

[Simon Hayhoe](#)

A grounded theory investigation into the philosophical and pedagogical theories of play by blind and visually impaired children

Conference paper

Original citation:

Originally presented at Hayhoe, Simon (2014) *A grounded theory investigation into the philosophical and pedagogical theories of play by blind and visually impaired children*. In: 6th Biennial Conference of the International Froebel Society entitled "Play, Self- activity, Representation and Development", 26-28 Jun 2014, Canterbury, UK.

This version available at: <http://eprints.lse.ac.uk/59354/>

Available in LSE Research Online: September 2014

© 2014 The Author

LSE has developed LSE Research Online so that users may access research output of the School. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Users may download and/or print one copy of any article(s) in LSE Research Online to facilitate their private study or for non-commercial research. You may not engage in further distribution of the material or use it for any profit-making activities or any commercial gain. You may freely distribute the URL (<http://eprints.lse.ac.uk>) of the LSE Research Online website.

A grounded theory investigation into the philosophical and pedagogical theories of play by blind and visually impaired children.

Simon Hayhoe

Canterbury Christ Church University, UK

Presentation to the 6th International Froebel Society Conference, Canterbury UK, 26-28 June 2014.

Introduction

- This article presents a grounded theory investigation on cognitive and emotional development of blind and visually impaired children
- It focuses on three themes in relation to play and creativity:
 - Academic
 - Social
 - Cultural
- Data is analysed through:
 - The epistemological model of disability
 - The notion of passive exclusion from cultural activities through institutional policy and practice
- The study is inspired by my early research on pedagogy for the blind, focusing on art education (Hayhoe, 2008a, 2008b, 2012)

Epistemological Model

- The epistemological model is based on three core ideas of the causes of exclusion:
 - exclusion is founded on the processes of knowledge creation
 - stereotype people's impairments and behaviour
 - knowledge is influenced by the social and cultural biases of authors
 - social and cultural unevenness in the theories of impairments and disability
 - In terms of blindness, knowledge on touch was derived from pedagogies influenced by a philosophy of enlightenment from the 17th and 18th centuries (Hayhoe, 2008a, 2013b)

The Epistemological Model on the Back of Cigarette Packet

Int Ps \rightarrow (Kn $>$ Im) \rightarrow Ds Pc & Ps Ex

Int Ps = Intellectual Process

Kn = Knowledge about impairment

Im = Impairment, e.g. blindness or deafness

Ds Pc = Disabling Process

Ps Ex = Passive Exclusion

Exclusion: Active Exclusion

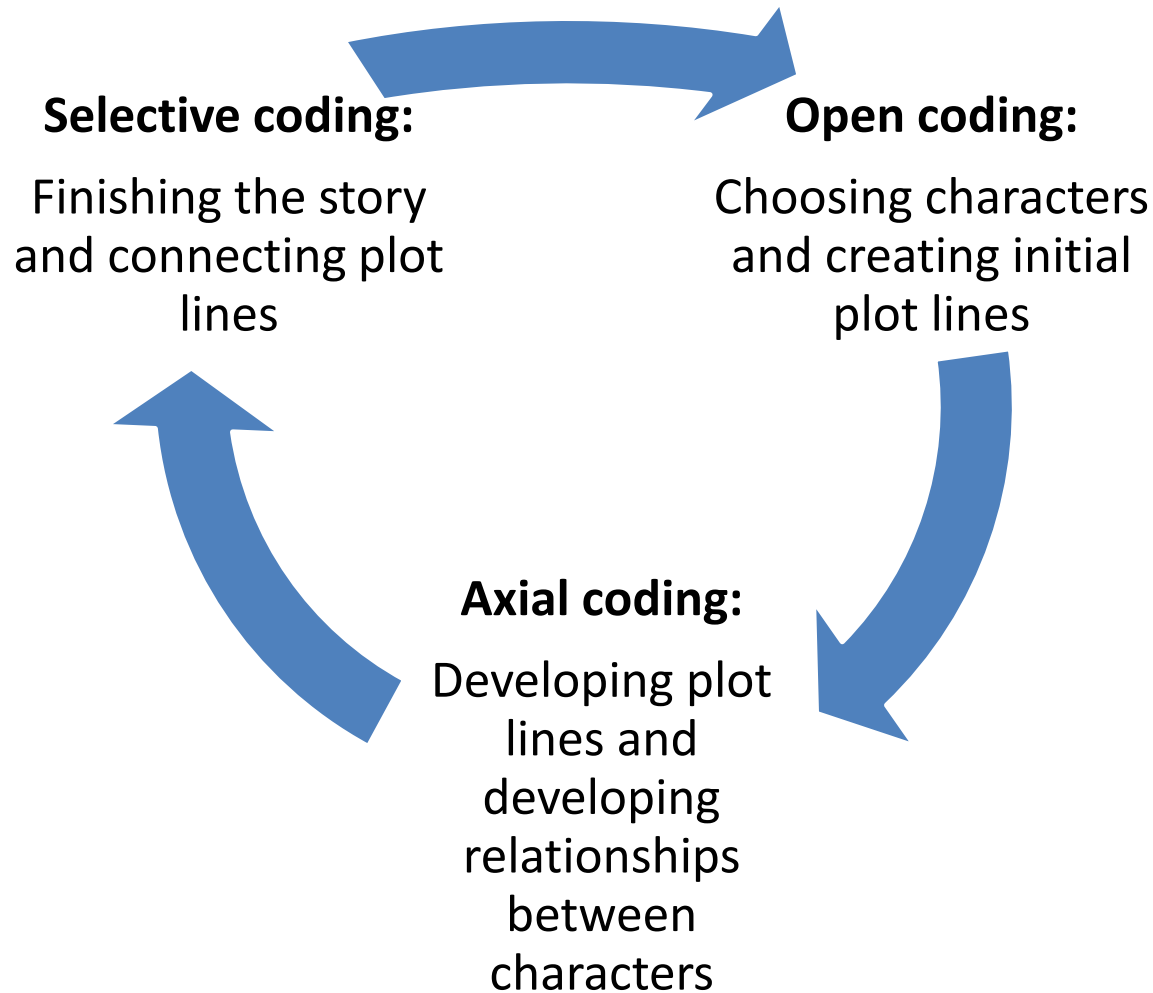
Three observable forms of active exclusion:

1. Violent and aggressive acts, such as eugenics (Pfeiffer, 1994; Reinders, 2008; Tilley, Walmsley, Earle & Atkinson, 2012, Barnes & Mercer, 2003)
2. Segregation, analogous to oppression based on race, class or gender (Smith, 2001; Valeo, 2009; Oliver, 2001, 2013).
3. Marginalisation, observed in the openly expressed belief in the inferiority people with impairments, as distasteful and deviant to social norms (Hehir, 2002)

Exclusion: Passive Exclusion

- Passive exclusion is opposed to active exclusion and is observable in academic attitudes to disability
- It homogenises an idea of impairments as disability, and has two forms:
 1. Authoritarian struggles that have an effect on our attitudes towards types of impairment (Hayhoe, 2008a, 2012, 2013b)
 2. Changing of knowledge of impairments changes in different environmental, cultural and historical contexts (Hayhoe, 2012, 2013b)

Grounded Methodology (Hayhoe, 2012)



Data Collection Methods

- In common with the epistemological model, the focus was on the pedagogical theories and those that create them
- Primary literature:
 - Academic articles
 - Text books
 - Research reports
- Secondary literature:
 - School reports and brochures
 - Magazine and newspaper articles
 - Witness accounts by blind people – where available

Observations on the anomalies in play, pedagogies and blindness

OPEN CODING FINDINGS

Epistemological Anomalies

- The majority of blind people, in modern Britain for example (Access Economics, 2009), still have visual experience
- Hayhoe (2008b, 2013a, 2013c, 2014) finds that blind people with visual experience like to exercise their vision and can show preference for visual artefacts over tactile objects
- Early pedagogies fell into national and religious categories, and were restricted to separate institutions
- The assumptions on blindness amongst early pedagogists in particular related to philosophies from the C17th & C18th – particularly those of Locke, Berkeley and Diderot (Hayhoe, 2008a, 2013a,)
 - Discussed touch and audible sources as play media and environment – assuming this was the main perception
 - Speculation based on perception related to intelligence and morality
 - Philosophical speculation continued until the end of the C20th

Molyneux's Question to Locke

A man being born blind and having a globe and a cube, nigh of the same bigness, committed into his hand, and being taught or told, which is called the globe and which the cube, so as easily to distinguish them by touch or feeling; then both things taken from him, and laid on a table. Let us suppose his sight restored to him; whether he could, by his sight, and before he touch them, know which is the globe and which the cube? So whether he could not reach them though they were removed 20 or 1000 feet from him?

MS, Locke c16 ff. 92-93 Letter from Molyneux (William) to the authors of the Bibliotheque Universelle, 7 July 1688. Reproduced from the correspondence of John Locke, the John Locke Collection, Bodleian Library, Oxford University

The development of a philosophy of *Perceptualism*

AXIAL CODING

Initial Pedagogical Movement: Blindness and Deficit

- In the middle of the C18th Diderot (2001) proposed that blind people had abilities with their hands and through music in particular, a point later developed by Demodocus (1774) and Hauy (1889)

The most important view, therefore, which we can entertain in the education of the person deprived of sight, is to redress, as effectually as possible, the natural disadvantages with which he (sic.) is encumbered; or, in other words, to enlarge as far as possible his sphere of knowledge and activity. This can only be done by the improvement of his intellectual imagination and mechanical powers, and which of these ought to be most assiduously cultivated, the genius of every individual alone can determine...

That if one sense should be suppressed, it but retires into the rest. (Diderot, 2001: P. 676)

Classification of Pedagogies in the Original European Institutions (Hayhoe, 2008a)

	French	British	Austrian
Product	Knowledge	Capital/Handcrafts	Emotional Development
Process	Route Literature	Mechanical Production	“Aesthetic” hand usage
Motivation	Morality	Morality	Morality
Inspiration	Catholicism	Protestantism	Catholicism
Outcome	Financial weakness	Financial survival	Financial expedience
Funding	State/ Royal Patronage/ Charity	Charity	State/ Royal Patronage

Perceptualism: A Pedagogy of Play & Morality

- Early studies referred to the Christian moral aspects of play and creativity
 - There was a often an assumption that blind people
 - Had no visual experience
 - Were less capable of play and creativity
- Touch was revered as the main influence
- Earliest asylums (Britain & France) dissuaded children from creative play, although in Britain there was hand work
 - All early education prized morality developed either through vocational handwork, the bible , literature or religious music
- Assumed that blind people were a homogenous group

English & Scottish Approaches to *Handwork* – Vocational Handwork

*"Then view you pensive, interesting
group,
Hard is their lot,- with poverty they
stoop,
The shades of darkness on their
eyelids dwell,
They know not how to chase the
mystic spell.*

*View nature's soul! doth not that god
of day!
Pour in delight upon the visual ray?-
View Flora's beauties in their gay
attire,
Say, do not these a secret joy inspire?*

*The charms of nature, and the works of
art,
To different minds their various joys
impart;
Save where the darken'd optics ne'er
could learn,
Objects of arts, or nature to discern.*

*This night of nature striving to illumine
By their honest toil, to cheer this visual
gloom,
Fair Charity with kind, unwearied hand,
Supports the cause of virtue's chosen
band.*

*Their aim is blessings on the blind to
pour,
Make useful that, which useless was
before;
Yes, charity will flow the useful grain;
And cheerful, industry each good obtain."*

The New Austrian Movement of Creative Handwork & Morality

- In Austria during the early C19th, Klein, a devote Catholic, was influenced by Hauy, but felt a different form of handwork was needed for moral reasons
- In 1836, for example, Klein stated:

“[The] blind person who cannot be stimulated by vision and who is thus used to gaining pleasure from feeling objects is more liable than others to involve himself in the vice of masturbation that weakens the body and soul. Exercise and occupation can prevent this most effectively” (Klein, 1971)

Klein's Proposal for Symbolic Play and Interaction With the Environment

“Wooden animals and similar play things he will enjoy no less than any other children and at the same time he will exercise his hands while playing with them...

Once a blind child can walk, he will soon point out by himself what needs to be done to cultivate his mind. He will observe by touch all objects in his environment and like seeing children will ask many questions about them.”
(Klein, 1971)

Klein in Britain: Symbolic Play in the Environment

- The Normal School, founded by Armitage, a British surgeon who became blind, studied in Austria, and later founded the RNIB, the normal college tried to “normalise” blind children
- Although children engaged in vocational handwork and music to develop a career after their education, they were given opportunity to play:
“I have known a blind child who constructed mountain ranges, mud forts, cottages - in fact, a whole village, with a church, shops, and ordinary houses; even modelled men and women, invited them to a party, and then to mud pie and cakes.”

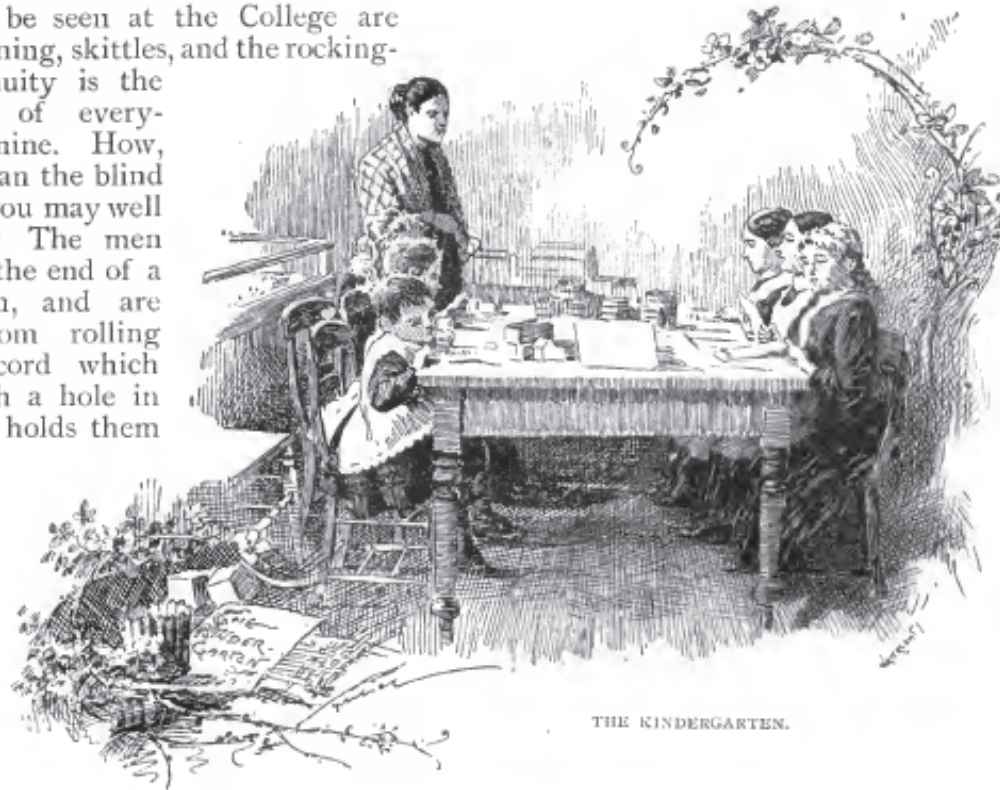
Klein's Pedagogy at the Normal School

world, and how, when they were having their feed at the inn, this rapt admirer rang the bell of the machine, to the delight of a crowd of enthusiastic onlookers.

Other forms of outdoor amusement and recreation to be seen at the College are swinging, running, skittles, and the rocking-boat. Ingenuity is the characteristic of everything we examine. How, for instance, can the blind play skittles, you may well ask? Thus: The men are placed at the end of a long platform, and are prevented from rolling away by a cord which passes through a hole in the board and holds them where they fall. The ball having rolled to the end of the platform, drops over on to a slope, and returns to the players.

themselves, is one of the delights of their lives.

So much for what Dr. Campbell properly regards as the generation of the motive



Play Through Symbols & Environments

- In the early 20th Century British and American museum courses developed object based exploration through touch (Charlton-Deas, 1914)

- This theme continued later into the C20th, through schools for the blind
“ “[Handcrafts] should take the form of the expression of the child's own ideas. If handwork is the outcome of a project such as "the home," "the garden," "Christmas," the child's work will be a purposive fulfilment of his felt needs.”

(Joint Committee of the College of Teachers For the Blind & the National Institute For the Blind, 1936)

Image from an American museum touching session



Modern Assumptions in Toy Design

- Contemporary toy design and play pedagogy has also been based on an assumption of complete lack of sight, and the need for touch – and in the case of deaf-blind children, lack of *all* sight and hearing (Capozzi, De Prisco, Nasti & Zaccaginino, 2012; O’Bryan, Parvez, Pawluk, 2012)
- That digital games for blind children should be auditory, and have no visual reference (Carvalho, Guerreiro, Duarte, & Carriço, 2012)

Testing hypotheses through empirical studies

SELECTIVE CODING

Selective Coding: Testing Hypotheses

- Hypotheses: Because blind students had a separate pedagogy based on an assumption of their perceptual and cognitive inferiority, their development was found lacking in comparison to sighted children
- Findings on the structure of research showed that a number of researchers, most prior to C21st, made similar assumptions to those of the early pedagogists, and focused on totally blind students alone (Wills, 1968; Sandler & Wills, 1974; Tröster & Brambring, 1994; Adelson & Fraiberg, 1974; Finn & Fewell, 1994; Skellenger, Rosenblum & Jager, 1997)
- Other studies showed that blind children were only behind in their play development only before intervention or when they had limited language development, speculatively related to a lack of intervention or stimulation from outside sources (Rogow, 1983; Pérez-Pereira & Conti-Ramsden, 2013; Lieberman & MacVicar, 2003; Recchia, 1997; Celeste, 2006, 2007; Zanandrea, 1998; Skellenger & Hill, 1994; Warren, 1994)

Conclusion

- Tactile and auditory play was developed from a tradition based on miss-assumptions and reductions in philosophy and psychology
- Access to multi-modal forms of play that encompass and utilize all of the senses in concert should be favoured for blind and visually impaired children – as indeed it should be for all children
- Individual needs of the blind and visually impaired child should be considered when designing the environment and toys they use for play
- Research on creativity and play for children who are blind and visually impaired needs to emphasise the individual physical, social and cultural needs of the blind and visually impaired child

REFERENCES

- Adelson, E., & Fraiberg, S. (1974). Gross motor development in infants blind from birth. *Child development*, 45, 114-126.
- Capozzi, A., De Prisco, R., Nasti, M. & Zaccagnino, R. (2012). Musica Parlata: A methodology to teach music to blind people. In *Assets 2012: Proceedings of the 14th International ACM SIGACCESS Conference on Computers and Accessibility*. New York: ACM.
- Carvalho, J., Guerreiro, T., Duarte, L., & Carriço, L. (2012). Audio-based puzzle gaming for blind people. In *Proceedings of the mobility accessibility workshop at MobileHCI*, San Francisco, CA, US.
- Celeste, M. (2006). Play behaviors and social interactions of a child who is blind: In theory and practice. *Journal of Visual Impairment & Blindness*, 100, 75-90.
- Celeste, M. (2007). Social skills intervention for a child who is blind. *Journal of Visual Impairment & Blindness*, 101, 521-533.
- Charlton, Deas J. A. (1913). The Showing of Museums and Art Galleries to the Blind. *Museums Journal*, 13, 3, 85–106.
- Demodocus (1774). On the education of the blind (open letter, dated September 10th 1774). *The Edinburgh Magazine and Review*, 2, 673–86.
- Finn, D. M., & Fewell, R. R. (1994). The use of play assessment to examine the development of communication skills in children who are deaf-blind. *Journal of Visual Impairment and Blindness*, 88, 349-349.

- Hauy, V. (1889). An essay on the education of the blind: re-printed from the original from Paris, 1786. Leicester, England: Tompkin & Shardlow, St. Martins.
- Hayhoe, S. (2008a). God, money & politics: English attitudes to blindness and touch, from enlightenment to integration. Charlotte, North Carolina: Information Age Publishing.
- Hayhoe, S. (2008b). Arts, culture and blindness: Studies of blind students in the visual arts. Youngstown, New York: Teneo Press.
- Hayhoe, S. (2012). Grounded theory and disability studies: Researching legacies of blindness. Amherst, New York: Cambria Press.
- Hayhoe, S. (2013a). The philosophical, political and religious roots of touch exhibitions in 20th century British museums. *Disability Studies Quarterly*, 33, 3, <http://dsq-sds.org/article/view/3760/3273>.
- Hayhoe, S. (2013b). Expanding our vision of museum education & perception: An analysis of three case studies of independent, blind, arts learners. *Harvard Educational Review*, 83, 1, 67-86.
- Hayhoe, S. (2013c). A practice report of students from a school for the blind leading groups of younger mainstream students in visiting a museum and making multi-modal artworks. *Journal of Blindness Innovation & Research*, 3/2/<http://www.nfb-jbir.org/index.php/JBIR/article/view/43>.

Hayhoe, S. (2014). An enquiry into passive and active exclusion from sensory aesthetics in museums and on the Web: Two case studies of final year students at California School for the Blind studying art works through galleries and on the web. *British Journal of Visual Impairment*, 32/1/44-58.

Joint Committee of the College of Teachers For the Blind & the National Institute For the Blind. (1936). *The Education of the Blind*. Worcester: Edward Arnold & Co.

Klein, J. W. (1971) *Guide for a suitable treatment of blind children from their earliest youth on in the circle of their families and in the schools of their home communities*. *Blindness* 1971, 231–42.

Lieberman, L., & MacVicar, J. (2003). Play and recreational habits of youths who are deaf-blind. *Journal of Visual Impairment & Blindness*, 97, 12, 755-768.

O'Bryan, C., Parvez, A. & Pawluk, D. (2012). An interactive play mat for deaf-blind infants. *Assets 2012: Proceedings of the 14th International ACM SIGACCESS Conference on Computers and Accessibility*. New York: ACM.

Pérez-Pereira, M., & Conti-Ramsden, G. (2013). *Language development and social interaction in blind children*. New York: Psychology Press.

Recchia, S. L. (1997). Play and Concept Development in Infants and Young Children with Severe Visual Impairments: A Constructivist View. *Journal of Visual Impairment & Blindness*, 91(4), 401-16.

- Rogow, S. M. (1983) Social routines and language play: Developing communication responses in developmentally delayed blind children. *Journal of Visual Impairment and Blindness*, 77, 1, 1-4.
- Sandler, A-M, & Wills, D. M. (1974) Preliminary notes on play and mastery in the blind child. *Journal of child Psychology*, 1, 3, 7-19.
- Skellenger, A. C., & Hill, E. W. (1994). Effects of a shared teacher-child play intervention on the play skills of three young children who are blind. *Journal of Visual Impairment and Blindness*, 88, 433-433.
- Skellenger, A. C., Rosenblum, L. P., & Jager, B. K. (1997). Behaviors of preschoolers with visual impairments in indoor play settings. *Journal of Visual Impairment and Blindness*, 91, 519-530.
- Tröster, H., & Brambring, M. (1994). The play behavior and play materials of blind and sighted infants and preschoolers. *Journal of Visual Impairment and Blindness*, 88, 421-421.
- Warren, D. H. (1994). *Blindness and children: An individual differences approach*. Cambridge: Cambridge University Press.
- Wills, D. M. (1968). Problems of play and mastery in the blind child. *British Journal of Medical Psychology*, 41: 213–222.
- Zanandrea, M. (1998). Play, Social Interaction, and Motor Development: Practical Activities for Preschoolers with Visual Impairments. *Journal of Visual Impairment & Blindness*, 92(3), 176-88.