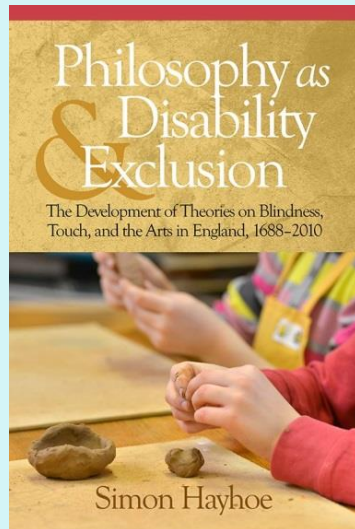


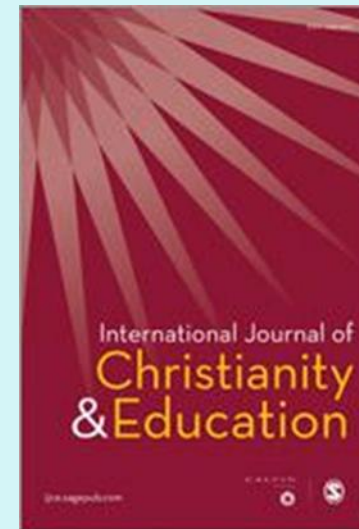
PSYCHOLOGICAL, PHILOSOPHICAL AND SOCIAL THEORETICAL EPISTEMOLOGIES OF BLINDNESS

Lecture to PsychVIC
Royal National Institute for
the Blind, Judd Street, London
Friday 13th May 2016

PARTLY BASED ON NEW BOOK AND ARTICLE



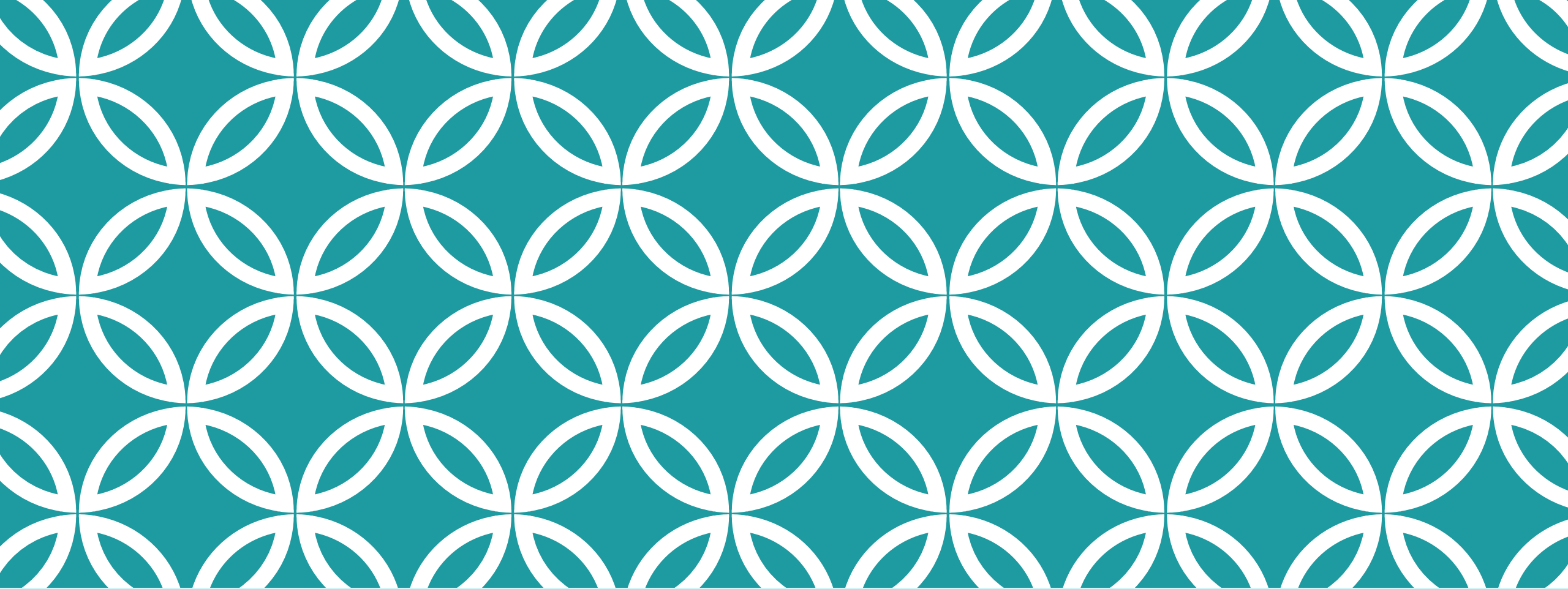
Hayhoe, S. (2016). *Philosophy as disability & exclusion: The development of theories on blindness, touch and the arts in England, 1688-2010*. Charlotte, North Carolina: Information Age Publishing.



Hayhoe, S. (2016b). The epistemological model of disability, and its role in understanding passive exclusion in Eighteenth & Nineteenth Century Protestant educational asylums. *International Journal of Christianity and Education*, 20(1), 49-66.

PRESENTATION STRUCTURE

- Who are we, and where have we come from?
- Describe the epistemological approach to studying blindness
- Early philosophies of blindness
- The effects of these theories on eighteenth and nineteenth century institutions for children
- Twentieth and twenty-first century developments



CRITICAL DUALISM & EPISTEMOLOGIES

Epistemology as a field of study,
and Karl Popper's theory on
ontology and epistemology from
Protagoras

THE EPISTEMOLOGICAL APPROACH TO EXAMINING BLINDNESS

- Analyses the concept of blindness
- Sees the study of blindness through psychological, scientific and cultural identities of disabled people, relating to a whole identity
- See blindness as a methodological concept, and examines ontologies
- Informs more accurate and effective definitions of blindness
- Examines cultural history of blindness, which has evolved
- Develops a social and scientific *understanding* of blindness
- Sees education as a cultural construction of blindness

DICHOTOMY OF BLINDNESS: SUBJECTIVE BLINDNESS

Described in relation to tasks, whether they are socially or naturally defined.

Only exists within certain tasks in certain locations. E.g. people are not blind during a telephone conversation.

Not linked to an identity. It has no cultural or symbolic characteristics.

Can be alleviated through technology.

People who are regarded as able bodied in what we regard as normal living conditions can be blinded under what are regarded as abnormal conditions.

Not regarded as a physical but a practical category.

DICHOTOMY OF BLINDNESS: OBJECTIVE BLINDNESS

An identity defined by a society, institution or scientific concept.

People who are blind are identified by symbols. E.g. Dark glasses, the look of their eyes, white canes, facial expressions.

People are defined by their perceived usefulness to society. E.g. Tasks that produce capital.

People are judged on the permanence of their blindness. E.g. a person who is temporarily blinded is still regarded as person with sight.

Social assumptions are made about people's characters based on their blindness. E.g. sexual deviance or innocence.

HYPOTHESES

(1) Our understanding of blindness is less to do with physical and psychological characteristics. Instead, it is more to do with an ethical philosophy of human capacity.

(2) The education of people who were blind through touch tells us much about our psychology of mythologies and the intellectual construction of human thought.

(3) The myth that people who are blind are incapable of visual comprehension is one of the most engrained modern folklores. It is part of cultural, intellectual and philosophical conscience.

KARL POPPER ON PROTAGORAS' THEORY OF LAWS

At the time of Protagoras, some 500 BC and before Plato, there was a debate on the nature of laws – these were divided into human laws and natural laws

Popper referred to these as “facts” and “norms”, and the difference as Critical Duality

These two forms of phenomena can be illustrated as follows:

- Human *laws*:
 - It is wrong to steal (Social norm)

POPPER ON PLATO'S CRITICAL DUALITY

- Natural *laws*:
 - The sun rises in the east and sets in the West (Natural fact)
 - In 2015, many British people believe it is wrong to steal (Sociological fact)

Protagoras argued, 'we never put our feet in the same river twice'.

Popper observes that Plato argued for a natural social order

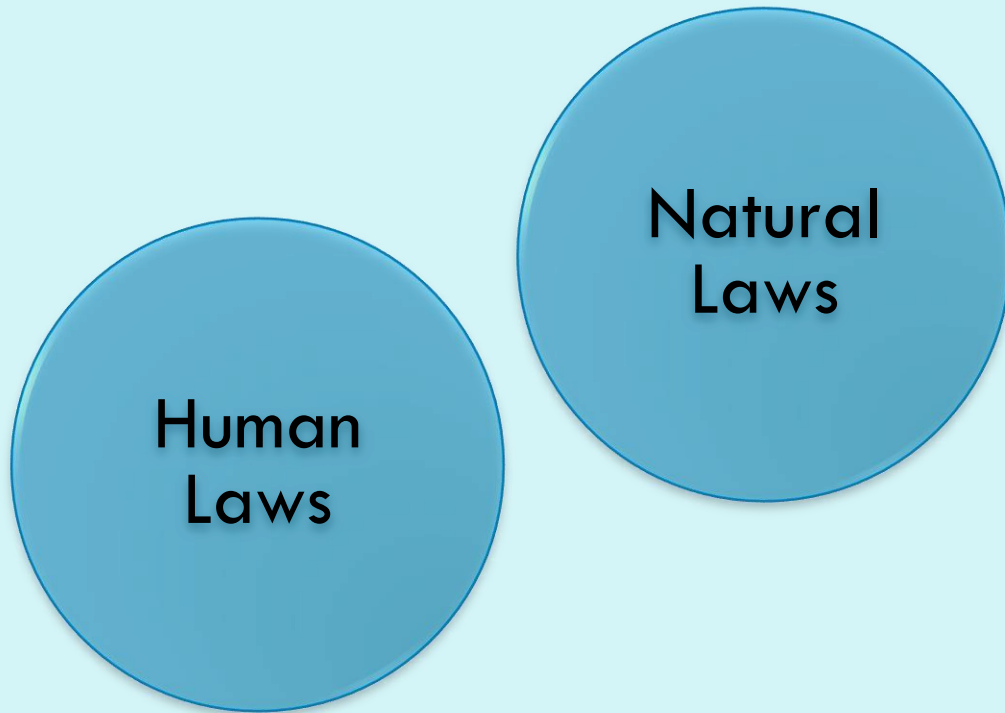
- Popper referred to Plato as the first sociologist

Plato created a biased understanding of social norms: a Biased Dichotomy

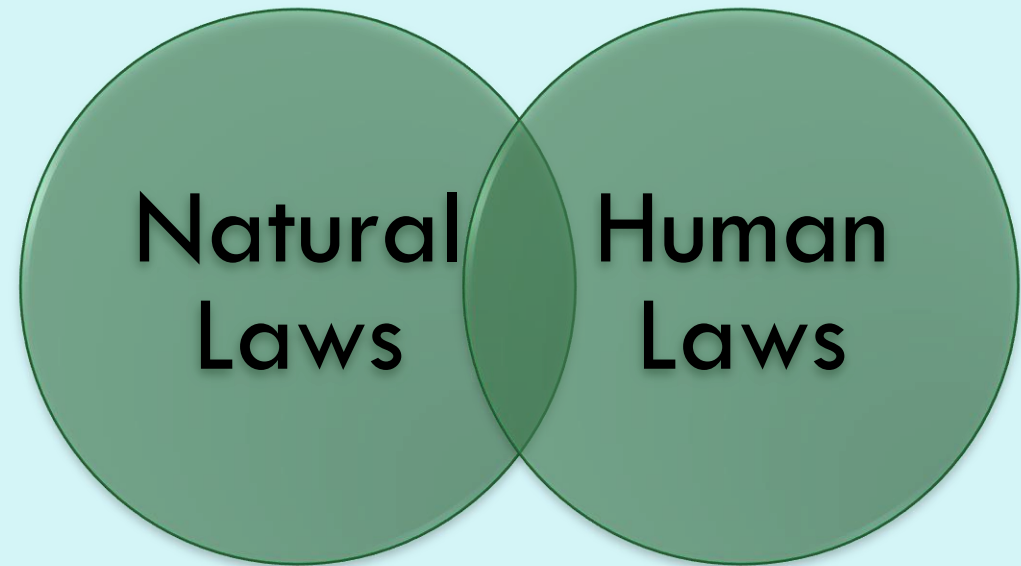
Applied to laws, this created "A natural order of humans" and ethical positivism

CRITICAL DUALISM PROBLEMATISED

Empirical dichotomy



Biased dichotomy



TRADITIONAL EPISTEMOLOGICAL APPROACHES TO STUDYING BLINDNESS

- In this presentation, I argue that in the study of blindness we have largely mistaken natural and social laws:
 - Physiological / medical theories
 - Social / sociological theories
 - Philosophical theories
 - Psychological theories (perceptual)
 - Psychological theories (developmental)

TRADITIONAL EPISTEMOLOGIES OF BLINDNESS: PHYSIOLOGY / MEDICINE

Focuses on blindness as a series of natural laws as:

- the symptom of a disease. The paradigm works towards therapies.
- a fixed symptom. The model works towards treating the whole illness in isolation. Does not consider before and after lives.
- a scientifically definable symptom only.
- a deficit. It defines it as abnormal and not equivalent to sight.

TRADITIONAL EPISTEMOLOGIES OF BLINDNESS: PHILOSOPHY

Mistakes social and natural laws:

- Focuses on “quirks” of blindness. This model works towards an understanding of all human conditions.
- Distinguishes between sightedness and blindness, and the transition between these two as separate binary mental states.
- Examines abstract issues caused by blindness without addressing their rectification:
 - Blindness is the subject of academic curiosity.
- Examines ethics, without considering the ethics of their study.

TRADITIONAL APPROACHES TO ANALYSING BLINDNESS: SOCIOLOGY / SOCIAL THEORY

Sees blindness as a label in the realm of social and natural laws:

- Blindness is a condition that is formed by social attitudes.
- People who are disabled are excluded by people who are able bodied. This paradigm works towards civil rights for disabled people.
- Disabled people are equally excluded. It is not a person's physical condition but the social attitude and institutional factors that disable people.
- Examines blindness under capitalist, feudal, theocratic and socialist governance.

TRADITIONAL APPROACHES TO ANALYSING BLINDNESS: PSYCHOLOGY (PERCEPTUAL)

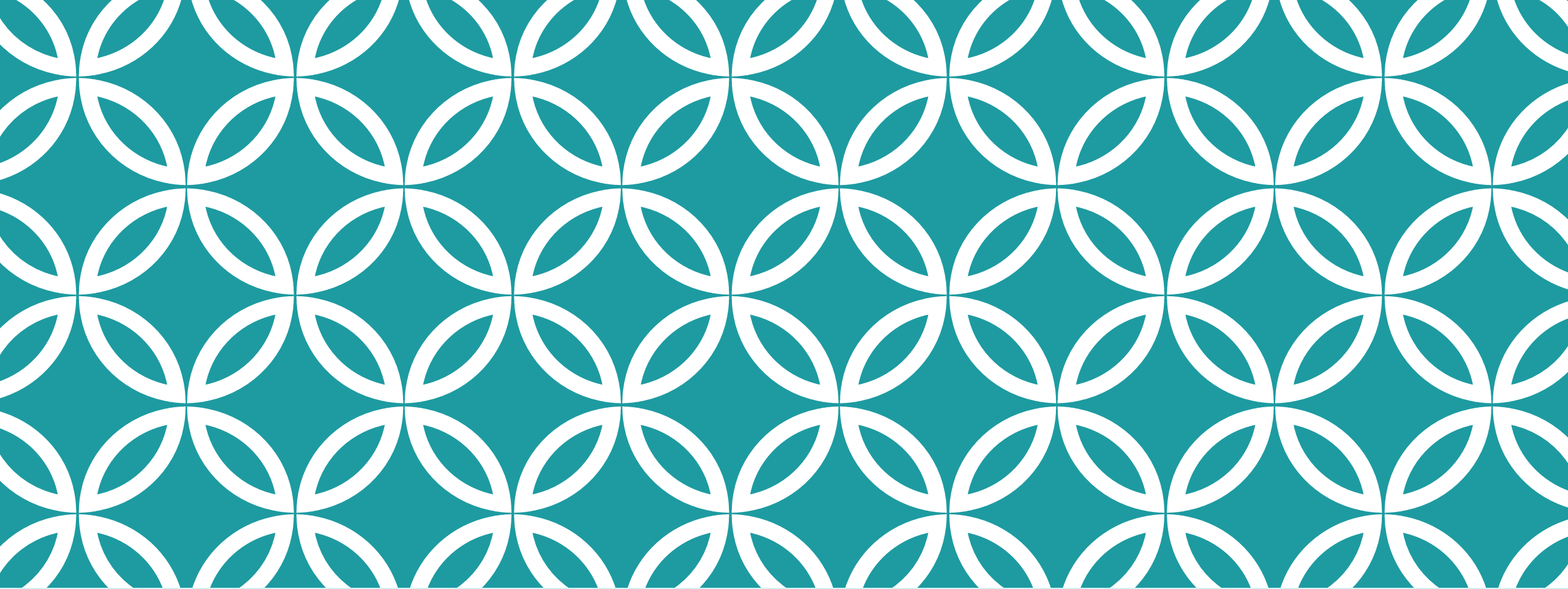
Sees blindness as a conscious form in the realm of social and natural laws:

- Examines issues caused by the symptoms of blindness, such as comprehending objects, communications and cognition.
- Restricted to sensory impairments.
- Distinguishes between sightedness and blindness, , and the transition between these two as separate binary mental states.
- Works towards overcoming the issues caused by disability without necessarily being able to treat it. The aim is to work on traits resulting from the disability, such as lack of communication.

TRADITIONAL APPROACHES TO ANALYSING BLINDNESS: PSYCHOLOGY (DEVELOPMENTAL)

Sees blindness as conscious behaviour in the realm of social and natural laws:

- Examines issues caused by blindness, such as socialisation, social communications, emotional trauma and cognition.
- Distinguishes between early & late blindness. Uses this distinction to facilitate smooth transitions or re/education for these two distinct groups.
- Works towards overcoming issues caused by blindness. The aim is to work on traits resulting from blindness, such as lack of communication and cognition.



THE ANCESTORS OF CURRENT APPROACHES TO METHODOLOGY

Historical perspectives on the
study of blindness

TWO TRADITIONAL PHILOSOPHICAL SCHOOLS OF THOUGHT ON BLINDNESS

The Metaphysists

- membership examined the metaphysical joining of visual art, nature, aesthetic purity and direct sensory experience (ethically positivist)

The Perceptualists

- membership examined the scientific representation of sensory data as material perception – cognitive impairment (biased duality)

Developed the cult of the “*born totally blind man / boy*”

Hayhoe, S. (2016). Philosophy as disability & exclusion: The development of theories on blindness, touch and the arts in England, 1688-2010. Charlotte, North Carolina: Information Age Publishing.

THE METAPHYSICIST: 15TH CENTURY PHILOSOPHY OF DA VINCI

“The eye which is called the window of the soul is the chief means whereby the understanding can most fully and abundantly appreciate the infinite works of nature; and the ear is the second, which acquires dignity by hearing of the things the eye has seen. If you, historians, or poets, or mathematicians had not seen the things with your eyes, you could report but imperfectly of them in writing. And if you, O poet, tell a story with your pen, the painter with his brush can tell it more easily, with simpler completeness, and less tedious to follow. If you call painting dumb poetry, the painter may call poetry blind painting. Consider then which is the more grievous defect, to be blind or dumb?” (P.190)

DESCARTES: THE ORIGINAL PERCEPTUALIST

In the early years of the 17th Century, Descartes philosophised light was beyond metaphysics and was learnt

Like Galileo he was criticised by the Vatican for his beliefs

He also proposed that a blind person's use of a cane was similar to a distillation of colours on objects

Descartes felt that colour was a property of light - it was interpreted in much the same way that a blind person could tell the identity of different objects

Hayhoe, S. (In Press). Philosophy as disability & exclusion: The development of theories on blindness, touch and the arts in England, 1688-2010. Charlotte, North Carolina: Information Age Publishing.

BOYLE: COLOUR AS NATURAL LAW

“That after the Blind man had four or five times told the Doctor the ſeveral Colours, (though Blinded with a Napkin for fear he might have ſome Sight) the Doctor found he was twice miſtaken, for he call'd the White Black, and the Red Blew, but ſtill, he, before his Errour, would lay them by in Pairs, ſaying, that though he could eaſily diſtinguiſh them from all others, yet thoſe two Pairs were not eaſily diſtinguiſh'd amongſt themſelves, whereupon the Doctor deſir'd to be told by him what kind of Diſcrimination he had of Colours by his Touch, to which he gave a reply, for whoſe ſake chiefly I infer all this Narrative in this place, namely, That all the difference was more or leſs Aſperity, for ſays he, (I give you the Doctor's own words) **Black feels as if you were feeling Needles points, or ſome harſh Sand, and Red feels very Smooth.**”

Boyle, R. (1664). Experiments and conſiderations touching colours. Firſt occaſionally written, among ſome other eſſays, to a friend; and now ſuffer'd to come abroad as the beginning of an experimental hiſtory of colours. Downloaded from <http://www.gutenberg.org/files/14504/14504-h/longeſs.htm>.

LOCKE: PERCEPTION AND METAPHYSICS DEFINED

“[A] blind man I once talked with, who lost his sight by the smallpox when he was a small child [had] no more notion of colours than one born blind. I ask whether anyone can say this man had any ideas of colours in his mind, any more than one born blind? And I think nobody will say that either of them had in his mind any idea of colours at all...

[The] truth is, ideas and notions are no more born in us than arts and sciences, though some of them indeed offer themselves to our faculties more readily than others and are therefore more generally received, though that too be according as the organs of our bodies and powers of our minds happen to be employed: **God having fitted men with faculties and means to discover, receive, and retain truths, accordingly as they are employed.**”

Locke, J. (J. W. Yolton, Ed.). (2001). An essay concerning human understanding. London: Everyman Library / J. M. Dent.

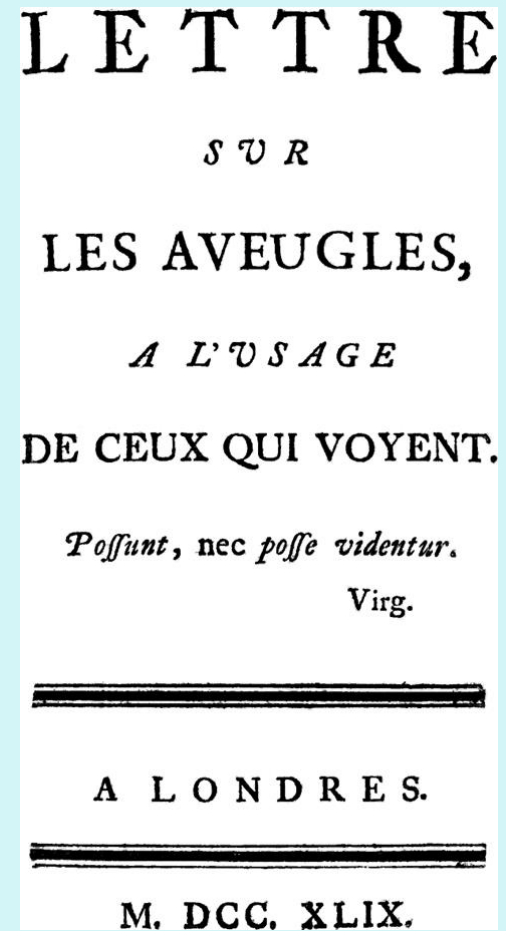
BERKELEY: THE EMPIRICAL TESTING OF LOCKE

This concept was tested by Bishop Berkley, who studied a boy born blind who gained his sight through surgery

- The boy was unaware of what he had felt before, but built an understanding through touching what he saw

DIDEROT'S ESSAY ON THE BLIND FOR THOSE WHO SEE (FIRST PUBLISHED 1749)

“Our virtues depend so much on the sensations we receive, and the degree by which we are effected by external things... [Yet,] Madam how different is the morality of the blind man from ours? And how different would that of a deaf man from his? And how to one with an extra sense, how deficient would our morality appear – to say nothing more? Our metaphysics and theirs agree no better.”



HUME: PERCEPTION AS THE ONLY EXPERIENCE

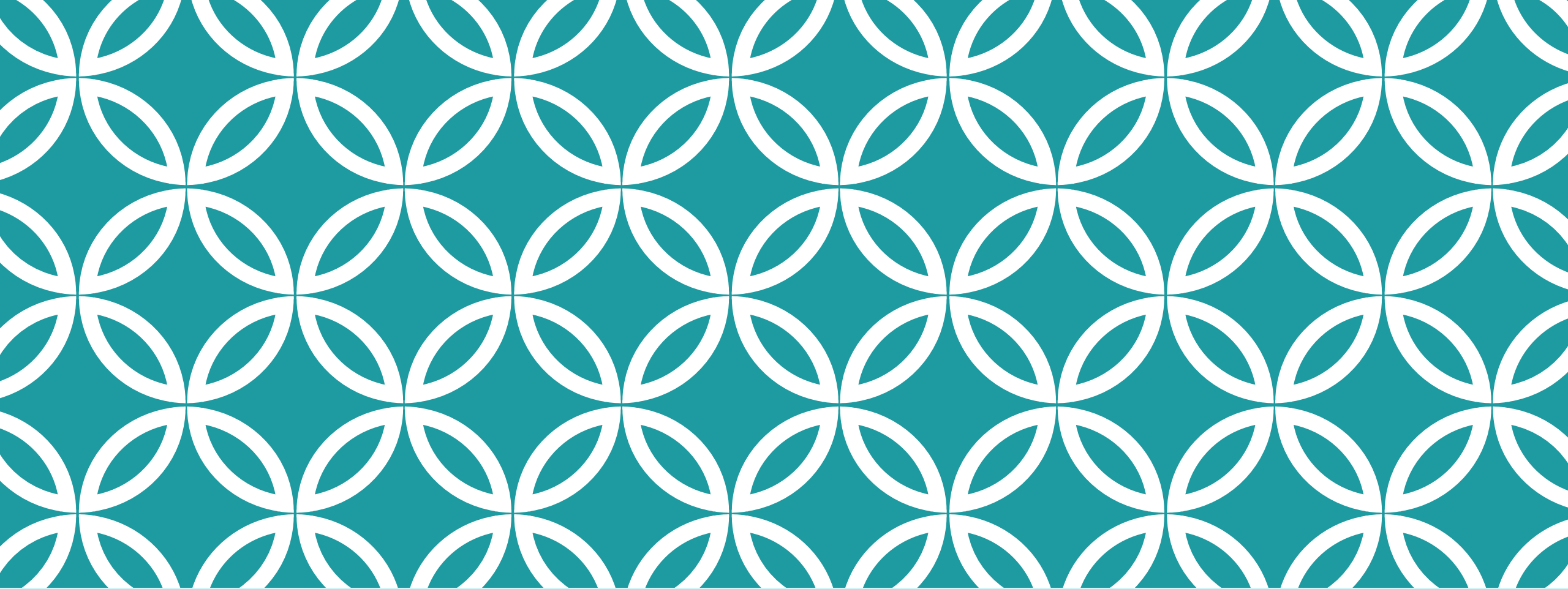
“If I comprehend the Author's Doctrine, which, I own, I can hitherto do but imperfectly, it leads us back to innate Ideas. This I do not advance as an Objection: For nothing ought ever to be supposed finally decided in Philosophy, so as not to admit of a new Scrutiny; but only that, I think, the Author affirms I had been hasty, & not supported by any Color of Argumen[t] when I affirm, that all our Ideas are copy'd from Impressions. I have endeavoured to build that Principle on two Arguments. The first is <a Detail> desiring any one to make a particular Detail of all his Ideas, where he would always find that every Idea had a correspondent & preceding Impression. If no Exception can ever be found, the Principle must remain incontestible. The second is, that if you exclude any <I> particular Impression. . . as Colours to the blind, Sound to the Deaf, you also exclude the Ideas. ” (P. 416)

Wood, P. B. (1986). David Hume on Thomas Reid's An Inquiry into the Human Mind, On the Principles of Common Sense: A New Letter to Hugh Blair from July 1762. *Mind*, 95(380), 411-416.

QUESTION

So, were the Perceptualists discovering natural laws or repeating social norms?

What was the effect of this philosophy?



INSTITUTIONS AND CULTURAL ATTITUDES

The first Protestant asylums

THREE CORE ATTITUDES IN THE ORIGINAL EUROPEAN INSTITUTIONS

	French	British	Austrian
Product	Knowledge	Capital/Handcrafts	Emotional Development
Process	Route Literature	Mechanical Production	"Creative" 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

THE DEVELOPMENT OF AN ETHIC OF BLINDNESS

Diderot's philosophy was in reaction to a common European belief that working and underclass blind people were immoral and lazy

Created a forebear of developmental psychology of blindness

A large number of people were blinded by Syphilis and were beggars

In the 1780s, the Scottish philosopher Blacklock (1774), calling himself *Demodocus*, believed that education, the arts and work were able to 'save' blind people

Diderot D (Jourdain M Trans) (2001) *Letter on the blind for the use of those who see*. In *Thoughts on the interpretation of nature and other philosophical works*. Manchester: Clinamen Press

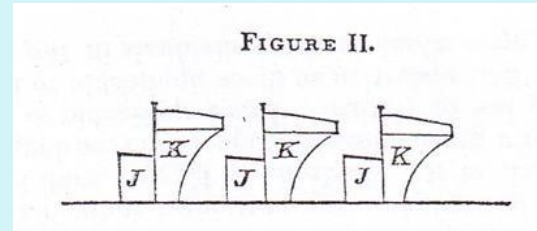
Blacklock, J. (October 1774) *On the education of the blind* (open letter, dated September 10th 1774). The Edinburgh Magazine and Review 2/673-686

LATE EARLY 19TH CENTURY AUSTRIAN EDUCATION (1836)

"[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."

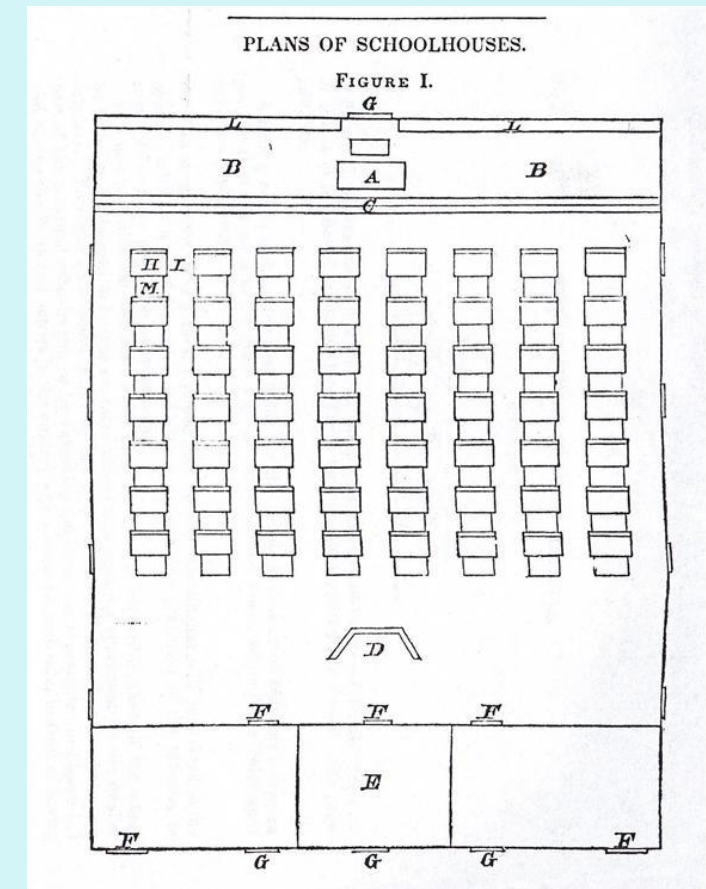
Klein JW (Lowenfeld B Trans) (1971) Guide for a suitable treatment of blind children from their earliest youth on in the circle of their families and in the schools of their home communities. *Blindness*, 1971, 231-242.

HOWE ON THE FOUNDATION OF US PUBLIC SCHOOLS, 1839, US, PROTESTANT MATERIALISM



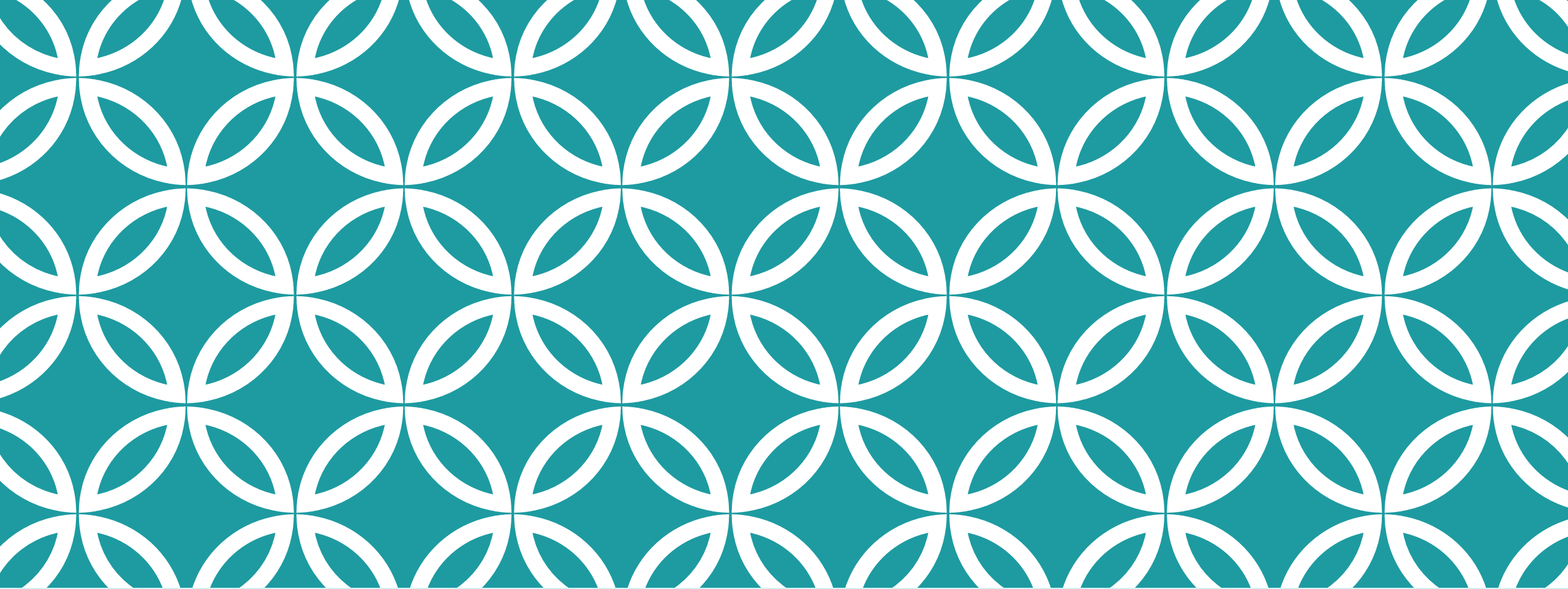
“We should never read but in the erect posture; we should never read but when the **arterial** system is in a state of high action... I believe an attention to the physiology and laws of vision, by parents and instructors, would be of great benefit to children, and diminish the number of opticians; for as surely as a stone thrown up will come down, so surely the exposure to causes of evil , bring evil, at some time, in some way, upon somebody.”

S.G. Howe (1839) Report of the secretary of the board of education on the subject of school houses, supplementary to his first annual report. The Common School Journal 1/19



WHAT THIS MEANT IN INSTITUTIONS

- Touch was assumed to be the main form of perception for blind people
- Handcrafts have been a focus of education in Europe and North America
- It is often assumed that blind people cannot understand visual concepts
- Although the majority of blind people have visual experiences, descriptive material often assumes non-visual references
- Provision for blind people assumed total blindness and were educated using Braille, whereas many people do not read Braille



THE TWENTIETH CENTURY

Moving towards a social and
cross modal understanding

ATTITUDES TO PERCEPTION?

Phenomenologists such as Katz still felt that sight stood by itself, and developed a touch language.

Many educational strategies for blind students were still based on this assumption

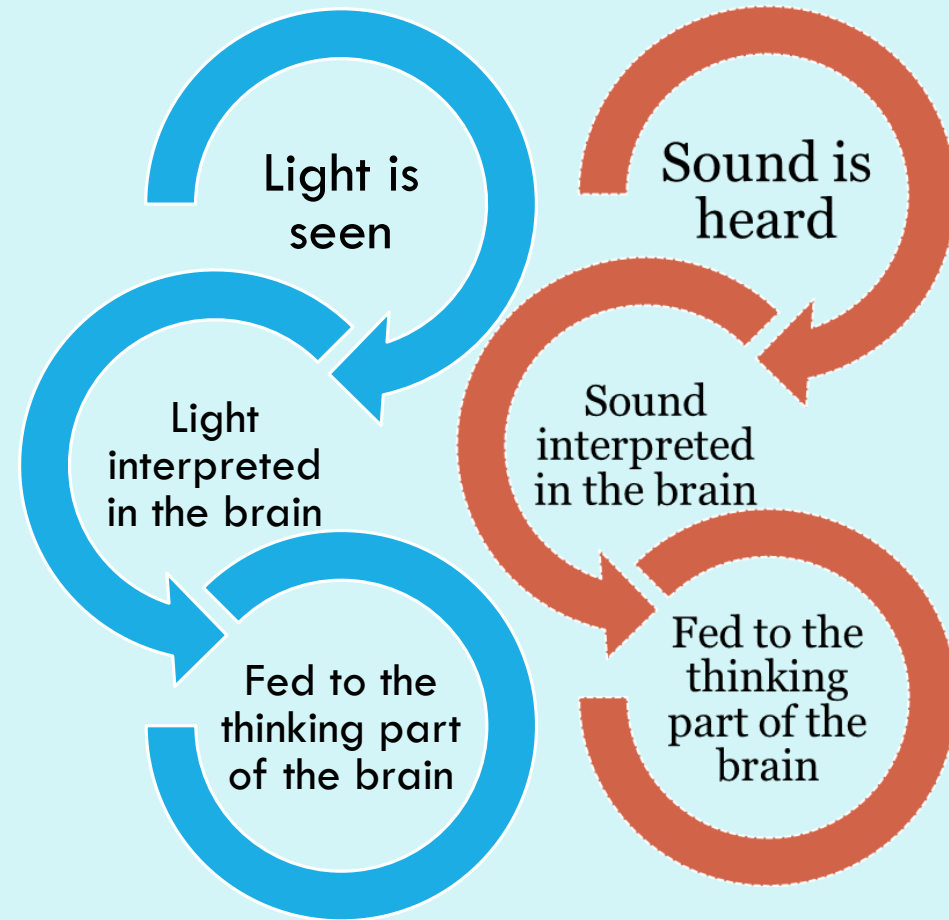
Katz, D. (1925) Der Aufbau der Tastwelt.
Zeitschrift für Psychologie, Ergänzungsband, 11,
270



FALSE ASSUMPTIONS IN THE HISTORY OF EDUCATION

Although information could be substituted, perceptions could not, and language could not substitute perception. For example:

- Writing for touch languages, such as Braille
- It was felt that people could not substitute visual concepts through language



PERCEPTUALISTS STILL DOUBTED THE ABILITY OF BLIND PEOPLE

“[From] what sources could a blind person, who has never seen the world with all its wealth of forms and color, derive those manifold experiences?... [No] one born blind is able to become aware of the diversity of nature and to apprehend all the rich and various appearances of objects.”

Revesz, G. (1950). Psychology and art of the blind. London: Longmans, Green.

VYGOTSKY ON BLINDNESS: MODERN DEVELOPMENTAL PSYCHOLOGY

“Every physical defect (sic.), be it blindness or deafness, alters the child’s attitude towards the universe and, primarily towards its fellow beings. Let us take, for instance, the geometrical place of a human being in the social sphere, his part and his fate as partaker of life and all functions of social existence, and we shall all come to the conclusion that everything is to be entirely altered on the case of the human being with any defect. Any physical defect provokes a social sprain, with unavoidable consequences.

It goes without saying that blindness and deafness are biological facts and not at all of a social nature, but the [person] has to deal not so much with the facts as with the social consequences of these facts. When we have a blind child as an object of education before us, we are compelled to deal not so much with the blindness itself, as with the conflicts which arise therefrom within the child when it enters life...”

Vygotsky LS (Van der Veer R & Valsiner J Eds.) (1994) The Vygotsky reader. Oxford: Blackwell

BERTHOLD LOWENFELD'S DEVELOPMENTAL CATEGORIES - ADAPTED

CLASSIFICATIONS OF MEMORY:

- No visual/aural memory - blind or deaf from birth or very early blind, 0-4 years
- Assimilated blindness – blind from mid to late childhood, 4-18 years, educated in older schools for the blind, primarily non-visual/non-aural
- Visual memory – blind in adulthood, 18+ years

CLASSIFICATIONS OF BLINDNESS:

- Total blindness – no light perception
- Minimal perception - some light perception, but little enough to be usable
- Distorted vision –light perception, highly distorted but still registered blind; e.g. achromatism, tunnel or no central vision

After, Lowenfeld, B. (1981). Effects of blindness on the cognitive functioning of children, In Berthold Lowenfeld on blindness and blind people: Selected papers. New York: American Federation for the Blind.

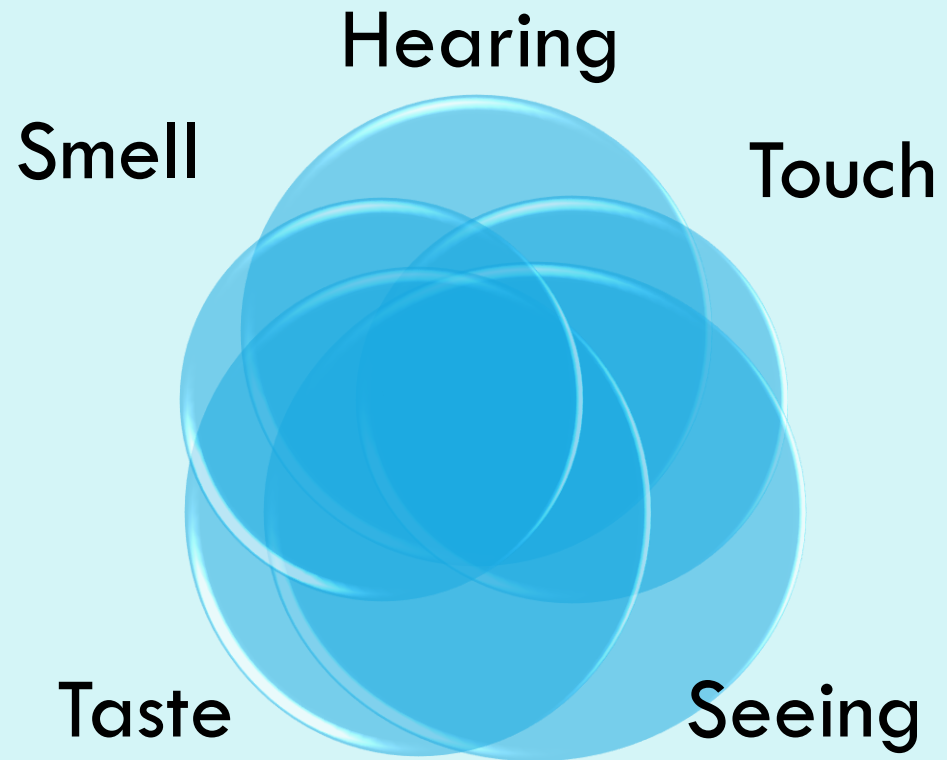
FROM EMPTY BUCKETS TO CROSS MODAL TRANSFER

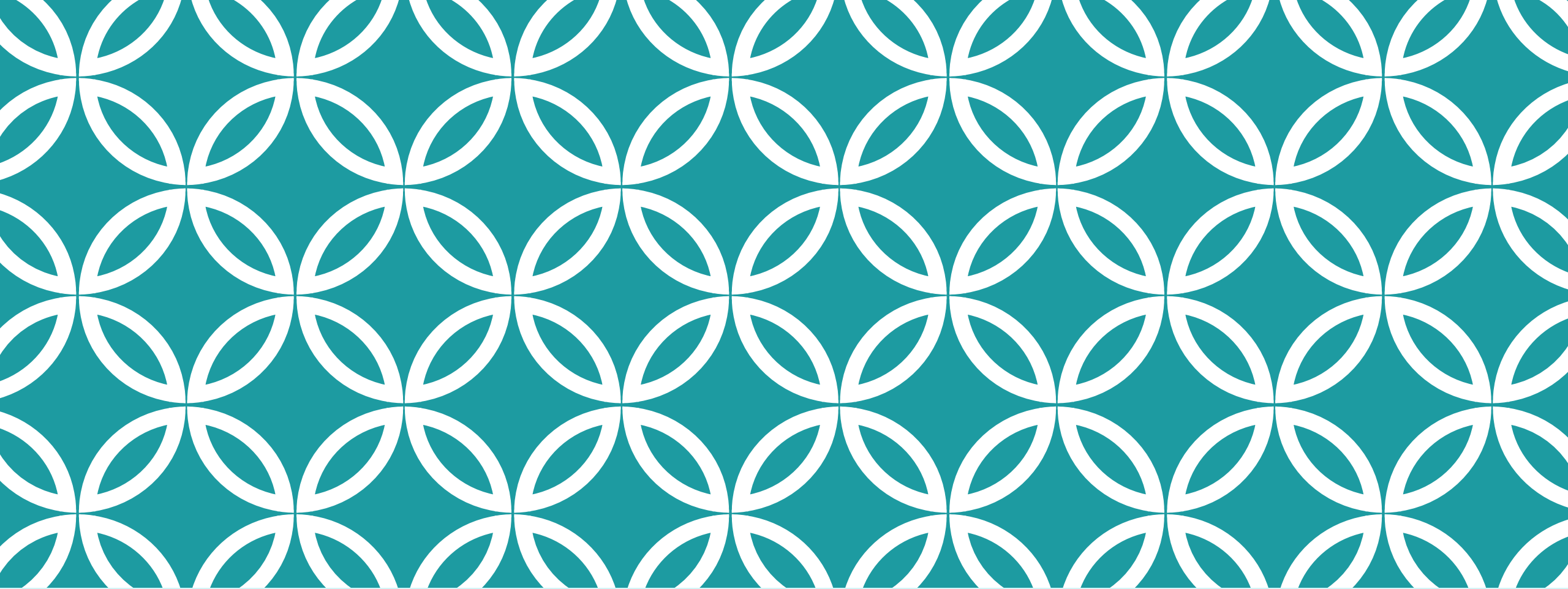
Contemporary work by Spence looks at the effect of the senses on each other

His focus is on Cross Modal Transfer (CMT), first formulated by Gregory & Wallace in the 1960s

Spence's most interesting study was changing the flavour of Pringles by manipulating their crunch

Spence, C. (2010). Cross modal attention. *Scholarpedia*, 5(5), 6309.





ANNA

Student at RNIB New College,
Worcester, UK

ANNA: ART ADAPTED TO INCORPORATE COLOUR



ANNA: STUDENT PREPARING FOR ART COLLEGE

Anna was born colour blind, in her late teens, and had attended mainstream school as a young child and then New College as an early teenager

She only moved to New College when her sight deteriorated substantially and her mainstream school could no longer support her.

She extreme tunnel vision and total colour blindness

In the latter stages of compulsory education, she had little problem with her art classes

Hayhoe, S. (2008). Arts, culture and blindness: Studies of blind students in the visual arts. Youngstown, New York: Teneo Press.

ANNA: OFTEN WITHIN EXPECTED SOCIAL NORMS

“During her Christmas holiday, Anna plans to take more black and white pictures. She says, “I really, really enjoy it.” She also says that she would spend three hours after school in the dark room in New College if she had to, as the project is that important to her. Anna also said that it gives her real senses of achievement when she gets an image right the way she wants it.

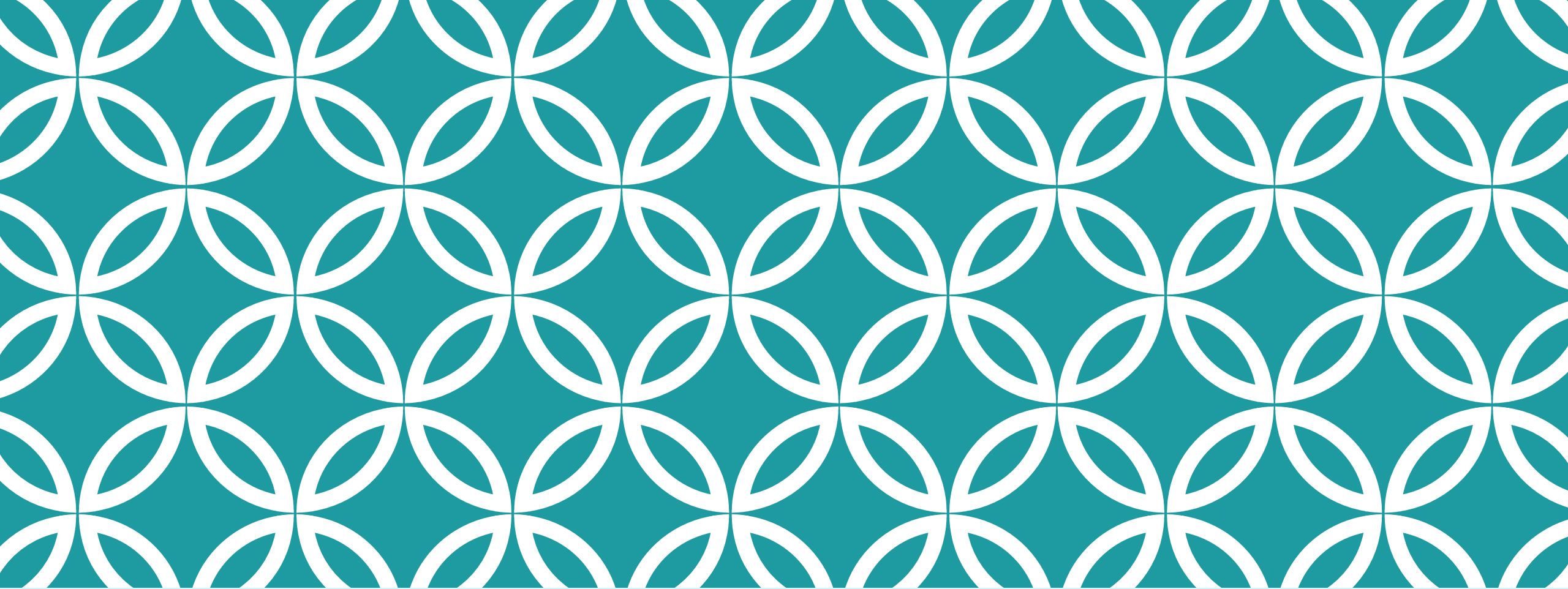
Anna shows me a series of black and white photographs that she took during her previous half-term holiday. This series is of what she considers to be interesting faces of people she either knows or found in London. She says that she particularly enjoys [her] images of old men with teeth missing.”

(S. Hayhoe, observation notes)

ANNA: HOWEVER, TESTED NORMS USING COLOUR

“I always found art difficult in mainstream because of my colour vision, or lack of. You know I was always having to ask people what colour things were, like paints. With my pens and pencils, however, I usually labelled them up and then took them into school, so I knew what colour was what. When it came to mixing paints and things I had real trouble. And I’ve never been very good at using paints, because I can’t even see when paints have run into each other on the actual painting. And sometimes they can turn out a real mess. That got easier through towards GCSE. I was more independent, I could more, tell more easily, you know, what colours that I was using. Probably because I got used to recognising them.”

(Anna, personal communication)



CONCLUSION

Problems to address in our studies

THREE PRIMARY CONCLUSIONS

Previous literature has focused too heavily on the understanding that inclusion in the museum is premised primarily on touch, and therefore “purely” visual concepts cannot be understood

Case studies show Perceptualists and Metaphysicists are wrong: concepts are not specific to inherent knowledge or individual perceptions

Blind people should be included in all aspects of visual culture through language, with an understanding that they are capable of developing the conception through language and environment