

Bodily play, movement- based games and disabilities

– a contradiction or synergy?



- How can we design games that include players with different bodily abilities?
- What is the role of multisensory design in this regard?

About me

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- Design of movement-based games with a focus on designing for bodily play in an experiential perspective
- Research through Design methodology; developing designs and theory in synergy
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Playing with bodily handicaps is common in traditional movement-based games

- Blind man's buff – the catcher is blindfolded
- Hopscotch – only hop on one leg
- No use of the hands in football (soccer)
- No use of feet to touch the ball in, e.g., basketball
- Only allowed to touch the ball with a racket in tennis
- Balloon dancing; keep the balloon between your heads while dancing

Jørn Møller. 2000. *Euroleg, 121 gamle lege og spil fra Idræthistorisk Værkstedes internationale legepark*. Bavnepanke, Idræthistorisk Værksted, Denmark, Slagelse.

Restraints – limited bodily preconditions

- Restraints refer to the common handicaps in traditional movement-based games; fixations or exclusion of body parts, or deprivation or manipulation of bodily senses (restraints)
- Fixation of body parts, e.g., fixating body parts on designated colors in Twister
- Exclusion of body parts, e.g., the use of hands is not allowed in football (soccer) or feet in handball.
- Deprivation or manipulation of bodily senses, e.g., blindfolded in Blind Man's Buff



Restraints

“We define restraints for bodily play as direct fixations or exclusions of body parts, or deprivation or manipulation of body senses instated either by rules, actions or the use of devices. When the players move, the restraints take form as unnecessary and arbitrarily chosen obstacles causing a change in the players’ bodily preconditions for actions and interactions, which leads to a difference in their bodily movement possibilities. For bodily play experiences, the change in the players’ preconditions for actions and interactions starts the process of reshuffling the equilibrium leading to kinetic joy rides.”

Louise Petersen Matjeka, Mads Hoby, and Henrik Svarrer Larsen. 2021. Restraints as a Mechanic for Bodily Play. In *CHI '21: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, ACM Press, Online. DOI:<https://doi.org/10.1145/3411764.3445622>

Sensory stimulation through "handicaps" in bodily play

- Reduction of a bodily sense channels the attention to other senses
- In this way, bodily awareness can be stimulated through restraints
- Bodily play can offer a frame where the ordinary everyday beliefs and rules (of, e.g., bodily "being in the world" and identity) can be altered and re-negotiated

Don Ihde. 1990. *Technology and the lifeworld: from garden to earth*. Indiana University Press, Bloomington.

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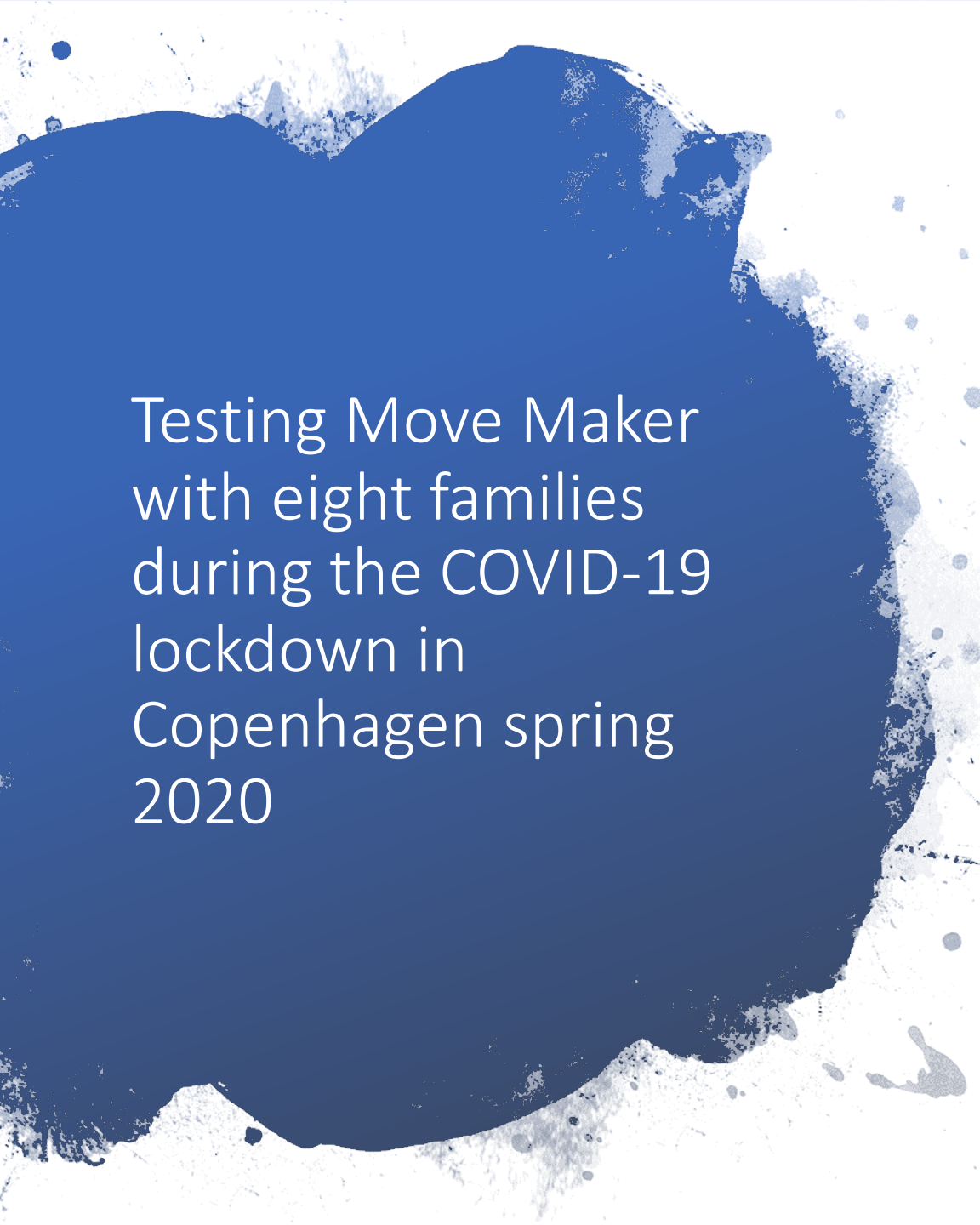
J. H. Kerr and Michael J. Apter. 1991. *Adult play : a reversal theory approach*. Swets & Zeitlinger, Amsterdam.

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J. Stenros. 2012. In Defence of a Magic Circle: The Social and Mental Boundaries of Play. In *Proceedings of DiGRA Nordic 2012 Conference: Local and Global – Games in Culture and Society*.

The Move Maker –
Exploring bodily
preconditions and
surrounding conditions for
bodily interactive play
(designing with restraints)

Louise P. Matjeka. 2020. The Move Maker –
Exploring Bodily Preconditions and Surrounding
Conditions for Bodily Interactive Play. In
*Proceedings of the 2020 CHI Conference
Extended Abstracts on Human Factors in
Computing Systems*, ACM Press, Honolulu,
Hawai'i. DOI:[https://doi.org/DOI:
https://doi.org/10.1145/3334480.3381652](https://doi.org/DOI:https://doi.org/10.1145/3334480.3381652)



Testing Move Maker
with eight families
during the COVID-19
lockdown in
Copenhagen spring
2020

"Handicaps give you an insight into other people's lives because you have your own room for manoeuvre - short or long arms, short and long legs, and it makes us more equal. Adults and children are equally good/bad at it. Adults also need to do something new."

"watch your parents in silly positions."

"[The father], and I had to put our ears together, and I (re)experienced a kind of closeness that we may lack in our everyday, hectic daily life."

Movement-based games and awareness of bodily abilities

Identity and role play; being disabled, having different disabilities, reversing the roles of being the bodily-abled

Bodily play; stimulating bodily senses and bodily awareness through "disabling" bodily abilities (and thus augmenting others)

Can we include diverse bodily abilities in our movement-based game designs and encourage bodily play for all abilities to play together by stimulating different bodily senses (including the kinesthetic)?

Moreover, hopefully create greater awareness of our own and others' bodily abilities in general?

References

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- J. H. Kerr and Michael J. Apter. 1991. *Adult play : a reversal theory approach*. Swets & Zeitlinger, Amsterdam.
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- Louise Petersen Matjeka, Mads Hoby, and Henrik Svarrer Larsen. 2021. Restraints as a Mechanic for Bodily Play. In *CHI '21: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, ACM Press, Online. DOI:<https://doi.org/10.1145/3411764.3445622>
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