

Water – a Space for Playing and Learning

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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 new world in which gravity predominates, disabling us, 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 physiotherapists use water-based intervention, and the reasons why they treat patients or clients could for example be: It may be easier to handle a heavy client in water than on a couch, you can make exercises against the controlled pressure of the water, a client may benefit from the upthrust or buoyancy to promote standing and walking etc.. With children they often use play activities as 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.

In occupational therapy with children goals ought to be different. Here goals might be for example: promoting Activities of Daily Living, arousal, attention, body awareness, body control, and perhaps infinite playing / playfulness, which all are vital learning areas for children's personal growth.

Another important goal in O.T. may be to coach parents or caregivers in interpreting and understanding their child's reactions and needs, so the parents or caregivers feel more competent in assisting the child experience and learn.

I shall even give you an example of how water activities may promote reading skills!

In pictures and words this presentation will cover these aspects of water activities, as they might look from an O.T. in Children's Health- perspective.

I would like to **thank** the conference committee of NAPOT for both giving me the honour of being one of the foreign features in this 'Space Odyssey', and for giving me the opportunity to talk on a topic, which I have devoted my energy to for so many years.

I have been looking forward to this day, and worked hard on it – for 24 years actually - and I'm launching myself, partly because it is a rather personal, phenomenological presentation, partly

because I'll have to do my presentation in English! And as I don't trust a computer, I will have to operate the overhead, too.

As you know, the words: activity and participation are words used in **WHO's** new international classification of disabilities, with the working title **ICIDH-2**, where in the earlier edition of the classification from 1980 words like: **Impairment**, **Disability** and **Handicap** were central. The newest edition – which has not been submitted yet – is **ICF**, **I**nternational **C**lassification of **F**unctioning, **D**isability and **H**ealth.

I would like to think that the words and the spirit in this new classification from the WHO also have been **influenced by the spirit of the Halliwick Concept and by the core of good Occupational Therapy.**

Imagine an iceberg: you can see only one tenth 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!

The inventor of the **Halliwick Concept of Swimming and Rehabilitation in Water**, James McMillan from The UK, was a hydro-engineer and a swimming coach. He often said when teaching Halliwick: “Swimming is *that* bit”, showing half an inch of space between thumb and forefinger.

“The rest “– showing a fully open hand – “is the personal gain through swimming”, he said!

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

The Halliwick Concept is to me much more than just swimming-technique and hydromechanics.

It is also a concept on:

- • motor learning
- • holistic learning
- • coping – regarding a person's ability in water rather than her or his disability on land
- • healing more than cure
- • improving quality of life and even 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 mid-sixties.

In those days 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. The Concept emerged in the same period as The Bobath Concept and The Concept of Conductive Education from Hungary. James McMillan and Mr. & Mrs. Bobath had several discussions, and did not at all agree in the early years. In the course of time The Bobath Concept has changed a lot. But time after time it strikes me how little actually both The Concept of Conductive Education and The Halliwick Concept have had to change, compared to other concepts. Andreas Petö and James McMillan shared many traits, they were really ahead of their time. Both Concepts do emphasise

- • the spirit of looking at ability instead of looking at disability
- • learning functional movements instead of correct movements
- • the influence of the environment in learning movements
- • situated learning - In Halliwick: you learn to control your body in water *in* the water
- • motivation as important factor for the learning
- • the parent or caregiver are also part in a learning process, conducted by a skilled instructor, conductor or therapist

I am a recognised Halliwick lecturer, a swimming coach and an occupational therapist in children's health, working part time in an interdisciplinary team in a local Pedagogic-Psychological Counselling Centre. Besides being inspired by The Halliwick Concept, I'm very much inspired by The Concept of Conductive Education and by Sensory Integration.

Water Activities has for twenty-four years been a major part of my intervention as an occupational therapist in children's health. The children attending may have all kinds of activity problems and problems in participation. Every week I have had 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 education and supervision of the parents and caregivers.

The children will attend the groups at least one year, most of them for several years. So we actually run the water activities very much inspired by 'School for Mothers', as done in The Conductive Education.

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 children's health the art of my profession has always been: to make activity tempting, not to manipulate or force.

Barbara O'Shea, a Canadian occupational therapist gave an interview in the Danish O.T.-magazine. She said:

- • “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.” (end quot.)

I think many of us – perhaps especially because we work with children – may agree on this comparison.

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 I also like the rhythm and pulse of jazz-music!

“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).

Characteristics of the element of water

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 it 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 water withdrew and dry land appeared, 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, drought, 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, Glenwood Springs in The US, 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
 - 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 most people think 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 children have swimming-lessons and learn to swim, and swimming is a very popular leisure sport for people of all ages.
- ● As I started saying: All of us begin life in water. Before birth, children grow and frisk about in 'aqua vitae' - the water of life. In this environment with upthrust or buoyancy , the embryo learnt to move freely. Right after birth, gravity predominates us, disabling us, 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 learn overcoming that force.
- ● In the element of water we may all benefit from the force of upthrust or buoyancy, if we re-learn to master the environment. 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,' the little mermaid said, when she turned fifteen. '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 above 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 – in the original version. But I have been told that in the Disney-version, the tale has a happy ending!

- • Seen from an O.T.-perspective, you may say that:
going from one element or environment to another has a great impact on activity performance!
Through Water Activities all over the world – though differently applied – we have all experienced little mermaids 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 like the Disney-version - they may experience coping and have flow-experiences when becoming masters of the element!

And that may promote both their learning and playfulness.

- ● **Some main differences between being on land & being in water**

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. In water we perform active movements in an ever-changing context. Movements and skills, learnt in water, cannot just be transferred to land-conditions.

But you certainly may bring your experiences or adventures with learning, coping, mastering and playfulness *in* the water with you on land!

There are four main physical differences between being on land and being in water, and that have a great impact on your body functions. If you learn to master and appreciate this, water activities can be most motivating. If you don't, water may be terrifying.

- ● **The four aspects are:**

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

re 1. bodies are influenced by the upthrust or buoyancy

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. bodies have the freedom to move three-dimensionally

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 three-dimensionally, 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 keeping your body symmetrical, and
- • to initiate voluntary changes in postures by keeping your body asymmetrical.

When a child needs an aid in the water, the aid uses her or his hands to facilitate the child's own balance-reactions, so it is essential that aids know the correct handling of a child in water. The aid must also know, what the goals of the water activities , in order to assist promoting the goals.

re 4. you have to learn new automatic breathing reactions, appropriate to the new environment

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 puff away plastic eggs!

- • **Sensory Integration and Occupation**

Water can be a powerful and highly motivating therapeutic medium. A number of physical and psychosocial benefits may be associated with water-based intervention. Activities potentially provide the child with a number of benefits related to sensory integration. Active involvement and the demand for an adaptive behaviour also are part of water activities.

- • Water may provide many different kinds of sensory information. Because movements in water is felt differently from that of air, **the tactile system** receives a great deal of stimulation. In a pool with a lot of people moving around, the water also moves in continually new ways. This may result in lack of habituation by the tactile receptors. Water invites movements in a number of positions including the vertical and horizontal planes. Because of buoyancy, rotations

of the body are also common. Movement in a number of planes provides enhanced information to **the vestibular system**. In water, it is not possible to compensate for poor processing of vestibular information by using vision, as you cannot see your body well and therefore, lack visual reference. When the child moves against the resistance of water, **proprioceptors** receive input. However, due to upthrust or buoyancy, the proprioceptors receive different stimulation than that received on land, where gravity or downthrust dominates. Therefore, it is difficult to tell exactly the effect of proprioceptive stimulation received in water.

- ● 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, but means that a person is engaged in what she or he weights as meaningful activity.

If children with disabilities have knowledge about water and the body's reactions in the element and have skilled parents, caregivers, conductors 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.

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.

Water activities may provide an opportunity for the mastery of numerous occupational performance based goals. Undressing and dressing, toileting, showering, using public transportation, and also social skills, self-esteem, fitness, training for leisure sport, playfulness are some of the many tasks individuals may perform when involved in O.T. in water. Children readily understand the relevance of these skills in the context of a meaningful activity for which they are required.

In our programs, we spend a long time in the changing room and in the shower - as well as the sauna. Parents and caregivers are inspired 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 also 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 occupational therapist assesses a child's actual capacity in water, and is able to match that to the challenge of the activity, the child may feel mastery and coping – may have a 'flow-experience' – 'it goes swimmingly' as you say it in English.

(Csikszentmihalyi)

Example:

- ● "Come on, now we are going to do The Alarm Clock!" I say.

Immediately all the children and their aids 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 aids 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 or the roles, 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!)

1st 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!

- • **Participation**

”Games need groups and groups need games”.

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 meaningful occupation.

In the group you may “learn how to win and how to lose, as well as develop greater ego strengths.” (quot.: 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 dog 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.” – he certainly didn’t launch himself! 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 O.T.-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 experienced many ugly ducklings’ transition into swans when holding themselves floating – literally and figuratively
– they may have ‘flow-experiences’, feeling that ‘it goes swimmingly’, when becoming part of the group and ‘masters of the element!’
- • And that promotes activity, more participating and playfulness.
- • Water activities are valued leisure or recreation activities that can be shared with friends and family. Water-based intervention programmes as part of O.T. treatment may often enable a child to attend a swimming club or going with family or friends to public pools. Such recreation is nice for the whole family and capitalises on a child’s abilities rather than emphasising her or his disabilities. Water activities may 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**

I have been told that the words 'playful' and 'playfulness' are not commonly used in English, and especially not appropriate words in English, when talking of adults.

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

In Denmark we have a very nice saying: "You never get too old to play, but you get old, when you stop playing!" So playing, being playful and playfulness have nothing to do with age!

Some people think that it is only children, who play. And you may be called childish if you are playing. I would be 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 may say: "When you have finished working, you may just go and play!"...

Many people also think that playing is just something with fun and laughter all the time. It *may* be fun and laughter, but play may also be a very hard, serious and concentrated matter.

Play is hopefully something every one wants to do – but some are more skilful players than others.

Some authors have described some main characteristics of play.

Play requires, as you may know:

- • *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 even 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!

They may value what they call serious training, correct movements and learning something useful = normal skills! – and certainly not *just* playfulness!

It has taken me so many years to come so far as daring to write down in the treatment plan for a child, that a goal for the child is playfulness.

Actually the word ‘playful’ directly translated from Danish into English is ‘sick from playing’! It must be a very infectious sickness – a real disease carrier!

Example: Camilla, her mother and the conductor.....

• • Practise

As in intervention on land, we try in water to motivate children through play activities and motivate them to play. 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 understanding of the task and their active engagement in activities, I decide and conduct. Playthings also provide useful feedback and knowledge of the result of their movements.

And we really try also to promote the children’s capacity of being infinite players – by trying to be good playmates, and not always deciding what to play and how it should be played! This may be promoted by just having a lot of different playthings available to the children and give them the time to decide for themselves what they want, and offering your hands for support.

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 and meaningful skills.

A learning landscape or ‘water-scape’ could be, that we place 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.

- • And here finally some pictures about how water activities **may promote children’s reading skills**: These three girls – I took the photos – the teacher and the children made their own personal reader, which they actually could read to friends and family – although their reading skills were very limited! That certainly promoted their self-esteem and motivation for learning to read!

- • 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, also for an O.T. in Paediatric.
- • Learning from the Halliwick Concept is crucial!
Playfulness will promote
- • The **art** of water-based intervention is the ability to blend the physical properties of water with the child's wishes and functional abilities, to provide the optimal challenge for improved functional outcome (inspired by Jane L. Styer-Acevedo, PT)
- • It is my hope and sincere wish, that many O.T. will launch themselves, be taken in, dive into the element, submerge and find it worth 'getting wet' – doing many different kind of activities in water:
singing, dancing, friendly competition, diving, swimming - and *just* play!
- • Thank you very much!

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