to himself, which seems to be out of the established shared here-and-now conversational context, having to do with something related to swimming or bathing. The teacher tells the boy that she perceives his gesture and takes the initiative to expand on it as a new topic in the conversation. The teacher understands immediately that the signed utterance initially directed at himself has to do with his perception of the sudden shrieking sound and his need to make sense of this sound by categorizing it in relation to a referential scenario stored in his memory. However, she does not know which scenario or whether it has to do with swimming/bathing or something else. Erik is trying to clarify to her which scenario he is thinking about by contributing very creatively with many signs and gestures. The teacher is finally successful in understanding that Erik makes sense of and categorizes the shrieking sound in the here-and-now situation as similar to the sound of the singing dolphins he heard and physically felt in a pool in the Canary Islands, on his holiday six months earlier. The point is that by this process, Erik is demonstrating that he is curious about and interested in the world around him, and he shows others that he is one who has detailed and accurate knowledge about the animals we call dolphins.

(Video- documented practice from Skådalen School for the Deafblind, Oslo, Norway)

Concluding remarks about the environmental relation 'conversations'

The fundamental prerequisites for the partner to engage with a deafblind person in the co-authorship of sharable conversational topics are exemplified in the example with Erik. The partner needs as point of departure to follow the dynamics of the deafblind person's attention directing and offer to listen to and support him in sharing his sign-mediated mental focus. However, as a conversational relation is characterized by reciprocity of roles and perspectives it is also important that the partner invites the deafblind person to align with and follow the Other's attention direction towards something or somebody in the world. However, as foregrounded in the example with Erik and his teacher, a communication partner should be aware that a deafblind person needs to make sense of impressions here-and-now, and this is a cognitive creative process; i.e. a very fundamental cognitive sense-making type of mental project. This concerns the deafblind person's subjectivity, and is basic to the intersubjective or shared engagement in the collaborative co-creation of a shared vocabulary, shared utterances, shared meaning and shared stories. The deafblind person will not be able to lift his subjective concern into the sharable intersubjective conversational space if he is over-voiced by his partner. That is why the partner needs to discipline her other-directed listening attitude and notice spontaneous expressions and particular utterances that seem to be out of the sharable here-and-now conversational context. A congenitally deafblind person will not bring in new topics by pointing to something interesting in his visual field or by orientating in the direction of an interesting sound. His manner of contributing to expand the field of sharable interest is to point inward to trace impressions left on his body, in his body/mind. Deafblindness prevents easy and effortless access to context. A deafblind person will, like all other humans, be most fundamentally concerned with making sense for himself of the impressions he receives by being in the world (cf. Nelson, 85). An ongoing mental engagement will be to find patterns, recognize patterns, and categorize impressions into types on the basis of similarities and differences in pattern or image schematic structure (cf. Johnson, 87) which he can perceive.

Engagement in sense-making or categorization can take on different forms in a conversation. The deafblind person may for example change the way the here-and-now situation is played out by the sighted and hearing partner so as to be

more in accord with his idea or mental image about it. The deafblind person may present a gestured or signed utterance spontaneously which serves the function of an evaluating comment on the here-and-now situation; i.e. his comment refers to the categorization of the feeling it gives him. A deafblind girl did for example spontaneously present the sign PUSSYCAT in the absence of cats, but in the presumably cozy presence of persons she adores being with. She also adores being with cats. One needs to know that in order to understand that her intention and concern here-and-now is not to call the person a cat, but to categorize, mostly for herself, the here-and-now context with regard to mood i.e. the kind of nice feeling it gives her. We need in the actual or imagined role of a partner to assume that the deafblind person has a creative sense-making and meaning-making mind, and that the same sign or gesture may indicate both a subjective cognitive sense-making process and/or a socially directed intention to engage in the collaborative communicative co-creation of shared meaning.

We have addressed basic communicative processes, and tried to lift forward the richness and complexity and how one type of process relates to other types of processes. We presume that knowledge about and recognition of fundamental communicative processes is required in order that partners may use augmentative and alternative communication and (parts of) cultural linguistic practices in ways that are meaning-making and meaningful for the deafblind person. The use of conventional communication practices needs to be mapped on to basic communicative processes.

Use of video analysis as a tool in planned intervention

The purpose of using video analysis is for professional and personal partners to have better opportunities to discover and understand the way the deafblind person relates to the world. This involves the seeing/hearing partner being able to relate to the deafblind person in a way that can support developmental processes in basic face-to-face relations. The aim is for the partners of the deafblind person to fill the same fundamental relational roles that they would have if they had entered into a relation with a seeing/hearing person. The basic developmental conditions for deafblind persons may as a consequence become more functionally equivalent with the conditions that support development of agency and person-hood under ordinary and less extraordinary circumstances. Access to engage in basic environmental relations that frame positive developmental processes can be seriously hindered in the case of congenital deafblindness. Therefore this access needs to be planned for in detail on the basis of analysis.

The video analysis sessions insert reflective spaces into the intervention process. The reflective space can be shared between the different persons who occupy the partner role for a particular deafblind person and the consultants who guide analysis and intervention.

The video analysis sessions create the background for decisions about acts of intervention. The analyses are directed towards identifying how the particular deafblind person engages in core areas of contact, social interactive play, exploration, and conversations. Having identified and characterized such engagement, the participants in the session try to identify the relational qualities that are in play in the manner in which the partner on the video relates. On this basis, decisions are made regarding how the partners can contribute to sustain, stabilize and bring further nourishment to the analyzed manners and patterns of relating. An approach to intervention that builds on video analysis sessions can prevent that positive developmental processes in fundamental social-relational areas are distorted, and support that the processes run and are kept running over time and across different life-arenas.

The particular manners in which the different persons engage in learning and the particular products of learning will be diverse both with regard to forms and topics. Therefore, a person's particular manners of learning and the particular themes of interest and attention need be discovered and explored in each case. For example, the models provide principal guidelines for the maintenance of 'social interactive play/action' but do not prescribe precisely how this should occur or what the interaction should be about thematically.

Video footage is an especially sensitive form of documentation. It is necessary that participants have knowledge of the juridical guidelines that apply and are conscious of the processes into which they enter. This includes being aware how their own participation on the tape that is being analyzed may influence the collaborative analytical process in both positive and negative directions.

Guidelines for use of video analysis

Video analysis sessions can be more or less structured and structured in different ways, depending on the purpose (cf. e.g. Haw and Hadfield, 2011). The suggestion here is for a structured form which is prepared so as to economize on the time required for analyzing and in order to target analysis to the core areas in *The Developmental Profile*. In this section, we will describe guidelines for determining what kind of episodes are useful to videotape and guidelines for which type of sequences should be involved in a detailed analysis. In the next section, we will describe the dynamic structure of network groups participating in the analysis and the different roles taken by the leader of the video analysis sessions.

Guidelines for what we record

Video analysis has its starting point in videotapes demonstrating the deafblind person's activity and engagement under (for him) especially motivating conditions; thereby also showing an advanced variation of actual exchanges. It may be, for example, that a particular conversational ritual with the mother has a higher degree of reciprocity than other conversational rituals with her and with other partners. This particular conversation is then a window to conditions that motivate the deafblind person's increased engagement. Below is a description of how one can identify such video sequences.

We begin the process by recording events that according to care-persons contain sequences characterized by particular interested engagement from the deafblind person. Peaks of interest may occur now and then under extremely good conditions and may be considered the emerging new functions. Such emerging new functions are difficult to discover and grasp in detail without use of the video camera. Video analysis functions as a microscope. Micro-analysis enables discoveries that can make it possible to obtain confirmation of first impressions and identify more exactly what relational pattern and aspect is emerging or what aspect has been developed but so far overlooked by partners. The Diamond points out that it is relevant to take video recordings that show the deafblind person's engagement and the manner in which partners relate to this engagement within four fundamental face-to-face relations. When developmental theory is applied in practice, analysis begins by focusing on the most fundamental analytical aspects of the face-to-face interaction, namely the activity (i.e. the engaged activity) of the deafblind person. If activity is not a problem, or when it is no longer a problem, one moves on to the next analytical step and focuses on the reciprocity of the interaction, i.e. the reciprocal interactivity between the deafblind person and the partner. When reciprocity is in place, recordings move on to focusing upon what it is that makes the reciprocity last within one and the same sequence. When this is fulfilled, recordings can focus upon identifying if and how interactional complexity increases throughout the sequence. Finally, recordings can focus stability across situations and life-arenas.

In principle the environments in which the recordings are made should be natural. However, environments can also be designed so that the critical features can be cultivated and transferred to natural environments later on. The persons with the role of partner in the recordings should likewise in principle be the partners in the person's everyday life. However, in explorative sessions, professionals with expert knowledge of deafblindness may model a partnership that has characteristics that promote development.

Guidelines for sampling video footage for analysis

Category-based²³ analysis that is guided by *The Developmental Profile* is as a starting point concerned with analyzing in order to decide which face-to-face relation/s are being played out in the particular recording. *The Diamond* contains these categories and is applied as a conceptual reference for this analysis. Further, participants in the

23 Based on the categories found in *The Diamond* and *The Cue Model*.

analytic sessions must decide which category/categories of environmental relation/s will be focused upon more closely in further analysis. A sequence that has been categorized as showing a particular environmental relation, for example 'social interactive play/action', will subsequently be focused upon in greater depth. In in-depth analysis the analytical gaze switches to the patterns that characterize the dynamic complexity of a certain relation. The core of such analysis is to identify on a moment to moment basis the relational function of the deafblind person's spontaneous engagements and the patterns that enable the experience of interconnectedness between the partners in relation to each other and to sharable elements in the world (i.e. intersubjectivity).

The Cue Model can be applied to help view the progressively higher complexity in patterns of connectedness within each face-to-face relation.

One can administer what one looks for and the manner of looking (the analytical gaze) in the analytical process by beginning to focus on cues indicated by the bottom line in the cue model. After that one moves the analytical gaze upward in the model using cues that indicate increasing complexity in organizational patterns. This is done until the threshold is reached. The threshold refers to the illustration in *The Cue Model* that shows the point at which the pattern that regulates dynamic exchanges is most complex. It is in these threshold conditions that new exchanges emerge. The video clips that exemplify threshold conditions are chosen for close analysis. The category-based analysis enables selecting smaller sequences that are suitable for close analysis because the sequences are windows to developmental potential.

Recordings that are used in initial category-based analysis will always be longer than the sequences that are rational and relevant to analyze in detail on micro-level. This means that a smaller sequence must be chosen from each film for detailed analysis. The chosen sequence should as explained above preferably show the most advanced exchanges that are known to occur for that particular deafblind person. The result of micro-analysis should be used to specify goals and plan the intervention. In this model intervention is directed at the partner in the relation, who needs continuous support in order to adapt her manner of relating to the deafblind person's manner of relational engagement. The different persons who hold the partner role in the deaf-blind person's life will in this manner be supported to reflect over how important their own contribution is for the fundamental social developmental processes.

Focus groups/network groups

The intervention is directed towards the partner role and not at a particular person occupying that role. Each person with deafblindness tends to have many different persons around him who fill the partner role. As a rule, this involves both family members and professional partners. Partners in different environments that can be found around a seeing/hearing child will generally understand the child in sufficiently similar ways. Hence, intervention is not relevant. Such sufficiently similar understanding ensures enough stability in the environment of upbringing across people and environments. Enough stability is a prerequisite for further development. For persons with deafblindness, this means that there must be sufficient agreement in the way partners from different environments relate to the deafblind person.

As we have pointed out throughout this book, congenital deafblindness is characterized by low readability on the part of the culture. Therefore, there is on the one hand a danger of interventions becoming fragmented and disjointed, and on the other hand, a danger of focused interventions becoming rigid. The interventions become fragmented and disjointed if the deafblind person only has one particular person who plays the role of qualified partner. If this is the case, there is no transference to other partners in other environments. In this way, stabilization is hindered. Interventions may further result in rigid conditions that hinder development if stabilizing is understood as sameness, in the sense that everyone should do the same thing in all the deafblind person's life-arenas.

As a consequence of the above, video analysis should in principle be organized as a network model in which goal-directed intervention is a shared concern. In a network model, family members and professionals from different settings are gathered around the video recording, which is analyzed, no matter in what arena the recording of interest is made. By gathering everyone who holds a partner role around the same recording, the analysis and discussion of the recording is enriched by the many perspectives and different experiences of the participants. The participants are precisely the partners who hold 'insider' information about the world of the deafblind person. When the partners formulate their own knowledge for the others in the group, knowledge sharing occurs. The result may be a dialogue in the whole group, including the group leader that produces shared pieces of new knowledge. Such shared pieces of new knowledge make it possible to see the particular engagement of a particular deafblind person in the perspective of and as a variation over general

patterns and processes. The process of linking the particular and general aspects will increase the understanding of what is going on. Such increased understanding does not happen once and for all. Increased understanding tends to happen in bits and pieces, grounded in and building up through shared analysis of particular recordings. Increased understanding of what is going on may thereafter be applied by all network members in new and development-promoting ways²⁴.

A network model that develops shared knowledge about the child and the child's life-world is a working method in accordance with the principles that inform focus groups (Markova, Linell, Grossen, Orvig, 2007). In focus groups, the point is to develop shared social knowledge about something that is relevant in a local here-and-now context. Focus groups are characterized by knowledge that is developed as shared knowledge exceeding and becoming greater than the sum of the participants' knowledge. The explanation is that every individual participant relates in a listening way to all the contributions of the others. Thus each has the opportunity to become inspired by the utterances of the others. Each participant can then take the others' utterances in as part of her own. In doing so, she can develop her own perspectives as these are now coloured and enriched by the perspectives of the others. The aim of focus groups is thereby to make known and possibly shared the greatest number of relevant viewpoints. This leads to the establishment of an enriched basis in order to reflect on and understand a particular phenomenon.

In our context the discussion is disciplined by what is observable on the particular video-recording that is being analyzed, and by the categorizations defined by *The Developmental Profile*. However, it is not sufficient for the network group to come to a certain agreement or eventually a discussion about what categories are in play and produce many possible viewpoints. The group must also reach a decision about how one is to relate or act as partner for the deafblind person under conditions that are exemplified by the analyzed recording. The group must, in other words, identify a shared decision about the interventions that should be prioritized. In the network model, the reference to focus groups is used to emphasize that decisions should be made on a broad basis. When this is the case, decisions about how partners are to relate are informed by the perspectives and insights of all the participants. The aim

24 The above model of analysis in network groups is developed by the authors in cooperation with Skådalen School for the Deafblind in Oslo and in several projects in the Nordic countries.

is to ensure that the network group has sufficient shared knowledge to qualify the decisions they make together about the efforts they want to prioritize in the continuing work.

Working in and with network groups demands discipline. This discipline is primarily the responsibility of the leader of the network group. She will typically be a person who is able to co-ordinate each local knowledge-making process in a manner that makes explicit how theoretical principles and relevant pedagogical strategies are linked to what is focused on the video. It is also essential that this expertise is used so that everyone feels themselves to hold the role of an active and reflective contributor to shared knowledge that is collaboratively created around a particular deafblind person. It is crucial to cultivate that the whole network group listens to every individual participant's opinion and experience. This recognition of the possible relevance of everyone's contribution will make it easier to accept a shared final decision about how one should act as partner with the deafblind person under the exemplified circumstances. The acceptance of the final decision as shared can apply even though the decision does not match one's own original viewpoint. The decision about action can of course be other than that which the leader in the role of 'expert' would have held. Focus groups are also a unique way to develop knowledge that is not only relevant for the deafblind person but also for all persons in the partner role – this includes the group leader.

The role of the network group leader

Network groups must have a professional person, often a consultant, as leader of the group. The group leader has two roles that must be balanced. The one role is to function as facilitator of the knowledge-creating process itself. This is to say that the leader is ultimately responsible for the dialogue that occurs in the group. The dialogue must be of sufficient quality that each individual experiences herself as an active participant. At the same time, the participants must experience having individual influence over the process, even if the result of the analysis and the decisions taken about action are results of a shared process.

The other role is to function as the one responsible for the quality of the analysis that is conducted. This means being able to point to the relevance of the conclusions

that are reached about what efforts should be prioritized. The special challenge lies in being able to balance between these two roles.

When the role of being responsible for the quality of analysis is concerned, it is a challenge to be secure enough professionally that one can release control. The role of group leader requires that one makes an initial hypothetical analysis for one self because one is responsible for the quality of the analysis. On this basis the leader may better listen to the actual partners' perspectives, and modify or enrich her own initial analysis for herself accordingly. A sense of professional agency involves being able to be inspired by what others say in such a way that one can eventually change one's position without feeling that one has lost face. On the outer level, the group leader must analyze at the same tempo as the group so that one's own analysis can be continually adjusted by that which is underway in the group process. If one in the role of group leader allows her own analysis to overshadow the group process, the voice of the group will be silenced.

The role of the acknowledging professional expert

The role that the leader of network groups takes on can be described as that of an acknowledging professional expert. Acknowledging involves making more explicit and known to all participants in the group what the positive contributions in the comments of each of the participants constitute. The positive aspect is pointed out and emphasized alongside looking at the video film itself. The video serves to connect the positive comment to the display window of social and communicative interaction between a partner and the person with deafblindness. The acknowledging role means to make each of the participants' subjective experience visible to and acknowledged by the group, even when not agreed with. Giving acknowledgment is common in many video supervision models and has to do with a need for an acknowledging Other who sees and makes known one's fundamental other-directed intentions, in spite of perhaps vague goal directedness and a lack of concrete means and strategies.

There is also another function that is similar in many other models. This concerns getting the partners to reflect over how they already contribute positively to the participation of the deafblind person in 'social interactive play/action' and 'conversations'. This consciousness-raising makes partners capable of doing more of the same – but in a more planned and conscious manner.

In terms of the professional expertise required for a network-leader, the focus here is on deafblind specific knowledge and competence. This particular referential frame makes video analysis on the basis of the models in *The Developmental Profile* unique. Such analytical skills involve:

- Being able to apply an analytical gaze to social interactive play and conversations
- Being able to relate the different practical contributions of the partners to general theoretical principles
- Being able to translate theoretical principles in play to strategies of goal-oriented practical effort in relation to persons with congenital deafblindness.

The analytical gaze

During the analysis, the leader of the network group tries to model specific guidelines for how the participants should move their gaze during the analysis. The analytical gaze is moved in a way that is disciplined by *The Developmental Profile*. That which we primarily look for is how the deafblind person and the partner direct their attention towards one another or towards a potential third element, a potentially sharable something/someone in the outer world; i.e. in the world external to the dyad between YOU and ME.

The cues in *The Developmental Profile* that are guidelines for how the analytical gaze should be moved cover the unusual bodily/tactile ways in which attention is sharable with a person with deafblindness. Because these bodily/tactile variations of attentional connectedness are creative and rare and vary from person to person, there is no norm for how they can be visualized. The concepts that deal with how the dynamics of attention function to connect parts into relational and meaningful wholes are therefore simplified and presented in a more abstract schematic manner. This is done with the intention of making the underlying patterns recognizable in all possible extreme variations. Schematization should suggest that one can apply a manifold of outer forms when one enters into relations with other persons and the world – more than those that are already known and described.

When *The Developmental Profile's* schematizations are applied as cues in analysis, this is in contrast to a reference to normal developmental scales. Such scales apply definitions of robust skills as cues to assess developmental age or developmental level. However, these scales do not apply to persons with congenital deafblindness as they refer to populations of seeing/hearing children who do not in any way face the same risk of being deprived of basic social interactional experience. The schematizations that are constructed in the models we have presented here provide guidelines for moving the analytical gaze in particular ways. This is done in order to set the analytical focus on discovering how the participant/s in the video-taped interactional sequence direct attention during the taped sequence. Attention can be directed inward or outward towards another person and/or towards a potential third element outside the dyad.

Ways of moving the analytical gaze

The first thing one looks for is where and how the deafblind person directs his attention and eventually focuses it. It follows naturally that the two partners first and foremost share their attention relatedness in a bodily/tactile manner and that visual and auditory attention can occur but often will be fragmentary or lacking. Therefore, one looks for bodily/tactile expressions of attention directions and attention foci. Bodily expressions can be, for example, that the body movement is frozen, the head can be turned away but the hands and fingers can be actively investigating and directed towards that with which the Other is concerned or is doing. One looks for whether attention is directed towards the partner, towards a place in the outer world, towards himself or whether the attention directed towards a partner is more complex in such a way that it is placed on a third thing, for example something the partner is doing. In this last case, the pattern that regulates the attentive exchanges is triadic, and may come to involve something originally attended to by the Other as an element of shared and eventually joint attention. In the reverse instance, the deafblind person could be attending only to the other person or only to the element in the world, but not to the Other's interest in that element. In that case the relations are dyadic.

The second element one looks for is whether the partner directs her attention towards the deafblind person and eventually aligns her attention direction with that of the deafblind person towards the same focus.

The third thing one looks for is whether this partner directs her attention in such a way that her attention to following is clear enough in the bodily/tactile modality to be sharable with the deafblind person.

After one has mapped out where attention is directed to and from, one goes on to analyze the exchanges between the partners. The analytical gaze begins always by focusing on an initiative from the deafblind person. Thereafter, it is moved to the partner's possible answer to the contribution of the deafblind person. It is then moved again back to the deafblind person and his answer to the partner's answer to the contribution from the deafblind person. When one analyzes in this way, the fundamental units we look at will contain reciprocity between at least three inter-connected events or turns (cf. Bjerkan, 1996).

Identification of the relation

After having analyzed the way in which attention is directed in a given interaction sequence, the next question for analysis becomes what face-to-face relation/s this involves. If one sees that the interaction has a dyadic dynamic structure, the reciprocity is played out between two elements. In such cases, there may be one or several of the following face-to-face relations:

- 'social interactive play/action'
- 'proximity/attachment'
- 'exploration/categorization'

If the interaction is triadic, the reciprocity is played out between three elements and the social interactivity is about the third element. The third element can be a motion in a game, a place, a physical object, or a third person. Within conversational frames the third element will be a symbolic gesture/sign or a cultural-linguistic sign/word.

Example

The above is illustrated in this practical:

After having seen that the deafblind person and his partner direct their attention towards one another, we direct the analytical gaze towards the contributions of the deafblind person. We see that the deafblind person claps his hands. Thereafter, we move the analytical gaze to the partner's answer to his clapping. We see that the partner claps her hands in a way that is affectionately directed and accessible to the deafblind person. To continue the sequential analysis, we again turn our analytical gaze to the deafblind person. We see that he claps his hands and smiles. After discussion we agree that the smile is a sign that the clapping is directed to the partner as an answer the deafblind person makes that indicates that he experiences the partner's engagement in clapping as a reciprocation of his own clapping.

'Conversations' require triadic interactivity, whereas 'social interactive play, action', 'proximity/attachment', and 'exploration/categorization' can be realized by interaction patterns that have a dyadic or a triadic dynamic structure.

In the relational context of 'social interactive play/action', the aim and function of clapping is to achieve the experience of being together in a shared here-and-now and to maintain this experience over time. This is equivalent to what we experience when we dance with a partner. Analysis using relational concepts guides us towards both spatial and sequential analyses and enables us to understand what is happening in a relational manner. In the example above, this means that the spatial pattern of mutual directedness to each other's clappings is maintained while the sequential pattern is about how each turn in the sequence connects to proceeding turns and turns that follow. The final clapping and the smile of the deafblind person is perceived by the analysts as an answer to the fact that he is answered by the partner and not a smile that stands alone. If it is not possible in the

particular recording to find a sequence of three interconnected turns where there is reciprocity in the exchanges, the immediate intervention target will be that of establishing reciprocity in the exchanges.

The spatial pattern that organizes how attention is played out triadically in a conversation will typically be easier to recognize and more clear in its tactile form than it is in the more general visual and auditory forms. This is because the partners, when the conversation is based on the bodily/tactile senses, relate to one another's shifting attention directions and attention foci in a symbolic manner that is mediated concretely by the use of conversational hand positions. On the other hand sequential analysis can be very explorative when it comes to conversational interactivity as a consequence of the deafblind person's spontaneous utterances tending to be very difficult to understand for partners and analysts alike.

The cues that support what we here call 'the analytical gaze' were described in more detail in chapter 4, where the two analytical tools/models were foregrounded.

Translating utterances of the network group participants into theoretical principles

The participants in a network group will typically consist of both professional partners with different professional backgrounds and education, and family member partners. The participants will primarily speak from their own personal experiences of contact and interaction with the particular deafblind person who is present on the video we are analyzing. It is, as mentioned earlier in this chapter, the group leader's task to perceive utterances from the participants and to be able to see, explain and comment upon what theoretical principles the current person's statements actually are about. In this way, both the participant and the leader will be able to contribute to making one another's knowledge relevant for further development of the deafblind person.

Example

Network participant:

I've experienced what we can see here on the video several times. When I'm going with Peter to a new place, I've noticed that he places his arm on my underarm and moves quite close to me. Is that because he's walking unsteadily, or why does he do that?

Network group leader:

How does it feel when he holds onto your arm? Does he use a firm grip, or...?

Participant:

No, it's certainly not firm, and sometimes he moves his hands further down onto my hand.

Network group leader:

When he doesn't hold on tightly, do you think it might be because he's uncertain, or do you think it might be because he's looking with his hands at what you're doing with your hands?

Participant:

Well, yes, when you put it like that, I do think as well that that's right, that he's looking at what I'm doing by holding onto my arm. I haven't thought about it like that before.

When one applies a discussion form, as described in the example above, the possibility is created for the leader to expand the topic and tell more about how attention is directed in a tactile manner when the deafblind person uses his hands/touch. The leader of the network group can explain further how the partners can arrange the situation so that they increase the access to and interest of the deafblind person in the world.

General principles for intervention

In this section we will briefly describe two general principles for planned intervention. The first principle concerns how we can support that all the partners of the deafblind person are able to act in such a consistent way that stability is achieved. The second principle concerns how, in a type of 'greenhouse' environment, one can cultivate new, and in the beginning, delicate functions so that they can become strong and robust.

From personal experience to shared knowledge and shared projects

Intervention in relation to the development of deafblind persons has been focused, since the beginning of our field's history, on the professional partner role.²⁵ This focus has been particularly concerned with how the partner can best support the communicative and linguistic development of deafblind persons. That which is currently focused upon and taken seriously in addition is the fact that deafblind persons have more than one partner. This focus means that as many as possible of these partners – preferably all of them – should be active communication partners with the deafblind person. The focusing of partners on the deafblind person in his social network has the following general consequences for intervention:

Knowledge about how one as partner should relate so that the communicative relation can be as good as possible cannot be unformulated and personal (tacit). Such knowledge must be explicitly formulated and accessible to all. A reformulation from personal to shared knowledge occurs in an effective way in network groups that apply video analysis in the manner we have previously described. This intervention model is also at the same time a model of competence spreading and knowledge development as it also involves tacit knowledge becoming explicit or formulated knowledge. In this way the network model also becomes a model of quality assurance and efficiency.

The Greenhouse Model

When one puts new interventions into place, the relations are delicate and can easily collapse because they can be interrupted or disturbed by surrounding conditions. Another reason why emerging relations can be distorted is that they become rigid

25 Cf. e.g. the American film 'The Miracle Worker' about Helen Keller and her teacher; and the recent French film 'Marie's Story' about the relation between the congenitally deafblind girl Marie Heurtin and her teacher.

because they have received too little input. When relations are in the early process of emerging, they must be protected and nurtured in the same way as small plants in a greenhouse are nurtured. This means that new interventions must occur under conditions that the partner has adapted as well as possible to the individual with deafblindness. In this way, conditions of growth are made as favorable as possible. As a rule, this involves the eradication as far as is possible of all disturbances. It also means that the partner entering into the construction of a relation is often a partner who already has a good relation to the deafblind person. Sometimes this is a parent, sometimes a professional partner and other times several partners are involved. When the intervention works as intended in relation to one or several partners and under favorable conditions, the effort must be spread to other partners and under conditions that are less favorable. In this way, the delicate relations gradually become more robust. When they are more robust, they can be further developed with many partners in many settings.

Example

Petra has just received her new hearing aids. It is crucial that she has as many positive experiences with sound as quickly as possible. This will occur if Petra experiences sound as meaningful and interesting. When Petra uses her hearing aids, the sound conditions are made as favorable as possible:

- Background noises are reduced
- The partner who functions best is with Petra
- Sound is connected to the singing games that one knows from prior experiences are motivating for Petra
- Sound and movement are synchronized

When Petra is motivated for these sound games, use of the hearing aids is expanded. The conscious use of sound is transferred to other activities with more people and in a greater number of Petra's life-environments.

Guidelines for follow-up analysis and intervention

Intervention in relation to persons with congenital deafblindness and their partners demands continual analysis that leads to new interventions. The new analysis that follows intervention evaluates the usefulness and effect of the interventions that have been made during the previous analysis. At the same time as the new analysis evaluates the previous interventions, it points forward towards new interventions. Relating analytically to planned intervention is a theoretically informed way of working. This way of working is radically different to a prescriptive form of planning intervention by partners with interventions geared at the accumulation of individual skills that are defined beforehand.

Many professional partners, especially teachers, have the problem that authorities demand plans for the acquisition of precise skills for the individual deafblind person within a particular span of time. It is therefore a great current challenge for professionals to describe the efforts they make in such a way that supports the development of the deafblind person and also is acceptable to the authorities.

Concluding comments on use of video analysis

When one works professionally with persons with congenital deafblindness, one should constantly attend to scaffolding the communication between the individual deafblind person and his partners so as to be of the highest possible quality. The most effective and best way to achieve this is to use video documentation and analysis that lead to individualized prioritization of interventions and their continual evaluation. This is dependent on a disciplinary and administrative leadership that prioritizes such activity. It also means that the leadership creates the framework that makes it possible to work in this way. In this framework it is also important for one or several professionals to have the opportunity to develop the knowledge and competence necessary to lead the analytical process.

The authors' concluding remarks

In the preceding chapters, we have given our suggestions for how persons with congenital deafblindness can be given a voice in communication with seeing/hearing partners. This voice is the deafblind person's own, but is expressed as co-created with the partners to whom he relates. We suggest that the natural language of persons with congenital deafblindness is co-created on the basis of their embodied experience-based spontaneous and creative referential gestures. We have also pointed out how the culture's conventional use of signs and/or sign language can be mapped on to this natural embodied language. We want to conclude this book by describing why we feel that most persons with congenital deafblindness do not immediately acquire the linguistic practice of the surrounding culture in accordance with the principles and processes that work under ordinary and less extraordinary circumstances.

Access to cultural language

We understand the challenges found in relation to the acquisition of cultural language when congenital deafblindness is present as a problem of access and not as a lack of ability in congenitally deafblind persons.

Acquisition of the linguistic practice of the surrounding culture is a process which usually starts with exposure in infancy, as patterns of care-takers' language use are mapped onto emotional, social and communicative patterns and processes. Seeing/hearing babies and their care-persons engage reciprocally in interactions that are patterned as dialogues. Cultural linguistic practice is a dimension of these dialogues so that we may assume that the patterns or contours of language in use get imprinted into the child's way of relating to the world. This occurs already in the first year of life before the child actively begins to acquire linguistic practice of the surrounding culture. Active engagement in the acquisition of cultural language begins usually during the second year of life when the child usually is able to engage communicatively in fully fledged reciprocal joint attention episodes.

With congenital deafblindness, access to cultural language which is based on vision and hearing is limited. The problem of access in most cases is so comprehensive that the child with congenital deafblindness cannot, in a natural and usual

way, become initiated into a cultural linguistic practice. There are several reasons for the problem of access. One reason lies in the functional disability of congenital deafblindness itself which hinders access to cultural language through vision and/or hearing. Another reason lies in the environment, also in the partners. Without training, the partners of the deafblind person very seldom have the competence that is relevant in relation to being able to compensate for the problem of access early and continually.

A relevant partner competence consists in being so skilled in sign language that the communication becomes sufficiently fluent and at the same time linguistically enriched. The challenge lies in the fact that the linguistic enrichment must occur in such a way that togetherness and the conversation remain unbroken. Beyond this, this competence consists in the ability to adjust the sign language to the individual deafblind person and to tactile access. Partner competence consists in using the bodily-based natural language of the deafblind person (the mimetic, iconic and pointing gestures/signs) as the bearing elements for the communication. At the same time the partner must be able to enrich the fundamental communication with cultural linguistic elements that are connected to the attention and thoughts of the deafblind person. This is more difficult with persons with congenital deafblindness than otherwise. This is because, among other things, that the partner must constantly adapt language provision to the shifts of attention of the deafblind person.

In spite of the many challenges partners of persons with congenital deafblindness encounter, the human drive in relation to the acquisition of cultural language is so robust that there are several examples of persons with congenital deafblindness who have acquired a greater or lesser portion of cultural language – both as children and much later on in life²⁶. However, there is very little analysis and explanation of how the deafblind persons have been able to acquire cultural language. We know very little about how this can occur in a planned way. There is currently research underway in this area²⁷ so that new knowledge in the near future may be able to supplement the contents of this book.

26 Several examples are described in Souriau et al (2009) *Communication and Congenital Deafblindness. Transition to Cultural Language*.

27 Several ongoing Nordic projects,

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COMMUNICATIVE RELATIONS is about how persons with congenital deafblindness can develop communicatively and personally in interactive relationships with seeing/hearing partners.

The authors present two models that can be used by the partners of the congenitally deafblind persons with the aim of planning interventions that support basic communicative processes. The models identify and apply principles from developmental and dialogical theory, as well as from other theories that are relevant to focus basic processes of meaning-making. The models are used to guide video analytical sessions where professional experts and families join forces to discover the manner in which the deafblind person engages in exploring, making sense of, and telling about the world he lives in.

The book is addressed primarily to consultants or other professionals who work with planned communication intervention. Beyond this group, the models may be useful for professionals and parents who occupy the partner roles with persons with congenital deafblindness. The material will also be useful for staff training and in video based supervision in daily work. Professionals who work with persons whose impairments have similar effects may also find the book useful.