

Is a child's identity able to advance within a spatial design of a school?

This is assessed against Maslow's Hierarchy of Needs, focusing on privacy, belongingness and territory

Contextual Practice Cara Mulroy 19065031



- 3 INTRO
- 4 PRIVACY
- **5 BELONGINGNESS**
- **6 TERRITORY**
- 7 COMBINED
- 8 CONCLUSION
- 9 REFERENCES

INTRO

'In recent years there has been an increasing interest in the interaction between man's physical environment and his social behaviour'

(Altman, 1973; Ittelson et al, 1974; Moos and Insel, 1974)

Lentity is cognizant of, 'the fact of being who or what a person or thing is' (Oxford Language, Dictionary). Engrossing in the development of this, when does one begin to develop an identity? An identity can develop from being a child, by the influence of mimicking identities within their home structure. 'In recent years there has been an increasing interest in the interaction between man's physical environment and his social behaviour' (Altman, 1973; Ittelson et al, 1974; Moos and Insel, 1974). It is critical to analyse the relationship between a child and a prominent spatial structure away from the home. Moreover, the school setting is an institution to educate children, which prepares them for adult life. This is the first aspect of freedom which enables them to explore and develop their interests and form friendships, solely away from the protection of their families and home. To understand the relationship of a child and their school, I will be analysing, 'Is a child's identity able to advance within a spatial design of a school?'

Considering this question, it is critical to measure the child's development of identity against a respected ideology. According to Maslow's Hierarchy of Needs, this theory structures the basic requirements to formulate an individual's identity. To contribute an informed answer to this analysis, I will explore the relationship against three of the Maslow's Needs. Moreover, privacy resides in the foundations of security and safety. This category is situated as the second division of basic need, which is also defined alongside feeling and being safe from harm. Secondly, belongingness resides within the third basic need. This is also positioned with friendships, intimacy and a sense of connection. Lastly, territory resides in the understanding of, esteem. This category is situated as the fourth division of basic needs. This is also aligned with respect, status and recognition.



PRIVACY

Privacy resides in the foundations of security and safety. This category is situated as the second division of basic need, which is also defined alongside feeling and being safe from harm.

Privacy is defined by the Oxford Language Dictionary as, 'A state in which one is not observed or disturbed by other people' (Oxford Language, Dictionary). When in discussion to whether privacy is of prominence to a child's identity within the spatial orientation of the school, it could be suggested of importance. Carol Weinstein, author of 'The Built Environment and Children Development' stated, 'a child's psychological withdrawal, use of fantasy and behavioural 'acting out' are strategies for attaining a degree of privacy and isolation not permitted by the physical features of the classroom' (S. Weinstein, G. David, 1949). This illustrates that if the child is lacking sociability within the classroom, the child will react and convey a form of imaginative behaviour to disassociate from its surroundings. This is interesting as it shows the child will take one-self through their own idea of privacy, even more so if there is not a supported space specifically intended for the child and this concept. This, however, is discredited through the observation that Weinstein was merely observing an opinion that has not been sustained by executive research. When in discussion of creating a significant comfort space within the classroom for a child to withdrawal to the theory, Prospect and Refuge argues against this. The acumen of this theory explores the cause of why specific spatial configurations evoke the feeling of security and therefore positively impacts the sense of wellbeing in the observer. Within this ideology it is described that a wide-open view, allows the observer to comfortably pre-assess their surroundings in order to feel safe (S. Annemarie, 2013). Following on from this thought, S. Neill and E. Denham carried out a Child Behaviour Study, that highlights the importance of the elusive use of large spaces, specifically for a child. Neill compared the behaviour of two groups of children in two classrooms varying in terms of openness, density (The Effects of Pre-School Building Design, 2006). The results of this study analysed that a child in a more open room, portrayed a high level of aggression, short attention span and engaged in few school-oriented activities. This conclusion ultimately discredits The Prospect and Refuge Theory, as this study is more beneficial for the understanding of a child's perspective. On the contrary in assessment of The Preschool Design and Child Behaviour Study, the observers failed to allow every participant to experience every space being assessed. This ultimately delivers a less conclusive result. However, in the book, Patterns for Designing Children's Centres by Fred Osmon it explores the issues involved in the design of children's centres.



IMAGE A: Studio Flusser, (2021), Malvina Day Nursery, Dezeen, https://www. dezee com/2021/04/18/no-architects-malvina-day-nursery-prague-interior/

In summary to this he delivers the requirements of a resolution that distinctively focuses on the relationship of a child and its surroundings. One of the resolutions is having, 'places to pause for a while' (F. Osmon, 1971). This illustrates an overstimulated child, is to retreat to a private space within a socialised area, such as a classroom, to allow the child to decompress their actions and reflect on their behaviour. This is in benefit to a child and their and identity within the classroom. In exploration Osmon, an architect whose designs are influenced by the idea of creating privacy within a home. He has not been able to carry this concept into a live project, therefore this is merely a hypothesis that has not been assessed. Although insightful and urges the importance of creating a personalised space. this concept is of response to a structural manifesto and not factual. In the study, 'A Child's Exploration of Space' by P. Curtis and R. Smith these considerations of a child's behaviour within the private spaces were explored. They created and assessed different spaces within an open area and reviewed the response of the children. These spaces were designed for the participants to crawl away into. only to find that the participants would not use them because they could not see within the smaller scaled structure (P. Curtis & R. Smith, 1974). From discovery of this, the assessors resolved the

issue by installing clear acrylic panels, which provided a sense of physical privacy yet granted them visual access of the room. This study is of interest as it supports all the theories and studies explored, it creates an analytical suggestion that children sought for a private space within an open space however, they want to be able to understand the purpose within the space. Simultaneously, Malvina Day Nursery has created a 'hidden den' (Image A) that the architect has designed for the children to retreat to, for privacy. This is located within the hallway which connects off from the main classrooms. This contradicts the study 'A Child's Exploration of Space' as the structure is of dark opaque materiality, restricting the child's visual understanding of the nature occurring. Although the link that is associated within both studies, is the understanding of the purpose. The restricted view is of discern as if the child has full comprehension of the purpose, they will enter the space freely (as shown in Image A). On the same note, Herman Hertzberg devoted his understanding of incorporating flexibility between spaces within a structure. In comparison to Malvina Day Nursery, this is not a direct sense of privacy as the space is of a sunken seating area that is occupied by multiple children playing, that can be viewed from afar (see Image B). However, this delivers a sense of privacy as this allows the children to collectively retreat to, to self-focus or carry out forms of play from the routine of the classroom. In evaluation of the understanding of privacy in relation to a child, it is urged of importance from several studies and theories explored. Although in comparison between the definition of privacy and grasp of a child's behaviour and needs, there are a slight dissimilarity shown. In example an adult in the workplace may retreat to a room without knowledge of the nature of the space, to create boundaries between other people or stress promoting situations. Yet a child within a classroom, still requires a level of privacy but demonstrated by an understanding of the



IMAGE B: Unknown, (1966), Children in private space, https://hiddenarchitecture.net/montessori-schoo/

nature of the space being retreated to. By creating these spaces within a classroom, it emulates a growth of identity amongst the children, teachers and parents. This could be viewed negatively towards a child who is sent to the space to calm down, from being overstimulated in the main classroom set-up. Nevertheless, it could be of a positive impact for the child as it is where they can freely demonstrate their individual personalities through play and discussion, which may be restricted in the expectation of the classroom set-up.

BELONGINGNESS

Belongingness resides within the third basic need. This is also positioned with friendships, intimacy and a sense of connection

 ${f B}$ elongingness is defined by the Oxford language Dictionary as, 'the state of belonging to a particular group' (Oxford Language, Dictionary). This concept could imply how a spatial structure of a school, can create a connection between the establishment and the child. In understanding of this, David and Mary Medd, architects, who based their work on the intersection of design and education. Their designs were established in post-war England, during a time of optimism and experimentation. Their architecture was curated to scale for children, Mary once stated, 'children should be able to see out of windows' (M. Medd, Unknown). Their design features included, low windowsills, lightweight furniture which created flexibility within the classroom. They also used decorative arts, integrated into the design for simulating intellectual development (D. Medd and M. Medd, 1959). This exemplifies a detail of connection between a child and the spatial design of a classroom, through the consideration of personalisation to the structure. These deliberations can heighten a child's identity and therefore fulfil a reassurance for their attendance to the school. In review of the aspect of incorporating decorative arts to the structure, Mark Dudek, an architect who researches children's centres, disapproved of the idea. He stated, 'During the whole-classes teaching sessions, concentration was difficult because of the visual stimulation occurring in every direction' (M. Dudek, 2000). In his account, there was a strong element of personalisation through the detail of decoration. Stating, 'every position of the room was bright and cluttered of the work of the children' (M. Dudek, 2000). This in term, reflects a strong sense of identity and belongingness however, the overuse of the personalisation may distract the child from their work. Which then results, in the child disassociating from the teaching. This then leaves the question of, if not for the child, who is the decoration for? Dudek implied the concept was, 'an outward manifestation of activity which impresses the school Governor or Ofsted' (M. Dudek, 2000). Although the decoration of the classroom is derived from the achievement of the child, it is the motive behind the concept which hinders the result of the decoration. Furthermore, focusing on a school set-up that didn't sought approval from an elevated hierarchy. The Malting House School, focused on the natural environment, which reinforced freedom of expression and spirit of a community (see Image C). In accordance with the spatial structure of the school, most of the classes resided outside, with



IMAGE C: Unknown, (1924), The Malting House School, Unknown

all ages participating. In association of the Montessori teaching Issacs, equipped the children with their own personalised, brightly painted beds and sitting area, scaled to an appropriate size to the child. This delineate of fixtures within the school has similar effect to the child, as David and Mary Medd also intended, to which both examples create a sense of belonging. The Malting House School has, however, has been discredited for the development of the children, regarding oppositional behaviour. Evelyn Lawrence who was associated with the school commented, 'doubts of the future manners and habits of the children' (Architecture of Schools, 2000). This has a discretion for the confidence of the relaxed school system and how it promotes the child's identity within it. Not for the sense that it does not consider the child but, by not creating a structure of expectation. In thought of this, a school system which emulates expectation from the children, are schools within The Russian Soviet Union (see Image D). This image illustrates a dissimilitude to The Malting School as the children are situated to an allocated seat and desk, all of which is not personalised to the child. The classroom is decorative but, to a functional, limited manner that showcases teaching material for the child not by the child. The design of the classroom is systematic, which hinders the potential of learning through play. It is dissociated from the occupant, which is the child and reinforces a military style of teaching. Although indifferent to The Malting School, this imitates a sense of belongingness, through the initiation of the class all wearing the same uniform. Although the classroom set-up is disembodied of the thought of children, this aspect can be seen as a sense of belonging to a group, not an individualised aspect. Advancing on from this, Impington Village College (see Image E), located in Cambridgeshire, was constructed by Henry Morris. This was a progressive private school concept, during the 1930s. The orientation of the school is transpired from the isolation of post war, from which the design focuses on the children forming a sense of community (A. Saint, 1987). dissembled the original site layout of the school and manipulated it to form relaxed routes, trailing to different areas of the site for different purposes of education. Like The Malting House School, both concepts

allow the children to experience parts of their day outside whilst mixing with different ages. This promotes a wide spread of identity with all in attendance and can positively promote friendships organically. Morris' concept of creating a community within the school, is also in accordance with the Russian Soviet Union School's, as the children are all wearing the same uniform. As well as gaining a sense of belongingness from collectively being a part of a in house 'community'. In evaluation, the meaning of belongingness in relevance to a child, is the imperativeness of feeling loved. In affiliation to a school set-up, this meaning may be relayed in how personalised the space is, to assure the child, of their attendance. By doing this, it magnifies their confidence and allows them to feel safe. This characteristic is mirrored within the home setting. By having a clear perception of belongingness in the school it resonates with having the safety and attachment to the child's home and family, which ultimately makes the transition between the two environments easier. Although it would not be appropriate for the teacher to demonstrate the actions of a parent, it heightens the dependency on the structure and system to convey belongingness to the child. The children within each of these studies represented an element of this by wearing matching uniforms, displaying their work on walls and receiving personalised furniture etc. From this, the sense of belongingness in a class room is formed as two components. One, being all the children uniting through being associated within the same class. This feature advances their identities by, the children creating friendships and establishing themselves as similar or indifferent to their classmates. And secondly, the feeling of attachment to the structure through recognition, personal to the child. This feature advances the child as it displays a sense of association. This allows the child to feel notable and appreciated, then in return, the child may display good behaviour. In any discrepancy with the personalisation of the classroom which results in unwanted behaviour, this can be seen as a result of the teaching style.



IMAGE D: Unknown, (1980), Russian Soviet Union School, Unknown

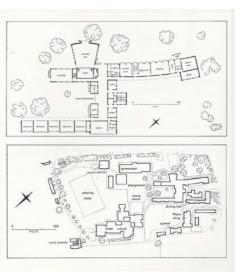


IMAGE E: Morris.H, (1938), Impington Village College, Cambridgshire Plans, Unknown

TERRITORY

Territory resides in the understanding of, esteem. This category is situated as the fourth division of basic needs. This is also aligned with respect, status and recognition.

In The Oxford Language Dictionary, territory is elucdated as, 'An area of land under the jurisdiction of a ruler or a state' (Oxford Language, Dictionary). Judith Houseman described the cognizance of children and their territory within the school structure as, 'Clarity of one's activity boundary, appears associated with minimum conflict' (J. Housman, 1972). This suggests that partitioned spaces for children increases cooperative play. This could be associated in the size of one's space, emotions such as closeness and intimacy and safety are evolved from small, bounded spaces. Well recognised areas also restrict on-going play from being disrupted by intruders ((J. Housman, 1972). In scrutiny, it may argue that the nature of this statement is not of an experimented ideology but, one that has been curated through ideas of other people. This, however, does reflect on the hypothesis in question and creates a clear impression, that there needs to be an understanding of a child's space for minimum conflict. In exploration of how children may gain an understanding of different territories and the function within the space, Carol Weinstein created a systematic approach. She suggested, 'there are three basic design guidelines to consider, partitioning spaces, providing materials that support group play and minimising conflict by offering children sufficient amount to do' (S. Weinstein, G. David, 1949). This is an insightful guideline that focuses on the child's understanding of the different functions and purpose of the areas of the classroom. This is accessible by visually enhancing the spaces to be understood by the child. In comprehension of this belief, D. Medd and E. Lowe incorporated the thought of allowing the child to take initiative of their surroundings and form a conscious understanding of accessibility and boundaries within the space. This is formulated through the flexible design and reinforcing a more open classroom, that could support progressive teaching models.

This was viewed as 'prepared landscape for learning' (D. Medd & E. Lowe, 1963) which fed into the child establishing themselves in a self-lead way, enforcing freedom and departing from the feeling of fear. These attributes were carefully formulated through the scale, variety and character of the space (see Image F) allowing the space to be supervised by teachers from every angle. Medd and Lowe allowed the child to understand territory, in the aspect that the child is not expected to stay situated to one area. This can create a clear purpose boundary for the child between the space. In comparison to a typical school setup where there is one classroom that the child is allocated to and the purpose of the space transitions throughout the day (see Image G). This however could be discredited as the plan shown is influenced through, the aspirations of the architect, this is simply a manifesto through architectural planning. On the contrary, when in discussion of analysing a structure that did not provide a free-flowing space for territories to be easily formed, this can be seen in schools during Thatcherism, England. In the seventies, Margaret Thatcher shifted the methodology of many components of England, one of which being the rethinking of classroom teaching and design. It was described as, 'teachers ultimately lost control of the classroom in terms of curriculum, design and use of space' (A. Donnelly, 2022). This hindered the schools and emphasised the structure and orientation into a more



IMAGE F: Medd.D, Lowe.E (1963), 'Detail Plan Study, Institue of Eductaion Archive, ME/E/7/S/1

military style approach. Ultimately regressing the use of spatial opportunities and a forthcoming return to a former hegemonic classroom model. When in thought about a territory, it can be viewed through restraint not just for a child but also for teachers, who lost 'control' of the relaxed style of teaching. Shown through ordered positing of the teacher presenting to a classroom, this control transgresses to a child having a fixed expectation of behaviour and positioning within the classroom. This ultimately reinforces all learning to come from the teacher and not through self-exploration of the child through the space. Although there is a perspicuous territory formulated through the child and their fixed seating arrangement there, is not a sense of self-fulfilment in learning. The restricted use of the space, ultimately withdrawals the child from individualism and creating a long-term identity. Conversely, The Montessori School Delft

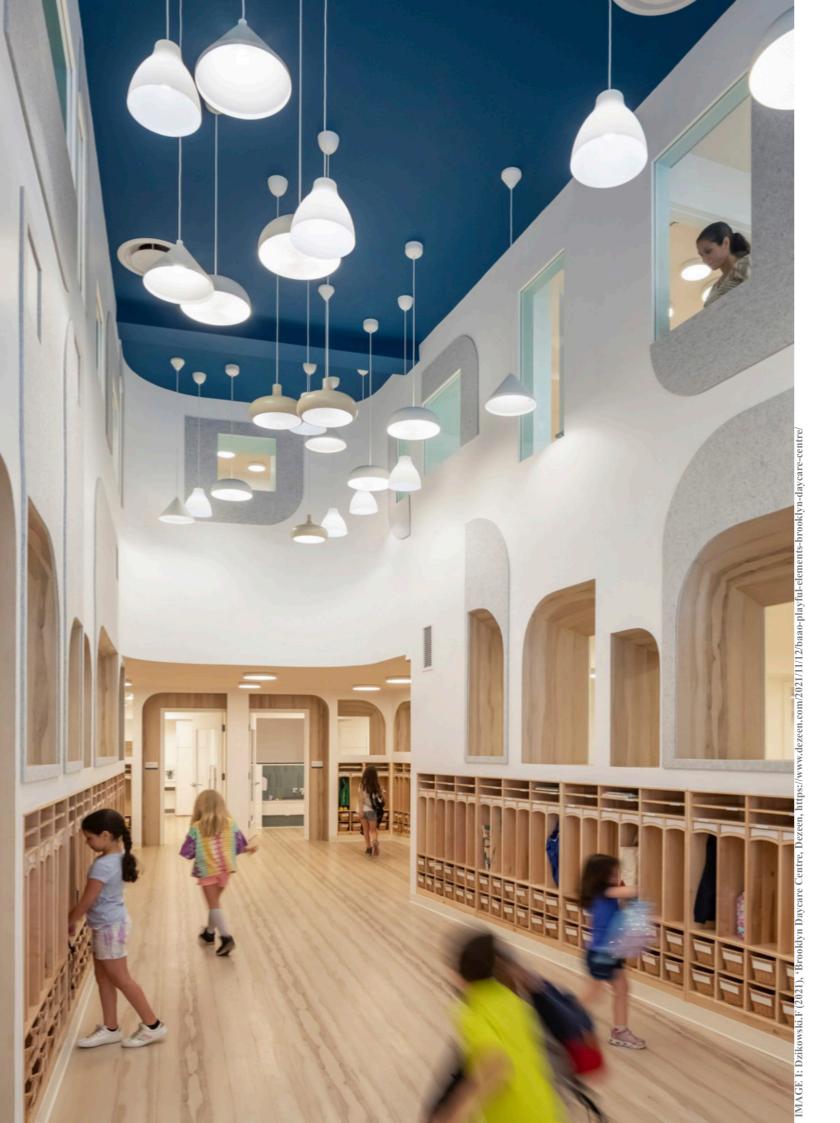


IMAGE G: Unknown, (Unknown), Prime Minister Margaret Thatcher seated in the history classroom at Kesteven and Grantham Girls' School, PA/PA Archive/Press Association Images Unknown, https://www.itv.com/news/central/2013-04-17/the-school-that-taught-margaret-thatcher-so-much

by Herman Hertzberge challenges the early modernist belief, by curating a building that allows the consumer to freely interpret and personalise by free-flowing movement through the space. The architecture compliments the Montessori ideology and as a result of this, there is not a fixed relationship between teacher and pupil. The design of the classrooms is composed as an L-shape, with one section higher than the other (image H). This promotes the children to utilise the space to fabricate their own boundaries between play and work. Whilst respecting others through a comprehensible assessment, of the different activities demonstrated on the different levels. By creating accessibility of rendition for the child's learning this, can emphasise the development of the child's identity in a more organic way. In evaluation, they key recognition that has intertwined all the studies mentioned, is the acknowledgment of a child's territory in affiliation to the classroom teaching style. When in analysis of the military styled classroom setup, which suffocated a child to one allocated chair and desk, this ultimately still demonstrated a level of territory but on a smaller scope. In effect of this concept, this could ultimately suppress the child, from conveying their personality within the classroom. Which decreases their prominence amongst teachers and classmates. The use of the military teaching style delivers a level of expectation expectation from the children to all behaviour in certain manner. Although this could be viewed positively, as it decreases the unwanted disruption from some in the classroom. It still devalues in allowing the child to express themselves through an organic display of individualism during class time. In comparison to the other studies such as the detail Plan Study and The Montessori School Delft, these spatial designs were curated around the concept of the child express ing themselves through a relaxed classroom style. The architecture in both, promoted the children to freely access all spaces within the classroom. This would methodically allow the children to respect and form boundaries amongst their classmates during lesson and play time. It would also enhance the child's initial interests and promote an identity amongst teachers and the other children, as well as forming a natural territory. In example of this, a child who enjoys reading, may establish themselves within the reading area. In scrutiny that the relaxed architecture and teaching style, may not sufficiently prepare the children, for the later expectations of adult life. Which then depreciates this idyllic teaching method and purpose of the schools. In review of this, this would emphasise the role of the teachers, who would emulate guidance and demonstrate the appropriate behaviour established in adult life.



IMAGE H: Hertzberge.H (1960), 'Montessori School Delft, Unknown, https:// hiddenarchitecture.net/montessori-schoo/



COMBINED

It is of heightened question, how all these attributes would naturally coincide each other within the use of the structure of a school.

 $S_{
m uccessive}$ of the discussion of all three needs, privacy, belongingness and territory. It is of heightened question, how all these attributes would naturally coincide each other within the use of the structure of a school. By analysing the Brooklyn Day Care Centre, this provides a clear illustration of this (see Image I). This depiction of the school is focused within the hallway, which functions as an open cloakroom for the children. This space is double heighted, with windows allocated on every floor to allow visibility from every height. Interestingly within this image, territory and privacy have naturally corresponded. In analysis, this area does not demonstrate both well as it is a communal area shared between children. However, it could be viewed that territory and privacy is exemplified between the children and teachers. The windows allow visibility from a different space within the school. This creates a clear boundary which encourages the child to navigate through the space. This advances their independence by allowing them to establish their own choices and responses to situations. Whilst granting the opportunity for support from the teacher. On a related note, belongingness is enhanced from the aspect of territory.

In view of the cloakroom, this is a clear touch point which evokes a sentimental relationship between the child and structure. The territory of the child's cloakroom has been personalised to an appropriately sized hanger, where the child is able to leave their belongings. This is beneficial as it creates a routine of responsibility e.g., remembering items of clothing. This concept also bridges the two most prominent structures in the child's life, school and home. As this develops the feeling of association to a place, which prospers into the feeling of security. This has heightened benefit for two reasons. The first being, it allows the child independence away from their home and parents. Secondly, it provides a level of identity for a child who lacks association within the structure of their own home. In scrutiny of this image, the child's development of identity can be impeded by the deficiency of privacy. This space is the spine of the structure, joining all the classrooms together. So, although there is a high tread within this space, there should be an allocated area for the child to abate from the classroom setting. This would conceal the child from judgment amongst peers and allow for reflection for of one's actions, to reintegrate back into the classroom.

CONCLUSION

Recognition is sought as a reward which helps the development of their identity within the school setting.

To conclude, I believe that a child's identity can advance within a spatial design of a school. This is shown through the discussion of the three factors derived from Maslow's Hierarchy of Needs, privacy, territory and belongingness. In consideration, it is recognised that it is salient for a child to form an identity because, it allows key characteristics to be defined. The child can gain strong confidence and form resilience through a sense of security in themselves which in time, will allow them to adapt to new situations. A child can naturally create an identity within the home, through the influence of their parents, siblings and surroundings. Although the structure of a home is contrasted between individuals. There is a sense of freedom of structure for the child to explore and implement these needs within the space. In contrast to this, a school set up differs as it is an institution to educate children, which prepares them for adult life. This defines a level of control over the child, with a premeditation of socialisation. A child is expected to behave a certain level of etiquette reinforced from the teaching style demonstrated within the school. The differentiation between the two structures, is that the school is much larger than the home. The child will spend most of their time situated in one allocated classroom, with a group of children the same age. Additionally, the journey through the remainder of the school is controlled, typically in relation to primary school. This demonstrates importance of the classroom for the child, as this illustrates a degree of ownership within the structure of the school. This relays a similar attachment the child will have to their home, with their peers displaying a sense of community which in perception signifies their family. In thought, this relays an element of belongingness to the child. This evokes importance as this allows the child to be relative to a group, that is not associated to their family. I believe the structure of the school is significantly more important to a child than their home. This is because it provides a sense of independence and space to explore their identity away from the constraint of developmental interest from their family. From this, it reinforces the importance the spatial structure of a school must accommodate to the child's needs. In review,

the exploration of privacy is an important fulfilment to a child. In cessation of this, a private space can be interpretated through different design attributes. The children respond to the connotation of the space rather than the design detailing. The understanding associated to the designated space within the classroom either emulates or hinders the child's identity. The portrayal of the space is controlled by the school's teaching, which shows importance of the understanding from the children. By portraying the private space negatively, the children will attach an unwanted identity to the child who spends most of their time there. To refrain from this, the school could emphasise that this space is to be used as an area for reflection, not punishment. Progressing to the thought of, territory. This need is prevalent through different interpretations within the school structure. The accessibility of this is dependent of the teaching style, which ultimately informs the structure of the architecture. This is shown with The Montessori classroom style which informed Herman Hertzberge architecture. Territory is highlighted as importance for a child's identity as it allows them to navigate and create ownership of a space which in term reflects their interests. From this it would allow a chid to naturally bond friendships with likeminded children. The more accessibility of movement the child has to the space, the more awareness for others they will gain. In time, the children will form respected boundaries amongst their classmates during lesson and play time. Lastly, the advancement of a child's identity is beneficial when in exploration of belongingness. By personalising the structure this communicates a clear sign of association to the child within the classroom and peers. By displaying the identity of the child or accommodating design aspects, this enthuses a level of 'want' from the school to the child. When this need has been fulfilled it allows the child to feel appreciated and the in return, display good behaviour. Belongingness is the most important need to advancing a child's identity. This is due to the child identifying the purposeful design which emulates an acknowledgment from the structure to the child. This recognition is sought as a reward which helps the development of their identity within the school setting.



Weinstein.C, .David.T (1949), 'The Built Environment and Child Development', 15-18, Spaces For Children, New York: Plenum Press, 1987

Montessori.M,(1949), 'The Absorbent Mind', No.1, The Theosophical Publishing House, India, pp.1-325

Medd.D & Medd.M, (1959) 'Ingredients of Planning', diagram. Source: Institute of Education Archive, ME/M/10/2.

Donnelly.A & Trommler.K (2020) 'The Democratic Design of David & Mary Medd', e-flux Architecture, 2022

Medd.D & Lowe.E (1963), 'Detail Plan Study', Institute of Education Archive, ME/E/7/S/1

Barandy.K,(2022 MVRD transforms concrete infrastructure of Mumbai into playful community space, Designboom, 17 October 2022,

Houseman.J,(1972), An Ecological study of interpersonal conflict among preschool children, Unpublished doctoral dissertation, Wayne State University, pp.1-325 (DAI, 33, 6175-A

Montessori.M,(1949), The Absorbent Mind, No.1, The Theosophical Publishing House, India, pp.1-325

Moore.G.T,(1979), 'Designing environments for handicapped children', A Design Guide and Case Study, University of Wisconsin-Milwaukee, New York: Educational Facilities Laboratories pp. 10-40

Annemarie.S, Michael J. Ostwald (2013), 'Prospect and Refuge Theory: Constructing a Critical Definition for Architecture and Design, 15-18, The International Journal of Design in Society, Volume 6 Issue 1

Miller.S, (1986), Designing The Home For Children: A Need-Based Approach, Childrens Environments Quartlerly Vol.3, No.1, The Home pp.55-62 (8 pages)

Weinstein.C & David.T (1949), 'The Built Environment and Child Development', 15-18, Spaces For Children, New York: Plenum Press, 1987

Altman, L., Nelson, P. (1972), 'The ecology of home environments), 27-50, Department of Psychology, Final Report, Project No. 0-0502 University of Utah, Salt Lake City, E.Left, Washington D.C.

Palludan.C and Winther.I, (2016), "Having my own room would be really cool": Children's rooms as the social and material organising of siblings, Aarhus University, Denmark, Journal of Material Culture, Vol1.22, 34-50,

Dudek.M, (2005), 'Children's Spaces', Amsterdam; London; Elesevier/Architectural Press, P14-50

A.Saint, (1987), 'Towards a Social Architecture, The role of school-building in post war England, Yale University Press, New Haven and London, 20-22