Abstract

IHA – conference Oct. 15th 2000: "Rhythm and Flow"

"Promoting Activity, Participation and Playfulness through Water Activities

Throughout history, water has been associated with life and health. People throughout history have flocked to places with holy, healing springs.

All of us began life in water. Before birth, we grow and frisk about in the womb in 'aqua vitae' – the water of life. At birth, all of us face a world in which gravity predominates, making us 'disabled', until we mature and learn to master our bodies in this new environment.

Those for whom gravity is a problem on land - as it is to many children (and adults) with

disabilities – may in water more easily be able to get actively engaged in play and social activities. Many therapists use water-based intervention, and they have different goals when treating patients. With children they often use play activities as a means to learn specific skills. Here, play is initiated and guided by the therapist. To many children with disabilities, finite play is the only kind of play they experience.

Another goal in occupational therapy might be to promote children's infinite playing – playfulness - , which is vital for their personal, growth.

In about 60 photos / pictures and words this presentation will present these aspects of water activities.

The Presentation (one hour):

"Promoting Activity, Participation and Playfulness through Water-Activities"

First: Congratulation to The Halliwick Association of Swimming Therapy here in England on their golden jubilee. 50 years is a long time, and amongst *you* are still people who have been engaged from the very start!- I'm to that a novice - only approaching my personal silver jubilee in Halliwick. You have been a tremendous inspiration to all of us, coming from other countries, where Halliwick since has emerged, been well established and promoted.

And thanks very much to Ann Gresswell, the conference organiser and also to The Education & Research Committee of the Int.Hall.Ass. for giving me the honour of being the foreign feature today in this special occasion.

I have been looking forward to this day and worked very hard on it – and I'm a little nervous, partly because it is a rather personal, phenomenological presentation

- partly because I'll have to do my presentation in English!

I am a Halliwick lecturer, a swimming coach and an occupational therapist in paediatrics, working part time in an interdisciplinary team in a local Pedagogic-Psychological Counselling Centre. My water-experience – as part of my intervention as an occupational therapist - mostly comes from more than twenty years' work in the pool with children with all kinds of activity problems and problems in participation. Every week I have two or three groups of children in the pool, children from six month and up to ten years. We use an ordinary public swimming bath. Water-temperature is 28 degrees C, which is app. 84 degrees F, and the depth of the water from one to four metres. The small children are each followed by a caregiver or parent, and with the bigger children we work one adult to approximately three children.

I'm responsible for referring children to the groups, for doing the qualitative assessments of each child's ability in water, for the training-programs, the evaluation of each child and the supervision of the instructors.

The children will attend the groups at least one year, most of them for several years.

Harald Lie, the by now former chair of The Danish Halliwick Association – has often quoted McMillan, saying: "Swimming is *that* bit", showing a $\frac{1}{2}$ cm space between thumb and forefinger. "The rest "– showing a fully open hand – is the personal gain through swimming, he said!" And I guess many of you may have heard Mac saying that!

What I'm going to present to you today, is a little bit of 'the rest'!

You may here also use the picture of an iceberg: you can see only the 10% of the iceberg. "The rest" – the 90% is not seen, but we all know it is there underneath – it is the basis for what we see – but it may be difficult to describe what is not visible – and that is the challenge I have today – trying to describe what – more than swimming – also may be derived through water activities!

As you may know and have heard, the words: activity and participation are words also used in **WHO's** new international classification of handicap, the so called **ICIDH-2**, where in the earlier edition of the classification from 1980 words like: impairment, disability and handicap were central. I would like to think that the new classification from the WHO also have been **influenced by the spirit of the Halliwick concept and by the core of good occupational therapy.**

All of us gathered here today know of the 'spirit' of Halliwick .

The Halliwick Concept is to me – as to many of you - much more than just swimming-technique and the ten point programme. It is also a concept about:

- motor learning
- holistic learning
- focus is on ability in water instead of disability
- improving quality of life and playfulness
- integration, or the stronger expression: inclusion of people

- and mind you, this concept was created in the early fifties, long before these 'terms' were actually invented !

Just look at these two pictures, which were taken by my mother here in England in the early sixties. Then these statues, begging of money were not unusual.

The Halliwick Concept is to me a unique approach both in teaching and in treatment of people with different kinds of activity problems. Throughout the years the Concept has developed further - like concepts tend to - as many different professionals: such as swimming instructors, occupational therapists, physiotherapists, doctors, speech therapists and researchers - together with persons with activity problems have practised and experienced The Concept. But time after time it strikes me how little actually the Concept has had to change, compared to other concepts.

• The 'spirit' or aim in occupational therapy is 'to promote the client's active involvement in meaningful occupational performance'. We create intervention promoting each client's capacity – her or his specific possibilities in her or his daily occupational performance and participation in social life, despite restrictions.

And as an occupational therapist in paediatrics the art of my profession has always been: to make activity tempting, not to manipulate or force.

"Where therapy and recreation are based on the same method they become complementary and so continual rehabilitation through properly thought-out recreation can be promoted" (Margaret Reid 1975 - I read it somewhere in the Dutch Halliwick-material)

A famous Canadian occupational therapist (Barbara O'Shea) recently compared occupational therapy to playing jazz. She says:

• "Occupational therapy is like playing jazz. Jazz is a very complex type of music to learn to play, like occupational therapy is a complex method to use in praxis. As occupational therapists we have a repertoire of knowledge and information, which we use to understand the life of the client, even though the client may not be able to express it to us.

To be a competent jazz musician you must know the music well. You must have a huge repertoire and be able to combine many different aspects of the music to create different kinds of music. Playing jazz is a process involving improvisation. The musicians in the band are playing the same superior theme, but within this they create sub-themes and play in different directions. When one musician has played his theme, the next will start from this theme and develop *his* further from that.

In the same way the occupational therapist works in collaboration with the client. She listens to the client to find out how to use her expertise and knowledge to find out, how to continue intervention.

I think many Halliwick instructors feel the same way about teaching Halliwick.

I also think that has been the reason why I personally do not distinguish in my work as a Halliwick instructor and as an occupational therapist – and also why especially I like the rhythm and pulse of jazzmusic!

Man has always been fascinated by water – and this fascination is to all of us **not either** pleasure **or** fear, but at the same time **both** a lot of pleasure **and** some fear of the element.

In the Bible in The Story of the Creation there are two different stories about the influence of the water:

• In chapter 1 of The Genesis, water was everywhere in the beginning - it was chaos, and therefore on the second day of The Creation God said:

"Let the waters under heaven be gathered into one place, so that dry land may appear; and so it was. God called the dry land earth, and the gathering of the waters he called seas; and God saw that is was good".

• In chapter 2 of The Genesis, called The beginning of history, only barren earth was everywhere , and it says:

"When the Lord God made earth and heaven, there was neither shrub nor plants growing wild upon the earth, because the Lord God had sent no rain on the earth.....A flood used to rise out of the earth and water all the surface of the ground....There was a river flowing from Eden to water the garden......". So the good world – cosmos was made.

So in chapter 1, life on earth began when dry land appeared out of the water, while in chapter 2, life on earth began when water waters the dry land!

• When thinking of water we may **both** get pictures like: holiday at the beach, sailing, skating on ice, refreshing rain, beautiful snow, a nice glass of cool water, and get pictures like:

storm surges, floods, shipwrecks, getting drenched with rain, cold from the snow, polluted water etc.

Throughout history, water has very much been associated with life and health. In ancient times, - the Romans and the Incas built baths.

- People of all times have flocked to places with holy springs, hot springs and healing water for example in all the towns in Germany and Switzerland starting with Bad: - Bad Ragaz, Baden Baden, or to the famous Gellert Bath in Hungary etc..

Today, we relax in bathtubs,

- hot tubs, and at SPAs, where S-P-A is an abbreviation for the Latin: 'Sane Per Aqua' – which means 'health through water.'

- Personally my fascination with water has been bigger than my fear, see for example:
 - how fascinating and mysterious really hot water with great force can emerge from the internal of Iceland, or
 - how frozen water can form a landscape of glacial crevasses in Norway, or
 - icebergs in sculptural designs along the coast of Greenland, or
 - or the current with the big white foam and blue waves by the sea at The West coast of Jutland.
- Denmark is surrounded by water, and in less than one hour's drive you can reach the sea from any spot within the country. In summer the water is warm enough to go bathing at the seaside. And public swimming baths are spread all over the country. In our schools nearly all ablebodied children have swimming-lessons and learn to swim, and swimming is a very popular leisure sport for people of all ages.

All of us begin life in water. Before birth, children grow and frisk about in 'aqua vitae' - the water of life. In this element, the embryo can move freely because of the upthrust of the water in the womb.

At birth, all of us face a world in which gravity predominates, making us "disabled," until we mature and learn to master our bodies in this new environment. Learning to overcome gravity takes to some of us more time than to others, and some will never overcome that force.

- In the element of water we may benefit from the force of upthrust or buoyancy. Those to whom gravity is a problem on land may in water learn to achieve independent freedom of movement using the assistance of buoyancy or upthrust, which may promote new possibilities for activity, participation and playfulness.
- Coming from Hans Christian Andersen's motherland I have from childhood listened to many of his fairy tales, where water plays different roles, for example in
 - "Thumbelina"
 - "The Ugly Duckling" and
- The Little mermaid.

"Far out at sea the water is as blue as the petals of the loveliest cornflower, and as clear as the purest glass, but it's very deep, deeper than any anchor can reach. Right down there live the sea people – and there is the Sea King's palace. There were six pretty little sea princesses, and their bodies ended in a fish's tail. As soon as a mermaid turned fifteen years old, she was dressed up with eight oysters nipped tight to her tail. 'Oh, that hurts,' she said. 'Yes, you can't have beauty for nothing! her grandmother replied. She was then allowed to rise to the surface, and watch the human world. And just because she could not get there, it was this about everything that she

longed for.

In a ship she one day saw the handsomest young prince. The little mermaid could not take her eyes off him. But a terrible storm came, the ship broke up, the prince disappeared into the sea. For a moment she felt quite pleased, until she realised, that humans cannot live under water. She rescued him, and swam him to the shore.

She could not forget the prince. She went to the Sea-Witch's domain, a terrifying place, built of the bones of humans who have been wrecked. The witch will make her a drink, so her fish tail will divide into two legs – but every step will hurt, as if a sharp sword went through you. The witch demands a high price for separating her tail – she wants the little mermaid's beautiful voice and the witch cuts off the little mermaid's tongue, so she can neither sing nor speak any more. For love the mermaid offers this. But even though, she does not win her prince in the end! She leaves her usual environment in the waterworld, where she is 'waterfree', and she gets severe activity limitations and a lot of suffering, when trying to live in a different world where the force of gravity predominates. The tale ends tragically".

• Seen from a Halliwick-perspective, you may say that:

going from one element or environment to another has a great impact on activity performance! Through our Water Activities all over the world – though differently applied – we have all <u>experienced little mermaids</u> holding themselves floating – literally and figuratively

- getting released from the force of gravity and supported by the upthrust and qualified instructors,

- *Their* tale may end quite differently - they may have 'flow-experiences' when becoming 'masters of the element!'

And that promotes activity, participation and playfulness.

• I'll now just briefly talk about some main differences between being on land & being in water – merely to those of you who are not Halliwick practicioners. Being in water is different from being on land for all of us. It is in quite another way we move, keep stable, and restore stability in water. So the movements and skills you learn in water cannot just be transferred to be used on land.

There are four main differences between being on land and being in water:

- 1. bodies are influenced by the upthrust or buoyancy
- 2. bodies have the freedom to move three-dimensionally
- 3. small alterations in shape of the body or with the body have considerable impact on stability and movement in water
- 4. you have to learn new automatic breathing reactions, appropriate to the new surroundings

re 1.

In water - as well as on land - the body is influenced by downthrust or gravity.

But in water the body is also influenced by upthrust or buoyancy. Those to whom gravity is a problem on land – for instance persons with cerebral palsy, muscular dystrophy, spina bifida, multiple sclerosis, polio, hemiplegia and paraplegia - may in water learn to achieve independent freedom of movement using the assistance of buoyancy or upthrust.

re 2.

On land we are dependent on firm surfaces to support us, but in water we can rest and move without "being grounded" to something firm or fixed. You must have good motor control to move threedimensionally, so it is a good element for training body-sensation, body-awareness, joint positions, spatial awareness and postural control. In the water - whenever you are not symmetrical in shape or density around the fronto/transversal-, the saggitto/transversal- and/or the saggitto/frontal axis of the body, you will start rolling. So when moving in water you are at once and continually reminded of your body-shape. You need not tell people that or correct them - it is felt! You are immediately aware of this effect and so automatically you may try to react to prevent the rotation. Through this you may become motivated to sense, feel and try to develop a greater variability of motor programming rules in order to control your body in water.

re 3.

So as small alterations of/or with the body have considerable impact on postures and movements, you may use that

- to avoid unwanted movements by making your body symmetrical, and
- to initiate voluntary changes in postures by making your body asymmetrical.

When a person needs an instructor in the water, she or he uses her or his hands to facilitate the person's own balance-reactions, so it is essential that the instructor knows the correct handling of a person in water. Also the instructor must know, if the goals of the water activities are something else than learning to swim independently.

re 4.

Usually - on land - we are not aware of our respiration. We have automatic respiratory reactions. When in water, you will have to learn new appropriate breathing patterns, as you can only inhale with your mouth and/or your nose out of the water. And you will have to overlearn these new breathing patterns, so they become automatic reactions, too, which means that you in all situations - also and especially the unexpected - will use these new automatic breathing reactions appropriately. Learning this requires much more than just blowing bubbles or eggs!

I shall now go on talking about the three words from the title of this presentation

- activity and occupation in specific environment
- participation in social activity and
- playfulness
- and finally I may give a few examples from my practise

Activity

We know that good health is closely related to a person's engagement in *occupation*. In this case occupation does not mean a person's profession or job.

If people with disabilities have knowledge about water and the body's reactions in the element or have skilled teachers or therapists who know that, they may be able to experience more freedom to move independently in water. And that may increase their self-esteem and promote playing freely. Most people - children and adults with or without disabilities - like water activities, but only if you learn to hold yourself floating – literally and figuratively.

Water invites moving and promotes play. Thus, occupational therapists and physiotherapists may draw on the power of water when designing intervention programs.

Physiotherapists may do hydrotherapy, where patients perform exercises in an environment different from that of air.

Occupational therapists may have quite different intention of using water as part of treatment. To an occupational therapist goals might be:

overhead with purposes

Water activities provide an opportunity for the mastery of numerous occupational performance based goals. Undressing and dressing, toileting, showering, and using public transportation are a few of the many tasks individuals may perform when involved in a therapeutic water-based program. Children readily understand the relevance of these skills in the context of a meaningful activity for which they are required.

In my programs, we spend a long time in the changing room and in the shower - as well as the sauna. Caregivers are taught not to help children with tasks they have already mastered, to assist with tasks the children are practising, and to do only what the children are not yet able to do. As an occupational therapist, the art of my profession is to create an enhanced environment where a person can be actively engaged in meaningful occupation.

We have as occupational therapists learnt in recent years that "…human occupation is motivated, organised, performed and influenced by the environment." (Kielhofner and Forsyth, 1997). As swimming coaches and Halliwick instructors we have always known that water is an environment that may offer these qualities, if you are skilful – from both a theoretical and a practical perspective.

We know from experience, that in water you may be "Breaking the Waves", getting the feeling of mastery and coping.

We will all feel anxiety if the challenge is too big compared with our capacity, and boredom if the challenge is too little compared with our capacity.

If the instructor has assessed the person's actual capacity in water, and is able to match that to the challenge of the activity, the person may feel mastery and coping – may have a 'flow-experience' (Csikszentmihalyi)

Participation

"Games need groups and groups need games", Ann Gresswell said at the Halliwick Conference in Nijmegen five years ago...

In water – especially when working in the upright position – you may easily create an atmosphere of being a member of a group, actively engaged in occupation...

In the group you may "...learn how to win and how to lose, as well as develop greater ego strengths." (Dorval, Tétreault and Caron, 1996)

From Hans Christian Andersen's fairy tale: **"The Ugly Duckling"** we know what it means to be different and be excluded from social interaction with peers

The Ugly Duckling was born under the dock weeds, close to the moat or pond. The mother duck was sitting there on the eggs, and the biggest of the eggs took such a long time to crack. At last it, too, cracked, and 'peep, peep' said the baby, and what a big ugly thing he was – very different from the other pretty ducklings! The next day the mother duck went down to the water, and in plopped one duckling after the other, floating beautifully, their legs working all by themselves. When she saw the ugly duckling swimming, she said: "He's quite handsome really, if you take a good look at him". Later, when the other ducks and the turkey in the yard said he was ugly, the mother duck said: "He is not handsome, but he's very good-natured and swims as nicely". But the ugly duckling was chased and mocked by the old duck, the turkey, his sisters and brothers, the wild ducks, the geese, and at last also mocked by his mother – so he ran away.
Weary and sorrowful he hid in the marsh. Some huntsmen appeared and started shooting, and

the dreadful big gun dogs found him, but turned away without touching him. "I'm so ugly that even the dog did not want to bite me", the duckling sighed.

- One evening in the autumn, a whole flock of beautiful large birds flew out of the bushes, giving their strange cry. The ugly duckling was overcome by a strange feeling. He did not know what these birds were called, but he loved them as he had loved nothing in his life before. Winter came, and it would be far too depressing to recount the misery the duckling had to suffer in that hard winter.

But in spring he flew to a beautiful garden. Just ahead of him three beautiful white swans came floating on the water, and he was overcome by a strange melancholy. "I shall fly to those royal birds and if they want to cut me to bits, it is better than being mocked by the other ducks." When approaching he said: "Kill me", bowing his head towards the surface of the water – but what did he see? – his own reflection. He was no longer an ugly duckling, but a swan himself. And the other swans swam round him – in admiration.

So everything was changed, when both he himself and his surroundings who had regarded him an ugly duckling – realised his transition into a swan. His heart rejoiced: "I never dreamed of so much happiness when I was the ugly duckling"

• Seen from a Halliwick-perspective, you may say that: when recognised as a swan, inclusion is promoted, and thus allowing a former ugly duckling to participate in a group of peers.

Through our Water Activities all over the world – though differently applied – we have all <u>experienced many ugly ducklings' transition</u> into swans when holding themselves floating – literally and figuratively

- they may have 'flow-experiences' when becoming part of the group and 'masters of the element!'

- And that promotes activity, participating and playfulness.
- Water activities are valued leisure or recreation activities that can be shared with friends and family. Water-based intervention programmes often lead to participants' attending swimming clubs or going with family or friends to public pools. Such recreation is nice for the whole family and capitalises on a person's abilities rather than emphasising her or his disabilities. Water activities provide satisfying experiences that lead to increased self-esteem and opportunities to develop valued interpersonal relationships.

These are certainly as important as, if not more important than, the sensorimotor and fitness goals also achieved in aquatic therapy programmes.

Playfulness

Actually Ann Gresswell has recently argued that the words 'playful' and 'playfulness' are not used in English and especially not appropriate when talking of adults.

But I love these words – so you will have to put up with my using them a lot – to me they are so expressive – so maybe I may be able to promote these words into The Halliwick Vocabulary in the future!

Some people think that it is only children, who play. And you may be called childish if you are playing. I'm proud if some one will call me 'playful' or 'childish', but I know that it probably is not meant as a compliment! They actually may mean: You are not serious, now!

People often say: "Oh, they are *just* playing!", and the word *just* indicates, that they are not serious - they are wasting their time.

Or the teacher says:"When you have finished working, you may just go and play!"...

• Playing, being playful and playfulness have nothing to do with age! We actually in Denmark have a very nice saying: "You never get too old to play, but you get old, when you stop playing!" (photo: playground in South Africa). And many people think that playing is just something with fun and laughter all the time. It may be fun and laughter, but play may also be very hard, serious and concentrated (photo: giraffe beach Party, South Africa)

Play is hopefully something every one wants to do – but some are more skilful players than others. But what is play actually?

If you read one of the rare theory books on play or hear a lecture on play, they nearly always start something like that: "No one has ever defined play!". It is difficult in a few words to tell the characteristics of play. You get some definitions, but they don't seem to catch the whole essence of what play really is and how important play is to all of us.

Some authors have described some main characteristics of play. It requires:

- *internal control*, which means the ability of the player to decide for herself or himself what to play, with whom, and something about how that play will turn out
- *intrinsic motivation*, which means that the player does that particular play activity because of something *about* it, rather than because someone else wants her or him to do it and the
- *freedom to suspend some of the constraints of reality*, where 'constraints' could be usual rules, certain expected roles, or suspend activity limitations and maybe pain. (Neumann, ref. Bundy, 1997)

You need not have specific motor ability or cognitive skills to be playful. But if you have limitations, you will often be assisted in your daily occupations by parents or caregivers. And they may not be playful – they may even think it is waste of time – *just* playing!

James P. Carse – (American professor of Religion) wrote the following in 1986:

• "There are at least two kind of games. One could be called finite, the other infinite. A finite game is played for the purpose of winning; an infinite game for the purpose of continuing the play.

The rules of a finite game may not change; the rules of an infinite game must change.

- Finite players play within boundaries; infinite players play with the boundaries.
- Finite players are serious; infinite players are playful.

Finite players win titles; infinite players have nothing but their names.

A finite player plays to be powerful; an infinite player plays with strength.

A finite player consumes time; an infinite player generates time.

The finite player aims to win eternal life; the infinite player aims for eternal birth.

And as I wrote in the abstract, many children with activity-problems have only experienced finite play with the therapist, the caregivers or the parents. They may never have experienced infinite play – the parents, teacher, therapist or caregivers may not recognise the value of infinite play – maybe even not the dangers of only finite playing. They may value serious training, correct movements and learning something useful = normal skills! – and certainly not *just* playfulness!

I never use the terms correct /normal or primitive/abnormal movements, but talk of increasing the children's repertoire and of learning appropriate movements, behaviour and skills. I think Theo Mulder at the first International Halliwick conference in Nijmegen in 1986 was a great inspiration and spokesman to promote understanding the value of these terms.

Practise

As in intervention on land, I try in water motivating children through play – a adults as well! With children, we use a lot of action songs and rhymes. We also use colourful, plastic playthings – for example balls, rings, and water pistols to promote the children's active engagement. And we really try to promote the children's capacity of being infinite players – by being good playmates together, and not always deciding what to play and how it should be played! As an occupational therapist I hope to be **a designer of a learning landscape**, in which the children develop their capacity for both infinite playing and learning appropriate skills.

A learning landscape or 'water-scape' could be, that I have placed markers along the edge of the pool with playthings and the children may in small groups use the things quite differently according to their imagination, their desires and their capacity, using the caregivers or parents to assist them physically and - if they are lucky - as good playmates.

* "Come on, now we are going to do <u>The Alarm Clock!</u>" I say.

Immediately all the children and their instructors know exactly what is going to happen and begin to prepare. They form a circle around me, the children in vertical position facing me, with the instructors supporting them from behind, according to their specific needs.

I then say: "Now you are going to sleep, all of you, with your eyes closed!" The children bend their heads backward into the water, their legs floating upward, and they lie supine. (**Goals**: concentration, trusting in their own ability, moving from one stable position into another by changing only head position).

* Then I move around the circle, touching each child's feet, saying her or his name. "Now I know that you are all fast asleep!" (**Goals**: supine stability with eyes closed). "Ding-a-ling-a-ling!" I yell until all children move into a vertical position by flexing their necks and hips and stretching their arms forward. As they move into vertical, their mouths go under water, so they close it or they begin to blow bubbles. (**Goals**: moving from one stable position into another, mouth-control, respiration). I continue yelling, until all children have placed one hand on "the alarm button" which in this case is my head, and they start pressing it into the water (**Goals**: mobile arms with stable trunk). I stay submerged as long as possible.

As I emerge, I'm absolutely sure to hear all the children laughing and yelling: "Let's do it again!" Sometimes the children want the activity over and over again in exactly the same way, but after a while they may change the rules, the sound of the alarm clock, where to press the bottom, who is to be the alarm clock etc.

• **Specific goals** in this activity might be (The four photos again!)

 1^{st} photo: concentration, trusting in their own ability, moving from one stable position into another by changing only head position

2nd photo: supine stability with eyes closed

3rd photo: moving from one stable position into another, mouth-control, respiration

4th photo: mobile arms reaching a specific target, with stable trunk

- **Overarching goals** in this activity are: promoting activity, participation and playfulness
- And I'll finish with a few more pictures from my water-world', and stating: As a person's own occupational performance is vital to her or his quality of life, water seems an obvious "remedy" – both in treatment and recreation - not only to children.
 – but it requires more than a pool and a swimsuit to do qualified water activities.
- Learning from the Halliwick Concept is crucial! Playfulness will promote
- So it is my hope and sincere wish, that many more will find it worth 'getting wet' doing many different kind of activities in water: singing, dancing, friendly competition, diving, swimming and *just* play!

Thank you for listening!

References:

- The New English Bible, Oxford University Press, 1970
- Andersen, Hans Chr.: "The Little Mermaid" & "The Ugly Duckling" Fairy Tales, Denmark
- Bundy, A.C., ScD., Occupational Therapist, FAOTA: **"Whoever Plays, Plays Freely",** from Occupational Science Symposium, Los Angeles, March 20, 1998
- Bundy, A.C., ScD, Occupational Ther., FAOTA: "Play: Possibilities, Problems, Paradoxes" from Medical University of Ohio, Toledo, Ohio, March 20, 1997
- Carse, James P.: " Finite and Infinite games: A vision of life as play and possibilities", Penguin Book, Philosophy, 1986, New York: Ballantine
- Dorval, Genevieve et alt.: "Impact of aquatic programmes on adolescents with cerebral palsy". Occupational Therapy Int., 3(4), 241-261, 1996, ? Whurr Publishers Ltd.
- Kielhofner, Gary and Forsyth, Kirsty: "The Model of Human Occupation an overview of current concepts", The British Journal of Occupational Science, March 1997

Further recommended readings:

- "Halliwick in 1986. **The Realities of Movement in Water''.** Edited by Johan Lambeck, N.D.T. Nijmegen, 1990. ISBN 90-800538-1-3. From that in particular:
- p. 70 -91: Mulder, Theo: "Current ideas on motor control and learning: implications for therapy" &
- p. 92-114: Cools, A.R.: Brain Plasticity
- Campion, M. Reid: "**Hydrotherapy in Paediatrics**". William Heinemann Medical Books Ltd. 1985,London, ISBN 0-433-06392-0.
- Campion, M. Reid: "Activity in Water, A Learning Experience"... "Interlink", vol 3: No 1, August 1991. ISSN 0957-3747.

- Gjesing, Gudrun: "How and Why May Water-Activities Be Part of Occupational Therapy to Children with Sensory-Motor Disabilities?". WFOT Bulletin (= World Foundation of Occupational Therapy) Rockville, MD, USA, vol 25, May 1992.
- Gjesing, Gudrun: "How and Why may Water-Activities Be Part of Occupational Therapy to Children with Sensory-Motor Disabilities?". Presentation from: 'Occupational Therapy into the Future', conference Sept. 1992. Dept. of Rehabilitation Sciences, Hong Kong Polytechnic, ISBN 962-367-111-3.
- Gjesing, Gudrun:" Water Activities Purposeful Therapy for Children with Special Educational Needs" Feature Article in NAPOT (Nat. Ass. of Paediatric Occupational Therapists in Britain) Autumn 1997, Oxford Information Press.
- Gjesing, Gudrun:" Water-Activities as an O.T. Intervention to Children (and Adults) with Physical and/or mental Disabilities". A.T.N. Newsletter, Spring 1998.
 A.T.N. =Aquatic Therapy Network for Occupational Therapists, 2424 Hirst Terrace, Havertown, PA 19083-1417, USA.
- Bundy, A.C., Lane, S.J. & Murray, E.A.: "Sensory Integration: Theory and Practice" (2nd ed.) – in press, Philadelphia: F.A. Davis. Chapter: "Water based Intervention" – Gudrun Gjesing
- You can find the whole of this presentation on: www.gjesing-haderslev.dk

Client's abilities in water are different from their (dis-)abilities on land. While intervention in water and "on land" share many traits, in water we use different strategies to promote movement and stability. Therapists must learn the hydromechanical principles of control for posture and movement. This may be learned from The Halliwick Concept. To create appropriate intervention plans, therapists must do qualitative assessments of each client's abilities in the water, to determine their water skills. In addition, they must learn to do continuous evaluation of each client's development and learning in water in order to adjust goals and plans appropriately. The Halliwick Concept inspires what we do in water, why, and how we do it.

Many activities in water will in the beginning be with the body in an upright position, unlike what many of us are used to, when we are in the pool. In the upright position it is easier to familiarise yourself with the new element, to feel basic trust, to communicate, to see and hear what is happening, and to participate in social activities. In the upright position you may work well on postural control of the neck ("head-control") and on breathing control. But all activities will be experienced under different conditions in order to develop a greater variability of motor programming rules: horizontal / vertical, in a stable position / in mobility, in stagnant water / turbulent water, in shallow water / at greater depths, alone / in a group etc.

* Rhythmical co-ordination:

Your respiratorical rhythm is the base of your whole body's rhythmical co-ordination. Therefore in learning by the Halliwick Method the swimmer will have to learn mastering new breathing patterns before working on specific swimming-patterns.

The current in water is rhythmical, and movements in water get rhythmical, especially when they are also supported by automatical breathing rhythm, rhythmical music or singing.

So water-programmes may give people with disabilities greater performance variations of postures and movements, which are often difficult or impossible on land. This may promote children's ability to play independently. It may also give people with disabilities opportunities to achieve independent movement control, which also has great psychological benefit.

For many people with disabilities, water may be the best element to improve fitness.

If you think in "Conductive Education- / Peto-terms" many aspects may be transferred into the swimming bath :

- training functional skills with a clear intention in structured programmes with a great variability of practice, and performing active movements in an ever changing context ("The Work")
- group-training with a group-leader ("Conductor") and helpers, with the therapist as a designer of a learning situation
- intense and repeated training in variability, both in the pool and in the changing room
- rhythmical training ("Rhythmical Intention")
- attention is focused on 'ability' rather than 'disability'
- important goals are : activity of life and quality of life !