Urban School Enclosure: investigating 'bordering practices' in English and Danish schools

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1.0 Introduction

Schools are a ubiquitous feature in the urban landscape and undoubtedly important in the lives of city residents. They have been an essential part of the urban experience in Europe since the emergence of mass education systems in the 19th and 20th centuries. Indeed, the temporal and spatial dominance of these institutions has long-been considered an essential strategy in the production of a disciplined, productive, and civilised urban population (Foucault, 1977).

Today, schools continue to shape children's lives and their geographies. In fact, schools have become even more dominant determinants of young people's space-times as school days lengthen and leaving ages rise. In addition, education is becoming increasingly central in urban development plans and policy agendas (see Million et al, 2017). The socio-economic challenges of the 21st century city and contemporary technological innovation have stimulated new discussions about the ideal environment in which to educate young people. As a result, the form and function of urban schools remains a topic of great political, pedagogical, and architectural debate.

There already exists a rich literature around schools. However, disciplines such as geography, architectural history, and educational studies have only recently begun to address the 'deep spatial silence' (Fisher, 2004 in Cleveland & Fisher, 2014) in educational research. Most of this work has explored the significance and history of 'internal school spaces' such as classrooms (Burke & Grosvenor, 2008) and playgrounds (Frost, 2010). Despite these works' substantial insights on the dynamic social-spatial relationships that characterise and shape 'intramural spaces', there exists little literature exploring the 'school boundary' and the history of urban school enclosure. This is surprising given that the physical confinement and separation of children from the city has been theorised as an important factor in the Western construction of the 'Modern Child' (Heywood, 2001).

The ways urban schools enclose students, separate them from their surrounding city contexts, and create a distinction between 'in here' and 'out there' was the focus of this research. Employing a mixed-method, qualitative approach, the 'bordering practices' (Spyrou & Christie, 2016) of a number of urban schools in England (London and Birmingham) and Denmark (Copenhagen and Aarhus) were documented. The fieldwork, informed by insights from assemblage theory, focused on the complex socio-materialities of the school boundary through ethnographic observation, interviews, and policy analysis. The aim was not to evaluate the effectiveness of school boundaries but rather to question how schools are separated from 'the urban', why, and what these practices can tell us about the societies and cities they are located in.

The findings from this research counter overly simplistic and reified accounts of 'the school border'. The fieldwork revealed dramatic differences in the bordering practices of individual schools and national contexts more generally. The schools in England and Denmark were characterised by different

arrangements of social and material practices and varying levels of enclosure, separation, and security. The conclusions contribute to scholarship on the nature of children's' urban geographies, the history of urban school design, and the contemporary socio-material construction of childhood.

1.1 Research questions

1. What social, material, and political practices construct the 'school-city' boundary?

2. What factors and discourses drive 'bordering practices' in schools?

2.0 Literature review

The literature review provides a summary of the research's theoretical underpinning and an overview of academic accounts of 'urban childhoods' and 'urban schools'. It is split into two parts. **Part 1** (2.1-2.15) draws from work in the fields of Education Studies and Children's Geographies, which have reconceptualised 'childhood' as spatially and temporally dynamic and a product of socio-material and spatial processes. The 'geography' of children has been rendered increasingly complex as researchers have expanded on the multiple 'spaces' (Teather, 1999) inhabited by young people and how these 'spaces', both figurative and physical, are produced by a range of human (mostly, but not exclusively, adult) and material processes. Then, work from contemporary researchers, who advocate a more detailed exploration of the 'everyday' and the socio-spatial dialectic of children's spaces, is discussed. This theoretical and methodological innovation has contributed to a renewed focus on school buildings and their social, material, and technological messiness and complexity. **Part 2 (2.20-2.30)** provides a historical review of schools and childhoods in England and Denmark. Particular attention is paid to the ways in which the concept of the 'school boundary' has been subject to change following shifts in pedagogical approaches, social attitudes, government policy, architectural innovation, and imaginaries of childhood.

2.1 Part 1: the 'construction' of children and childhood

> *'There is no natural or evolutionary child, only the historically produced discourses and power relations that constitute the child as an object and subject of knowledge, practices, and political intervention'* (Hultqvist & Dahlberg, 2001: 9).

Since the emergence of 'New Social Studies of Childhood' (NSSC) in the 1980s and 1990s, children have emerged from the margins of social science research. The interdisciplinary field of 'Childhood Studies' has since applied methods and insights from the social sciences to question and critically analyse the assumptions, ideas, and spaces that surround young people. This work builds off insights from historians such as Ariès (1965) who contend that the attitudes towards children, the roles they have played in society, and the spaces they have tended to inhabit have been contingent throughout history and have developed alongside the political, cultural, and economic transformations of society. Among the main

theoretical positions of this work, is the view of childhood as 'social construct, which changes over time, and no less importantly, varies between social and ethnic groups within any society' (Heywood, 2001: 9). This social-constructivist reading of 'Childhood' renders it historically and geographically contingent: ; a product of a series of 'complex social, cultural, economic, political and legal discursive frameworks' (Kratl, 2006: 488) which provide 'an interpretive frame for understanding the early years of human life' (Prout & James, 2003: 3). The social construction of childhood challenges understandings of the 'unitary child' (James and James, 2004: 14) and emphasises the spatial and temporal dynamism of children's practices. Rather than a fixed or 'natural' category across time and space, childhood is both a figurative and concrete achievement created by the 'adult gaze' and those 'placed in dominant positions of power' (Blundell, 2016: 7). This work is said to have opened up 'the last refuge of unexamined essentialism' (Crain, 1999 in Katz, 2008: 8) and challenged ahistorical and placeless discussions of 'the child'.

2.11 Space matters: the evolving 'geographies childhood'

> *'[T]he public landscape of urban children is located at the centre of the adult world… In structure and through prescriptions of use, settings made for children materialize adult interests and concerns, [and] discourses about 'good childhood' and 'good parenting.'* (de Coninck-Smith & Gutman, 2004: 134)

Since the early 1990s, geographers have argued that the social construction of childhood was also inherently spatial. This work argues that space in all its complexity 'makes a difference' (McGregor, 2004: 2) and should not be disregarded in accounts of childhood. Space is said to be 'neither innocent nor neutral and is an instrument of the political' which has 'a 'performative impact on its occupants' (Fisher, 2004: 36). Children are said to be always 'emplaced' (Anderson & Jones, 2009 in Blundell, 2016) both in terms of the abstract positions they are allowed to occupy in society and the physical spaces that they spend their time in. Geographers have thus explored the ways in which adults and communities conceptualize childhood and how these normative ideas and discourses of a 'child's place' have had socio-spatial implications. The discourses that surround children are 'translated into the spaces and places [they] are required to occupy…' (Blundell: 2016: 3). For Teather (1999), there are multiple types of children's spaces that have been influenced by both adults and children. These 'spaces', which are socially, emotionally, and physically determined frame children's lives. Indeed, she argues that the process of 'growing up' is fundamentally linked to these spatial realms. As humans mature they enter and contend with different 'activity spaces'[1], 'positional spaces'[2], and 'discursive spaces'[3] (ibid) which shape children's identities and their lifeworlds. These figurative and physical 'spaces' are co-determinants in children's everyday lived experience and their environments. This complex understanding of space has led geographers to document how the multiple 'spaces' and 'geographies of childhood' have been shaped by

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[1] 'Activity space' denotes the physical spaces of things and humans
[2] 'Positional space' denotes the figurative and hierarchy of humans, non-humans, and ideas
[3] 'Discursive space' denotes the 'public, cultural and institutional attitudes and conventions' (Teather, 1999: 49)

the interests and 'gaze' of adults. Childhood is understood as a powerful 'spatio-temporally contingent idea, ideal and normative category' (Kraftl, 2006: 489) which shapes where we think children *should* be, what we think they *ought* to do, and how we think they *should* act. Re-conceptualising the spaces that children inhabit as complex products of ideas, humans, and materials, which change over time and space demands that we 'open new understandings of the seemingly familiar public worlds of urban children and teenagers' (de Coninck-Smith & Gutman, 2004: 132).

2.12 The everyday overlooked: 'Children's Geographies' and 'More-than-social' approaches

> *'When we look at the social, we are also looking at the production of materiality. And when we look at materials, we are witnessing the production of the social.'* (Law and Mol, 1995: 274)

These constructivist approaches to childhood have not come without their critics however. For feminist scholars, NSSC's focus on the semiotic and iconographic constructions of childhood failed to account for the 'experiences, spaces, and voices' (Kraftl, 2006: 489) of children. In so doing, children were represented purely as objects of discourse, lacking the agency to resist and contest forces 'from above' and shape the world around them. Instead, proponents of this branch of human geography known as 'Children's Geographies' see children as agentive social actors in their own right, able to contest and resist the adult gaze and the 'children's spaces' assigned to them. In more recent years, this critique has been supplemented by those advocating a 'more-than-human' approach. This 'New Wave' (Horton & Kraftl, 2018: 108) of scholarship stresses that 'childhood is not merely a human *social* construction' but that ideas and ideals of childhood are 'comprised as much from nonhuman materialities - toys, stones, pets, drugs, food, desks, mobile phones – as they are human interaction' (ibid). Here it is argued that childhood and children are not constructed by social discourses alone but rather by a complex assemblage of human and non-human agents. This 'materialized sensibility' posits that 'things are fundamental to everyday human geographies' (Horton & Kraftl, 2006: 73) and that 'social relations are always-stitched together by nonhuman technologies, artefacts, and "natures"…' (Kraftl & Horton, 2018: 108). This relational perspective sees the materials and structures surrounding children as essential agents in young people's development and the construction of their experiences; materials construct, reflect, and inform understandings of childhood.

In the last two decades this socio-material approach has sought to address concerns that 'too much of the world is neglected, underestimated, effaced, disparaged or lost' (Horton & Kraftl, 2006: 71) in research. According to Kraftl (2006: 488), the oversight of previous studies which 'largely ignore[d] the importance of local, banal, ephemeral, mundane, material practices' is only now being addressed in contemporary research. Studies have begun the process of tracing how the 'smallest, *daftest,* most mundane, most humdrum' (Horton & Kraftl, 2006: 73) materials and practices reflect normative constructions of childhood. Objects are seen as 'the materialised carriers of theory and practice' which '*express* antecedent

social and discursive arrangements' and 'predispose current practices to emulate past practices' (Jacklin, 2001: 4 in McGregor, 2004a). The materials, structures and technologies that surround children perform and maintain the discourses surrounding childhood and shape a child's everyday experience.

These lively theoretical debates about the construction and spaces of childhood have encouraged researchers to 'look again' at spaces designed for children in cities and contributed to a renewed focus on the social, material, and technological complexity of school buildings.

2.13 Looking again at schools: containing and constructing the child

Since the emergence of universal education in Europe in the 19th and 20th centuries, schools have become increasingly dominant in the lives of children both temporally and spatially. It is therefore unsurprising that there is an abundance of literature covering their history (Burke & Grosvenor, 2008; Larsen, 2017) and social function (Foucault, 1977). However, it wasn't until the wider 'spatial turn' in the social sciences that Education and Childhood scholars began to critically examine the space and spatiality of school institutions in more detail.

The school institution is considered 'one of the neuralgic centres in which the young are initiated into the rites of cultural sociability and in the norm of civilisation' (Benito, 2003: 56). Taken as apparatuses of power, schools become central sites that facilitate the structure and cohesion of ordered society. The social practices, technologies and spaces of schools produce human identities, relations, and behaviours through their ability to order and structure space-times. This Foucauldian reading recasts schools as apparatuses and sites of Modern State power which produce disciplined and productive 'subjects' through the regulation and ordering of physical bodies (Foucault, 1977). Both the formal (e.g. timetablingand pedagogical practice) and the informal curricula (e.g. the design of spaces), are designed to manage the physical, mental, and moral values of children and 'produce and reproduce certain sorts of human being' (Blundell, 2016: 4). As a result, the production and function of school spaces have been reinterpreted. As opposed to 'a neutral or passive 'container'' (Burke, 2005: 490), the spaces and structures of schools along with the arrangement of everyday 'material artefacts (objects, tools, technologies, signs)' are ways of 'transmitting knowledge' (Fenwick, 2012: 112) which shape the agents and processes inside it. These materialities 'reflect and maintain political, technological and social influences from wider society' (McGregor, 2004b: 2) and are thus recast as deeply ideological. Reading the 'built form, layout and the practices' (Blundell, 2016: 77) of a school building as 'a literal, material manifestation of contemporary normative social–political constructs like 'childhood', 'education', 'schooling'' (den Besten et al, 2011: 13), renders the institutions important social artefacts and offer insight into the ways adults perceive and 'construct' children that have been largely absent from historical narratives.

2.14 The 'nitty gritty' matters: examining everyday practices and materials in schools

Despite a growing interest in the spaces and forms of schools, there remains a concern that the approach of many scholars remains trapped in overly semiotic and textual methodologies. These 'iconographic approaches' (Kraftl, 2006), have 'been largely concerned with the symbolic representational nature of children's spaces and artefacts' (ibid: 490). The focus on what buildings 'mean' and the tendency to 'read' them for their symbolism has resulted in a body of work that has failed to attend to the more everyday interactions that take place in schools (McGregor, 2004a; Kraftl, 2006; den Besten et al., 2011). This focus on symbolism fails to account for the complex processes, relations, materials, and practices which enliven them. Indeed, Den Besten et al (2011: 12) write that 'historians of education have latterly critiqued a problematic, longstanding silence within their field regarding everyday, material contexts of particular school buildings and spaces'. This oversight results in 'many accounts of 'school' [tending] to say little about the materialities of school buildings' (ibid) and as a result the 'rich, important, and potentially revelatory materiality' of Children's Geographies still 'often goes unexplored' (Horton & Kraftl, 2006: 73). Previous research appears to have adopted a scale which has 'over looked' the constituent parts of the school building and 'have failed to fully appreciate the complex nature of an individual building' (Jenkins, 2002: 223). As a result analysis has paid closer inspection to the impression buildings gave off rather than their material complexity.

More recent scholarship has begun to address this material silence by paying explicit attention to the 'various rooms and spaces, the walls, windows, doors, and furniture together with outdoor 'nooks and crannies', gardens and open spaces' (Burke, 2005: 490). A number of scholars have answered the call to examine the 'nitty gritty, everyday' (Horton & Kraftl, 2006: 74) geographies of school sites and focus on the 'banal, practical, 'behind-the scenes' details of *how* childhood is constructed' (Kraftl, 2006: 490). Despite this 'welcome emphasis on materiality' (ibid), there remain some socio-material elements of the school building which remain 'too often hidden-in-plain-sight' (Horton & Kraftl, 2018: 4).

2.15 The 'school fence' and 'boundary'

The 'school boundary' is one such socio-material component of schools that architectural historians and educationalists have begun to interrogate and question (see Benito, 2003; Rockwell, 2005; Burke & Grosvenor, 2008; Rooney, 2010, 2012; 2015a; 2015b). However these accounts, despite their welcome interest in the hitherto under-researched boundaries of schools, consistently fail to conceptualise their material, social, and political complexity. Too often, the 'boundary' is discussed only as a form of physical enclosure and as something static. These accounts fall into the trap expressed by Jenkins (2002: 225) who laments the tendency of academics to write about architecture as a 'safe and stable artefact' and' material site[s] that [are] easily accepted and understandable' in the form of 'the plan, the façade, or the photograph'. Even those architectural historians (Burke & Grosvenor, 2008; de

Coninck-Smith, 1990; 1997; 2010; Larsen, 2017) that carefully trace the development of urban school architecture fail to document the complex ways these spaces are socially and materially bounded.

Recent scholarship in the field of 'border studies' has challenged 'assumptions about the fixity and stability of borders' and stressed their fluidity and 'processual character' (Spyrou & Christou, 2016: 526). According to this relational and constructivist ontology, boundaries are delimited, managed and normalised by a range of human/non-human and material/immaterial 'bordering practices' (Spyrou & Christou, 2016). Borders are not seen as static but instead considered products of complex networks of 'material physical realities' and 'ordinary and everyday encounters' (ibid: 526). `This approach is informed by work on 'assemblage' and insights from Actor Network Theory (ANT). ANT considers 'things' and spaces as processually emergent and unstable; the multifaceted products of 'humans, organizations, tools, objects, technologies, texts…organisms…' (Jacobs, 2012: 416). Borders are therefore prone to change and adaptation as forces negotiate their form and meaning. This theoretical approach to the complexity of objects demands a re-examination of the seemingly simple and 'stable' school boundary.

Thomson's (2005: 54) work on primary school playgrounds in the UK is a notable exception to the reification of the school fence as a stable object. His study addresses the 'limited research on how adults and children individually 'territorialise […] the space of the school' and problematizes the playground's boundary. He argued that 'the landscape of each playground was bounded not only by walls and fences, but also a framework of rules, regulations, and surveillance' which were negotiated between 'adults, prescriptive agencies, and children' (ibid: 69). For Thomson, the 'internal' and 'external' boundaries of playgrounds are complex effects of both material and immaterial forces. Physical structures are not the only 'bordering' forces (Spyrou & Christou, 2016) which demarcated the space: '[v]isible lines did not mark out the boundaries of this space nor did fences partition the areas. The boundary of the area was maintained by a school rule' (Thomson, 2005: 70). Here borders are considered 'as much material, physical realities – walls, fences, barbed wire…as they are social constructions that need to be constantly validated and reaffirmed' (Spyrou & Christou, 2016: 526). The boundaries of the playgrounds were demarcated, delimited, and negotiated by a range of adults, children, and (im)material actors. As opposed to being something 'constant once established', the school boundaries were recast as 'a node of relations, whose durability is both relative and negotiated' (Jenkins, 2002: 232).

2.2 Part 2: A history of schools and school boundaries

Part 2 provides a historical review of schools and childhood in England and Denmark. Particular attention is paid to sources which have discussed the 'school boundary' and the relative 'opening' or 'closing' of schools following shifts in pedagogical approaches, social attitudes, government policy, architectural innovation, and understandings of an 'ideal childhood'.

2.21 Emerging school systems in the 1800s: removing children from work and the street

The emergence of public education systems over the course of the 19th and 20th centuries precipitated a dramatic reshaping of children's geographies (de Coninck-Smith, 1997; Heywood, 2001). Despite a clear shift in favour of expanding mass education, the significance of school in the space-time of children was not immediate but 'an extremely long-drawn-out process' (Heywood, 2001: 161).

In the early 19th century, urban children began to pose a problem for city leaders and planners. Whereas for much of the early modern period children had largely 'been the responsibility of the family' (Sandin, 1997: 17), the 19th century saw the state begin to manage the 'work, schooling, family life and leisure' (Burke & Grosvenor, 2008: 17) of children. The moral and physical well-being of children attracted the interest of those in power for a number of reasons. Processes of rapid urbanisation, technological advancement, changes in the labour-market and strategies of family economy (see Heywood, 2001), all challenged the previous understandings of 'how children should spend their time – and where they ought to be during the day' (de Coninck-Smith et al., 1997: 11). The 'spaces' assigned to young people were either seen as no longer satisfactory for their development or too easily contravened.

The displacement of children from the workplace was particularly important. As factory machinery began to replace much of the low-skilled, manual work undertaken by children there was a need to occupy and control them. The prevalence of child labour in the early modern period during which 'the majority of families sought work for their children as a matter of routine' (Heywood, 2001: 121) meant that their exclusion from the workplace required a managed response. This need to reoccupy children was heightened by the moral panic that emerged in both Denmark and England around the degeneracy of the young. For example, in 1816 the parliamentary 'Committee for Investigating the Causes of the Alarming Increase of Juvenile Delinquency in the Metropolis' published a report on the extent and causes of 'dreadful practices' of boys in London. Amongst the many conclusions of the committee were that 'The improper conduct of parents; The want of education; The want of suitable employment, [and] … habits of gambling in the public streets' (1816: 10) were driving crime rates up. Children – save when confined to designated spaces of work, learning, or leisure - risked falling into bad habits and succumbing to the 'morally deleterious environment' (de Coninck-Smith, 1990: 60) of 'the streets'. This sense of moral panic was later reinforced in the 19th century by 'sensational accounts of crimes by youthful street gangs, symbolized during the 1900s by the menacing figure of the London hooligan' (Heywood, 2001: 29-30) or the Danish milk boy (de Coninck-Smith, 1997).

The concerns over children's geographies reflected a shift in dominant discourses and understandings of a 'good childhood'. Laws implemented to remove children from the workplace, increase school attendance, and establish children's rights all point to a shift in adult perceptions about the proper 'place'

and conduct of children. For example in Denmark from the late 1880s, certain types of children's employment such as 'industrial work, milk delivery, hawking… and night work at bars' were seen to compromise 'the ideal of a proper childhood' (de Coninck-Smith, 1997: 134) and were outlawed. Many authors have pointed towards this type of legislation, implemented by a number of European states from the mid-1800s, as a sign of the normative and discursive shift in the conceptualisation of childhood. The legislation indicates a 'deliberate aspiration to get children into school and out of what were considered harmful settings – the lower class home and the streets' (Sandin, 1997: 17).

2.22 Separated spaces for a 'idealised' childhood: translating ideology into material form

During the 19th century 'the new bourgeois concept of childhood really began to make its mark' (de Coninck-Smith, 1990: 54). The child was increasingly seen as 'economically useless', but 'emotionally priceless' (Zelizer, 1994). The mental image of the 'innocent child' in need of constant supervision, 'detach[ment] from the temptations of the world' and 'rigorous discipline' (Heywood, 2001: 38) generated a new geography for children that the growth of private boarding schools in Europe can attest to. Institutions 'began to quarantine children from the world of adults' (ibid: 157) and manage pupils according to separated spatial and temporal systems.

In the UK (Heywood, 2001) and in Denmark (de Coninck-Smith, 1990), this approach to childhood was heavily influenced by Enlightenment thinkers such as Locke and Rousseau, as well as the early Romantic artists. According to Coveney (1967), Rousseau was essential in shifting public opinion away from the Christian tradition of Original Sin, towards an idea of the original innocence. The philosophical approach to childhood of the Enlightenment was further emphasised by the early Romantics in their art. In these pieces, the child would be elevated to a figure of wisdom, innocence and redemption. According to Heywood (2001), this artistic style served to emphasise the importance of childhood and the corrupting influence of experience. The effect of both the philosophical reconceptualization and the artistic depiction of children, constituted a discursive shift that would impact what a European middle-class child could do and where it could be. These elite attitudes would slowly be applied to working-class and 'delinquent children' who 'were increasingly seen as needing protection and education, rather than punishment' (Jacobsen, 2017: 100).

The social, cultural and ideological transformation of the 'good childhood' resulted in a new geography for children. Through a raft of political, legal, and material interventions adults imposed order on the lives of children and created an environment that mirrored the 'bourgeois dream of childhood' (de Coninck-Smith, 1990: 60). The sentimentalized narrative portrayed children as requiring protection 'against malicious societal influences (ibid: 224) and conceptualised 'the perfect pedagogical setting as 'a rural, natural, "anti-urban" environment' (James and Prout, 1997: 224-5). The role of the Enlightenment

teacher in the city was therefore to 'keep the child far from the degeneration of culture that disturbs its natural development' (Depaepe, 2002 in de Visscher and Scaré, 2017: 225).

> *'In this perspective urban public space [becomes] a big bad wolf ... representing a known but unpredictable threat in the outdoor world against which children should be warned and prepared [...] 'The streets' have become a symbol of the potential threat posed to the safety and integrity of vulnerable children.'* (De Visscher and Sacré, 2017: 225).

The need to distance the child from the threat of the urban was translated from a philosophy into a social-spatial form – the school building. The aim was for the school to regulate the where, when, and what of urban children. Schools were 'the instrument' to physically and symbolically separate children 'from the injurious environments of home and street and the unsuitable environments of work and factories' (Sandin, 1997: 38). The design of school buildings 'both the exterior shell and the interior ordering spaces' were thus 'in a symbiotic relationship with ideas about childhood, education and community' (Burke & Grosvenor, 2008: 12). Urban schools, responding to the then prevailing childhood discourses and geographies, were designed as a 'separate safe island in the city' (ibid) and a 'closed citadel' (Blundell, 2016: 44) in an attempt to protect children from their local culture and ecosystem.

This enforced 'spatial separation of children from the flow of everyday life' (Blundell, 2016: 15) and their families was emphasised by a monumental, enclosed architectural style and physical partitioning. The buildings were functionally separated from local communities – even 'placeless' (Gruenewald, 2003) - to reflect the need for children to be protected from external threats: '…school was detached from the community and the classroom was detached both visually and physically from its external environment…' (OECD, 2011: 25). The 'separate universe' (Vincent et al., 1994: 9) that was created for children in school buildings constituted a 'bounded system' (Nespor, 1997: xi) that was designed so teachers could 'keep children in' (Burke & Grosvenor, 2008: 188). The idealized and symbolic need for children to be isolated from the corruption of the adult world gave rise to the construction of schools which would 'not only enframe but also constrain and constrict children's lives' (Blundell, 2016: 10).

19th Century schools in London and Copenhagen	
Fig 1: Architecture of the London School Board: High Street School, Stoke Newington, London; from 'The Graphic', 2 June 1877. Source : www.lookandlearn.com	Fig 2: Mattheusgades Skole, Copenhagen. Built in 1883. Photography taken in 1897. Source: www.Kbhbilleder.dk
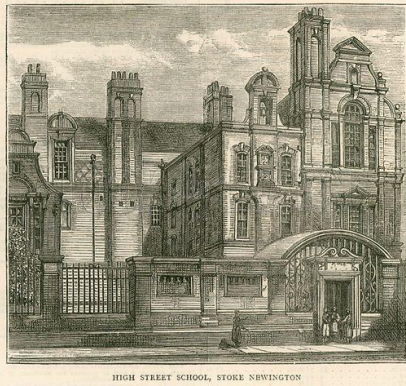
2.23 Resisting enclosure: the long struggle to keep children in schools

'In a Deptford school [London] at the turn of the [20th] century, a widowed washerwomen would regularly call through the classroom window to her eight year old [daughter]: 'Come on out, Liz, I need you.' And the teacher would let her go.' (Cunningham, 2006: 173)

Despite the best efforts of social-reformers, it was only at the very end of the nineteenth century that 'school triumphed over work' (ibid: 139). Indeed, Heywood (2001: 161) argues that we should be careful not to overemphasise the impact of compulsory schooling in the 19th century for the general population. This is echoed by Jacobsen (2017: 97) who writes that in Denmark 'the struggle over children's time…continued for almost a century after the adoption of compulsory education'. Many working-class families still relied upon the wages and labour of children meaning that they 'had to weigh up the costs and benefits of investing in the schooling of their offspring' (Heywood, 2001: 139). Working-class children continued to be seen by many as an 'economic asset to their households' production [...] and a means of securing the economic future for their parents and other members of the extended family' (Katz, 2008: 9). There remained an expectation from parents that their offspring's 'place' remained in the world of work. Indeed in Denmark, despite legislation enacted in the 1870s stipulating a maximum number of hours a child could work and a minimum age requirement, the number of working schoolchildren 'increased dramatically' (de Coninck-Smith, 1997: 131) in the 1880s.

The draw of the workplace and the street meant that school attendance in both countries was poor: in the 1840s, 25% of Copenhagen children received no elementary education (de Coninck-Smith, 1990: 55). Attendance also proved an issue in London: '[i]n England and Wales in the 1880s there were nearly 100,000 prosecutions a year for non-attendance at school. After drunkenness, it was the second most common offence' (Cunningham, 2006: 173). The presence of children in the workplace was not simply a matter of parental reluctance, legislative failure, or teacher oversight but also due to many working children's desire to remain in their 'space' of work. De Coninck-Smith (1997: 138) recounts the how

during the Great Dairy Strike of 1896 the milk boys 'participated actively in the strikes of their adult colleagues' and resisted attempts to implement employment regulation. Indeed, 'some milk boys once stood in the school yard during school and said 'Let us out! Otherwise you will have a riot!' (ibid: 139).

In both Denmark and England the measures required to establish the school boundary and ensure that children 'stayed in their place' were extensive (Larsen, 2017; Burke & Grosvenor, 2008). Only through a combination of political decrees (banning child labour and mandating compulsory school attendance), fines, enforcement officers (i.e. a network of attendance and child protection officers with the right to wield corporal punishment), police cooperation and physical confinement in schools was the 'habit of schooling' (Cunningham, 2006: 172) established. In terms of fencing or walling, both countries built closed school environments with clear physical boundaries embodying the symbolic and material separation of children from the city. The architectural design of London Board schools still in use today and the example of milk boys confined within their school point towards institutions 'specifically designed to hold children' to ensure 'the separation of children from society' (Burke and Grosvenor, 2008: 65). The notion that the world of adults and the street were incompatible with a 'good childhood' generated a socio-spatial urban landscape that could ensure 'the necessity for separation' (Blundell, 2016: 18). Schools were constructed as 'discrete spatial and temporal islands, isolated from the outside world' (McGregor, 2004: 4).

2.24 The 'Century of the Child' (Key, 1909): 'Progressive Education' and child-centred schools

In the early 20th century, many of the laws relating to child protection, school attendance, and labour conditions were strengthened and expanded. A network of socio-spatial practices reinforced the prevailing view of children as needing a separate geography away from the pollution of the city and the corrupting world of adults. Students were increasingly institutionalised as school-leaving ages rose, teaching hours increased, attendance improved, and gender and regional imbalances were slowly addressed (see Burke & Grosvenor, 2008). At the same time, however, the geography of children saw another dramatic change as the spaces of the 20th century school were increasingly opened up and made responsive to their needs.

In 1909, the Swedish writer Ellen Key published the hugely influential 'Century of the Child'. In the book, Key 'made an emphatic plea for the new 20th century to be devoted to the betterment of children's conditions' (Kristjansson, 2006: 17). She argued for a more child-centred approach to education in which 'the children's own perspectives and interests' (ibid) were central to any interventions. According to Kristjansson (2006: 17) the significance of this book 'beyond Sweden, Nordic countries, and Europe' should not be understated. Educational reformers such as Key (1849-1926), Dewey (1859-1952), Steiner (1861-1925), and Montessori (1870-1952) all developed novel pedagogical approaches based on different ways of understanding children's development and their socio-spatial needs. Crucially, their interventions

envisaged new ways of organising children, teachers, objects, and space. Their distinctive approaches argued for buildings and materials to be focused on the needs and interests of children and 'argued against the authoritarian and insensitive' (ibid, 2006: 17) practices of mainstream schooling. These thinkers envisaged a more active and emancipated role for the child that challenged their mostly passive experience in the popular hierarchical and monitorial systems of schooling established by Lancaster (1776-1838) and Bell (1752-1832) popular in both Denmark (Larsen, 2017) and England.

'Progressive' education saw all aspects of schools, not simply what and how teachers taught, as in need of reform. The materials and spaces needed to reflect and instil this new vision of the engaged, emancipated, and active learner. For Steiner 'every aspect of the school – the wooden furniture, pastel colours, natural lighting, and the presence of natural objects in the classrooms, as well as the outdoor spaces – had architectural and pedagogical significance…' (Upitis, 2004: 24). Similarly, Montessori 'carried out a vitriolic critique of the ubiquitous bench-table' (Burke & Grosvenor, 2008: 69) and called for a material culture in schools that was built entirely around the child. From scissors, shelving units, and chairs to the layouts of doors and windows and their relationship to the surrounding playground, the entire school needed to stimulate and inspire children.

The American progressive theorist John Dewey was particularly influential in the early 20th century; with Blossing et al. (2014: 134) even arguing that he was 'the main inspiration for the school reform movement in Europe'. Dewey advocated more responsive and adaptive pedagogy that placed new value on contextualised learning and knowledge, student interaction and play. He also lamented how the 'dominant school model undermined the integration of students' experience outside the classroom into their education and made it difficult to apply what they learned in school to their daily life' (Dewey, 1959 in Edelglass, 2009: 71). He vigorously contested the architectural approach that had 'divorced [schools] from normal social space' and made them a 'divided world' and a 'self-enclosed environment' (Dewey, 1938/1997: 44). A progressive education needed to 'relate directly to the wider social sphere' and therefore Dewey thought that 'learning must be situated partly outside of the traditional confines of a school's walls.' (Gislason, 2007: 8). The pedagogical and architectural approach of 19th century schools had constrained children's geographies of learning 'strictly…to the boundaries of a self-contained school' (ibid: 9). For Dewey, this hard 'boundary between the school and its encompassing social context' needed to 'be levelled' (ibid: 9) to enable the integration of the 'external' social and urban worlds of the students into pedagogy and classrooms.

2.25 Enter Modernism: Open-air schools and active learning

The school designs that had dominated the 19th century were not challenged by radical pedagogies alone. Modernist architects and educationalists questioned the 'traditional designs of buildings and furniture' and argued that they were 'failing the health needs of children' (Burke & Grosvenor, 2008: 69). This led to a

revolution in school design. Informed by a new regard for the importance of air, hygiene, and child-centred pedagogy (ibid), schools were constructed to be simple in both their architectural style and their aesthetic form. Out were 'the heavy walls, the terrible gates, the hard playground, the sunless and huge classrooms…the awful and grim corridors' (McMillan, 1919: 270) that had created a 'prison house' (ibid) around children. This monumental and austere design was slowly replaced with a more functional and open vernacular. The 'open-air schools', constructed in the 1930s in England, Denmark and throughout Europe, best express this new-found emphasis on children's physical health and their environment. Here, spaces 'inside' and 'outside' the buildings were subsumed into one with classes taking place 'semi-outdoors'. These schools, based on the ideas of Steiner and Montessori, expanded the geographies of children. The surrounding natural environment was no longer physically or symbolically 'out of bounds'. Children were encouraged to creatively explore the natural world around them, enjoy the fresh air, and become more independent learners.

Whilst the 'open-air school' may have been the most concrete translation of Modernist principles, school architects began to incorporate these elements into schools more generally. In Britain the 'architectural culture [shifted] towards Modernism' in the 1930s and efforts were made to make schools which 'emphasized a break with the past' and the 'vision of a new dynamic relationship between school, community and wider society' (Burke & Grosvenor, 2008: 121). Schools were reconstructed to be 'light in construction … transparent, the classrooms illuminated, and the pupil and teacher enlightened' (Lawn, 2005 in Burke & Grosvenor, 2008). Indeed, many of the schools were designed using Scandinavian timber architecture (Burke & Grosvenor, 2008: 85). In Denmark, a similar architectural transformation took place. Following a rapid shift in attitudes towards children and work in the 1920s (de Coninck-Smith, 1997) and the influence of educational progressivism, '"learning in an atmosphere of freedom", and the capacity of the school building and outside yard to become part of the curriculum' were 'formally sanctioned as an educational philosophy in Scandinavia' (Burke & Grosvenor, 2008: 92).

2.26 Post-war reconstruction: democracy, social-welfarism, and the 'Good Child'

The outbreak of the Second World War and a transition to a wartime economy stalled the development and construction of schools in both countries. However, school building was revived and accelerated after the end of WWII. This boom was both the result of a need to make good the physical damage suffered during the conflict and a widespread wish within European society to use the enlightening power of universal education to embed humanist principles more broadly. Nation states across Europe, ravaged by war, 'chose to strengthen their social democratic infrastructures and invest in social welfare and public education' (Burke & Grosvenor, 2008: 119). Schools were once more important signifiers of a better future and states embarked on extensive building projects.

In both Denmark and England, the architecture of the schools reflected the dominant socio-cultural aspirations of strong social-welfarist governments. De Coninck-Smith (2010) writes of the parallels in school architecture between these two countries from the 1930s to the 1960s. Driven by similar socio-economic and political systems and a mutual understanding of childhood, there were high levels of cooperation between English and Danish designers and urban planners. De Coninck-Smith (2010) traces the 'growing interest in British architecture and design' which were 'institutionalized after the war' (ibid: 73) by noting the number of shared exhibitions and study tours between the two countries. Broadly, the schools through their 'very design and organizational layout', spoke 'of a democratic and egalitarian society' (Burke & Grosvenor, 2008: 120) that could revive the hopes of the nation.

The theme running through the displays in the Education Pavilion at the seminal 1951 Festival of Britain in London was the need for 'The New Schools' to engage inquisitive pupils in their studies. The hope was for children 'to go out into their town or their countryside and seek to uncover all the facts they need. Then they come back to the classroom, analyse the facts, shape their conclusions and present them' (Cox, 1951: *New School' Pavilion*). The building itself – designed to show the latest trends in school design and equipment -- was notable for its floor-to-ceiling windows and innovative lighting.

The relative lack of ornamentation in school architecture echoed the attempts to create a more socially equal society that eliminated the class-structures of the 19th century. In opposition to the monitorial school, post-war buildings were designed to inculcate a less hierarchical relationship between teachers, students, and communities. The extensive use of glass, the emphasis on clear sight-lines in and out of the building, and more flexible classroom spaces, reflected the dominant Modernist architectural practices, socio-cultural attitudes in favour of greater 'transparency' and the pedagogical thinking of the time. In addition to this change in the 'internal' spaces of the school, the buildings' relationship to their environment changed too. Schools, especially those constructed in the expanding suburbs, were also often placed in large open areas and surrounded by gardens to promote physical exercise and exposure to 'nature'. Even if these spaces were often fenced off from the general public, the schools actively encouraged greater connectivity with their surrounding environment.

These New Schools were also intended to entrench and strengthen democracy by raising 'democratic young people, in mindset and actions, who were able and willing to avoid war' (Rasmussen & Moos, 2014: 57). This was especially the case in Denmark where following the Nazi occupation, schools became an embodiment of the new welfare state and tools for 'democracy-building' (ibid: 63). Democratic participation thus became a 'key value' in the Danish system (ibid: 63) and was incorporated into all elements of a child's education; from the building, to the teaching style, to the way children play.

By the 1950s and 1960s, theorists were not merely questioning 'enclosed' classroom architecture but the boundaries of schools themselves. They sought new types of learning environments to enable more flexible, differentiated and personalised experiences. The incorporation of such 'experience-based', 'community-based' and active pedagogies in school curricula precipitated a 'range of architectural innovation(s)' and 'some schools became more connected to the outdoors and 'hands on' learning' (Dovey & Fisher, 2014: 44). According to Jellingsø (1987 in Furlong, 2015: 18), an increasing emphasis on teaching and learning outside traditional spaces meant that 'the classroom became the dirty word'.

The concept that children possessed 'receptive mind[s], strong curiosity and […] fertile imagination[s]' (Burke & Grosvenor, 2008: 96) and that they should be encouraged to become independent learners generated new ways of organising space. The external boundaries of the school were re-examined during this period by those advocating a 'community or village' school. In the 1960s and 1970s, 'a new generation of architects eager to combine the arts of town planning and educational design' (ibid: 142) questioned the place of the school in the city. This approach sought to make the school 'the most important cultural and educational hub of a community, whose borders and boundaries were open to the world and whose facilities were used by all sorts of people, of all ages, at all times…' (ibid: 146). The idea was that 'boundaries would disappear as school became community, while community would become school' (ibid: 121).

The re-imagination and reconstruction of the school in the later 20th century responded to novel understandings of childhood. A 'healthy' childhood was no longer envisioned as a contained, isolated, and docile existence, but rather one in which children were free(r) to explore multiple spaces and express individual responsibility. Whilst the symbolic and physical removal of the child from the corrupting world of adults may have been seen as a pressing necessity in the 1870s, in the 20th century schools were expected to relate teaching and practice more explicitly 'to the real world'. A 'good school' was one 'that emphasized flexibility, learning through doing and a pedagogy that supported self-directed learning rather than instruction' (Burke & Grosvenor, 2008: 120). 'It stimulates [pupils] into trying out in practice all the skills that [they] have learned' (Cox, 1951: '*New School' Pavilion*).

This discourse of the competent, unbounded and independent child became especially prevalent in Denmark in the 1960s. According to Kristjansson (2006), the understanding of the 'good childhood' had an enormous political and cultural impact in Nordic countries. Over the course of the 20th century, children were afforded an increasingly privileged position in public discourse; Kristjansson (2006) even claims Nordic nations became 'child-centred'. The 'good childhood' which underpins the Nordic approach emphasises 'democracy, egalitarianism, freedom, emancipation, cooperation, and solidarity' (Wagner, 2006: 292). The child is seen as 'competent, participating and autonomous' and is encouraged 'to play…to move freely and practice cultural activities, with their peers, in particular in outdoor spaces

without adults controlling and organizing their space' (Kjørholt, 2007: 34). Nordic people endorse the idea 'that children and adults are equal on many planes' (Wagner, 2006: 292) and therefore the child should not be enclosed by adult authority unless it is absolutely necessary. In Nordic schools, children thus 'spend a great deal of time… beyond the immediate supervision of adults, running indoors and out as their interests dictate…' (ibid, 2006: 292).

2.27 Progressive Education in England under attack in the 1960s and 70s

The 1944 Education Act, which laid the foundations for England's post-War education system, underwent reform in the 1960s at the hands of a Labour government. In 1965, the Education Minister instructed local education authorities to plan to convert schools to a 'comprehensive' and more inclusive model in which all children were educated together, rather than in separate academic ('grammar') or more practical schools ('modern' or 'technical'). The reforms of the 1960s can be seen as the apogee in terms of a social-welfarist agenda: schools were seen as essential tools in addressing class and gender divisions in British society. This aim was reflected in the 'particularly radical designs' (Burke & Grosvenor, 2008: 146) of the new comprehensive schools from 1965-1970.

However, the move to comprehensive schools provoked a backlash and 'commentators were quick to condemn the shift from a selective system of secondary education' (ibid: 150). Abolishing grammar schools was particularly unpopular amongst Conservatives who had championed the streamed system while in government (1951-1964). With the publication of the 'Black Papers' (1969-1977) many of the key elements of progressive education came under attack. The education system in England, from its primary schools to its universities, was portrayed as in 'crisis' (Cox & Dyson, 1969). Standards were said to be eroding as 'competition [had] given way to self-expression' (Cox & Dyson, 1969).

These pamphlets were pivotal in shaping the national education discourse. They marked the first sustained critique of progressive education, which had characterized the English system since the War. From the 1970s onwards, Margaret Thatcher vowed to remake the system, first as Education Minister (1970-1974) and then as Prime Minister (1979-1990). What followed were years of 'financial constraints…placed on the design of new schools' and increasing government pressure directed 'against the freedom of experimentation and innovation that had been enjoyed by teachers for more than a decade' (Burke & Grosvenor, 2008: 152). Emphasis was placed on driving up standards (as evidenced by test results), ensuring value for money and a reversion to a more didactic style of teaching. The child-centred pedagogy methods, which had influenced the design of buildings and lesson planning in the 1950s and 60s, were replaced by a more 'traditional' and 'rigorous' approach.

2.28 The Tragedy of Dunblane and the calls for tighter school security in the 1990s

Whilst the Conservative governments of the 1980s and early 1990s had already masterminded a dramatic overhaul of England's educational governance structure (see Gunter & Hall, 2016; Blossing et al., 2016), the events of the 1990s hastened further changes in school architecture and security.

At the beginning of the 1990s there was a widely-reported rise in incidents of arson, violence, vandalism, and theft in England's schools (Noaks & Noaks, 2000). A Department for Education and Employment (1996) (DfEE) report confirmed that 'assaults on pupils and teachers in schools are increasing in number' and noted the increasing costs related to arson. Overall it estimated that in 1992-93, the 'cost of crime in England's schools… amounted to £49m' of which some £22m was attributed to malicious fires' with the 'remaining £27m due to vandalism and theft' (DfEE, 1996: 3-4). The threat of disgruntled pupils committing arson was clearly prevalent in the mind of both the public and policy-makers. According to one DfE civil servant interviewed for this study 'schools were a popular target for young arsonists…and quite easy to target as the building are unoccupied for long periods of time' (IEP1). In addition, there was recognition that 'modern schools contain(ed) many expensive items' that 'need(ed) protecting from theft' (DfEE, 1996: 3-4).

The insecurity of teachers, pupils and property was vividly highlighted between 1994 and 1996. In 1994, a man carrying a shotgun and knives entered a school in Middlesbrough, fatally stabbed a twelve-year-old and seriously injured two other pupils. In 1995, a head teacher of a London secondary school was stabbed in the chest and killed by a fifteen-year-old boy. Then, in March 1996, a man with a history of inappropriate behaviour towards young boys walked into a school in Dunblane, in Scotland, armed with four legally-held handguns. Over the course of 3-4 minutes, the gunman shot dead sixteen primary school children and one teacher, and injured 16 others. The attack remains the deadliest mass shooting in British history. Just four months later, an adult scaled the fence of a primary school and attacked children and adults with a machete resulting in seven non-fatal injuries.

These incidents, and in particular the Dunblane attack, provoked an urgent review of school security. The Cullen Report (1996) was commissioned by the UK government to investigate what lessons could be learned. In it, Lord Cullen argued that 'additional measures to protect the school population, either in the form of physical alterations to schools or an increase in the extent to which access to them is supervised' (1996: 10.5) were warranted. The report suggested increasing the vetting and supervision of adults working with children and young people. In addition, it made a number of suggestions about what material interventions might be sensible (Cullen Report, 1996):

Document	Paragraph	Feature	Description
Cullen Report (1996)	10.21	Fences, walls, gates	'It may be of value to consider whether the school should have one or more than one line of defence. Should the first line of defence by the boundary which defines the grounds of thee school? Should attention be given to walls, fences or gates? Should steps be taken in other ways to restrict public access to or through the grounds?'
Cullen Report (1996)	10.22	CCTV	'Is there a need for surveillance by closed circuit television?'
Cullen Report (1996)	10.23	Entrance doors	'As regards the means of entry to the school buildings, there may be scope for restricting access by reducing the number of doors or by modifying them…'
Cullen Report (1996)	10.24	Surveillance	'…Should some form of surveillance be installed at subsidiary points of entry?'

Table 1 showing some of the 'possible measures' suggested in the Cullen's (1996) to improve school security

The report (1996, 10.7) did explicitly state however that 'a balance has to be struck' between security and public accessibility. It noted that:

> 'The point has often been made that schools should be welcoming places. Many schools represent a community facility, receiving adults for evening classes and recreation. It would be unacceptable to carry measures to the point where schools were turned into fortresses. (Cullen Report, 1996: 10.7)

The conclusions of the Cullen Report were made concrete for schools when the DfEE released non-statutory guidelines around school security. The document entitled 'Improving Security in Schools' (DfEE, 1996) addressed a concern expressed by Lord Cullen (1996: 10.3) that there had been 'little, if any guidance on tackling the dangers which an unauthorised intruder could pose to the school population…'. The DfEE guidelines made clear the features of schools 'that commonly cause problems' (1996: 10) for issues of security. Included in the problems that it lists are (DfEE, 1996: 10-13):

- *'Open sites with long perimeters and poor fencing;*
- *Multiple entrances open during the day, making securing them extremely difficult; Reception areas located far from school entrances;*
- *Public access out of school hours to community facilities…'* (10)
- *Schools wanting an open door policy to encourage community involvement;*
- *The public have the idea that they own the school and don't regard it as private property.'*(13)

Here, the physical openness of schools to 'outsiders' was explicitly seen as a problem. The lack of a secure site combined with 'an open door policy' risked generating problems ranging from 'troublesome youths and angry parents to criminal trespass, abduction of children, and sometimes worse' (DfEE, 1996: 13). To counter these threats, schools were recommended to make significant material changes to their boundaries based on their 'level of risk'. Amongst the many 'solutions' were the suggestions to: 'treat everyone who is not a member of staff or a pupil as an intruder' (ibid: 14), establish 'some form of

boundary … to mark the perimeter and to act as a visual indicator of trespass' (ibid), and to erect security fencing capable to 'withstand a high level of physical attack' of 'at least 2.5m high' or '3-3.5m' in very high risk schools to 'deny access to determined intruders' (ibid: 26).

The publication of these guidelines marks the beginning of the hyper-securitisation of English schools. Schools were no longer seen as a 'separate safe island in the city' (Burke & Grosvenor, 2008: 12) but in fact had become spaces to fear: 'risk anxiety now pervade[d] school' (Rooney, 2012: 335). For Rooney (2015a: 886) the installation of security fencing serves as a mirror that reflects 'back to us the patterns of fear, insecurity and over-protection that … are evident in community attitudes to children in public spaces'. The 'hardening' of the school boundary in the 1990s also reflects the growing discourse around children and childhood. Indeed, for Rooney (2010: 349) the boundary not only materializes perceptions of children being 'at risk' from outsiders, but also a growing 'under-estimation' of their capacity to manage challenging situations.

2.29 Enter New-Labour and Buildings Schools for the Future (BSF): attempting to square the circle?

Prior to his election as prime minister in 1997, Labour leader Tony Blair famously declared that his party had three main priorities for government: 'Education, education, and education'. Upon taking office, New Labour increased education spending significantly. However, rather than defying the education narrative handed to them by the Conservatives, the policies introduced by Blair can be 'better represented as a further intensification' of neoliberal reforms (Gunter & Hall, 2016: 27). New Labour further reduced the declining influence of local authorities on 'maintained schools', expanded independent state schools ('non-maintained schools), and consolidated the indirect control of central government.

In the early 2000s, New Labour launched a national programme of educational infrastructure investment called 'Building Schools for the Future' (2004-2010). The flagship scheme was 'discursively invested with *transformative* promise' (Den Besten et al., 2011: 10) and seen as heralding a radical improvement in children's lives and social justice, the like of which had not seen since the 'Victorian era' (DfES, 2004: 2). The aim was that the new schools would be major catalysts for regeneration in their local areas. In official BSF documentation (PfS & 4ps, 2008), a number of 'learning environment' design principles are identified as essential to transforming education:

- Facilitate personalised learning;
- Imbue a sense of safety and security;
- Extend the traditional school day, offering extra-curricular learning and leisure opportunities (source: Thomson, 2016)

It is important to note that the boundary between the school and the local area is referenced as an important element in improving school performance. Through the re-design of schools, BSF hoped to innovate the 'way that schools work with the local community and local partners' and enable 'extended schools [that] will help meet the needs of pupils, their families and their wider community.' (DfES, 2004: 18). The desire to design learning environments that enable greater integration of the school and local residents was however framed by the demand for high levels of security: 'security and safety of the site and its users is paramount' (DfES, 2006: 53). Police forces provided guidelines to architects of new schools on the 'principles of designing-out crime' (ibid). Funding was only granted if their security arrangements followed these recommendations. Making schools both more open to the local community and more secure were identified in government documents as potentially conflicting goals. 'High unsympathetic galvanised fences across the face of the school' were seen as 'liable to create a negative attitude in all who enter' (DfES, 2006: 53). The advice explicitly emphasised that security features 'don't have to be 'prison-like'' (ibid) and could be 'welcoming', but the challenge of combining a community-facing school with the strictures of the Cullen Report was tantamount to attempting to square the circle.

The BSF programme was shut down by the Coalition government in 2010 as part of its austerity measures. The initiative was beset by delays and in the end only '584 schools were rebuilt or remodelled' (Thomson, 2016: 8). Whilst the initiative did not achieve the wholesale redevelopment of the entire school stock, it did represent the most significant government attempt to re-conceptualise the school boundary for the 21st century. In theory, new schools built today (2019) do not need to meet the requirements of 'Secure by Design'; indeed the Coalition government 'instigated a policy of removing regulations and standards' that were 'deemed to be overly specific' with little 'value for money evidence…and actual benefit to schools' (IEP2). However, the need for high security standards, especially those around fencing, was still emphasised in guidance and school inspection documents released in 2017-2019 (discussed in Section 4.31).

2.30 Creeping educational reform in Denmark: resistance and continuity

Whereas England's current education system bears little resemblance to its early-2000s form, let alone its mid-20th century structure, Denmark's remains true to the 'progressive' educational reforms enacted in the 1950s and 1960s (see above). Unlike England, Denmark upheld and strengthened 'child-centred education' (Winther-Jensen, 2015) throughout the 1970s. Education was considered 'an optimal investment in the future' and 'an important means by which to promote democracy' (ibid: 69). The 1973 Education Act enshrined the principles of democracy even further by 'emphasis[ing] as something new the cooperation between parents and teachers' (ibid: 72). The legislation wanted the ideals of 'intellectual freedom and democracy' to be reproduced in all aspects of the school's 'daily life' (Act on the Folkeskole, Article 1, 1973 in Winther-Jensen, 2015). Furthermore, the Act built on ideals of a 'good childhood' and subordinated 'the acquisition of knowledge to an all-round personal development of the child' (Winther-

Jensen, 2015: 72). This explicit child-centred approach permeated all aspects of the school: 'everyone involved in the educational process' was permitted 'to exert influence on the form and content of their own education' (Bjerg, 1992: 35). Choices about what and how to teach were negotiated between teachers, students and parents. With this approach came a 'freedom of method' for teachers which allowed them 'to adapt the content of the curriculum to a given group of students/pupils' (ibid: 37).

Reforms to the Danish system since the 1980s have somewhat challenged the equality-oriented approach that was entrenched in the mid-20th century. Winther-Jensen (2015: 73) argues that after 1975 'an ideology opposed…to state paternalism' and 'an emphasis on subject teaching rather than interdisciplinary activities' became increasingly influential in educational policy circles. Under the influence and 'soft pressure' of transnational organisations and the presence of a right-wing ruling party, the 'objective of schooling [was moved] away from education for everyone and participatory democracy and towards education for an excellent, talented workforce' (Rasmussen & Moos, 2014: 63). This resulted in a slow shift away from traditional welfare-state thinking towards increasingly 'neo-liberal [...] educational rhetoric […], the key words of which [were] "efficiency" and "quality"' (Bjerg, 1992: 34). This approach advocated greater autonomy for schools and an increase in parents' ability to make choices about their children's education. The outcome was the transfer of power and authority away from central state actors towards more local political actors, individual schools and parents. The role of central and municipal government was lessened in favour of the 'the individual school management' whose position was strengthened 'with regard to both budgeting and the formulation of the [school's] special 'profile'' (ibid: 74). This decentralisation process stimulated an increase in the number of students enrolled at private schools. However, the shift in the decision-making did not necessarily challenge the core humanist ideals which underpinned educational discourse in Denmark.

Despite indications that Denmark has 'moved away from [being a] traditional, Nordic welfare state toward a new, competitive, market-oriented state' (Moos, 2014: 440), its education system remains largely similar to its 20th century antecedent form. Volckmar and Wiborg (2014: 22) argue that, despite a restructuring of the economy according to neo-liberal thinking, 'market-led policies on education have been pursued only to a relatively small degree'. The reforms were unpopular in the eyes of Danish citizens who broadly support the welfare state 'since almost all…benefit as social welfare recipients' (ibid: 120). Tjeldvoll (1998 in Blossing et al., 2014) argued that the rationales and logics that underpinned neoliberal and individualist thinking were 'incompatible with the traditional social democratic egalitarianism of the Nordic countries' (Blossing et al., 2014: 6). In addition, it appears that the expansion of the 'indirect control' of the central State through the implementation of assessment and accountability technologies was seen as a threat to local democracy. Throughout the 20th century, the local control of schools was an important aspect of Danish identity and reflected 'deep traditions that are central to how Danes view themselves, their government, and indeed their schools' (Moos, 2014: 433).

3.0 Methodology

3.1 Investigating borders as an 'assemblage': Insights from ANT

> *'The point is not to reify or bring focus to 'things'. The point is in fact to contest the notion that things (including objects, texts, human bodies, intentions, concepts etc.) exist separately and prior to the lines of relations that must be constructed among them...'* (Fenwick, 2012: 111)

To account for the multiple ways children are 'enclosed' in schools and the complex socio-material assemblages that constitute school boundaries, a methodology based on Actor Network Theory was employed. A multifaceted and 'open' research method was needed to account for the sensitive and messy networks of humans, materials, spaces, and discourses that co-constructed and produced school boundaries. The aim was to become attuned to the multiple forces and elements which combine to separate, both materially and discursively, school children from the 'outside' world. The approach of Mulcahy et al. (2015) who employed an ANT-method to analyse the socio-material constitution of learning spaces was central in shaping this research method. Mulcahy et al. (2015) break down the socio-material assemblage of the classroom into three different categories:

1) 'Materialities' - the objects, materials and 'concrete physical practices' (ibid: 582) that inhabit or frame a space;

2) 'Socialities' – the 'social arrangements…interactions and processes' of a place. An interest in the rituals of a space and the experiences and attitudes of its users;

3) 'Textualities' – the discourses expressed through legislation, guidance, and culture that shape and determine spatial practices.

This research uses this structure to examine school boundary assemblage. Each 'category' (i.e. materiality, sociality and textuality) was investigated using a range of ethnographic and policy-analysis techniques.

3.2 Exploring 'materiality': photography and observation

Photography was used extensively during the field research. To establish some means of comparison and to address some issues of 'frame selectivity' (Hunt, 2014: 154), common features of a school's physical border were photographed. These included i) perimeter fencing and walls, ii) entrance doors and gates, iii) CCTV cameras, and iv) other boundary markers. Unfortunately, not all the schools in the UK granted permission to take photographs with multiple teachers citing issues of 'data and child protection' (ILE4) and 'security concerns' (IBE2). Practically, the camera 'assist[ed] with multitasking' and was a way to '[buy] time and space for reflection' (Wood et al, 2007: 880). This was especially useful given the sometimes frantic pace of school environments which sometimes made written field notes difficult. Additionally, the act of 'slowing-down' and using the camera 'help[ed] tune into the significance' of

'everyday textures and the matter of things' (Hunt, 2014: 159). By forcing the researcher to pay close attention to the 'micro-geographies' of the school boundary, 'to the objects and their component parts' (ibid), the camera lens elevated the status of objects and brought the objects critically 'into focus'.

3.3 Investigating 'border rituals', discourses, and adult understandings

The social practices that co-constrict the school boundary were recorded using 'live' field notes. Detailed ethnographic accounts of the interactions of teachers, students and visitors were recorded during break times and as students entered and exited the site. In these field notes I paid particular to the 'border rituals' which signified the school boundary: from the position of teachers on school gates and the conversations and language between teachers and students, to the incidences of strangers 'penetrating' the school grounds, and 'roll call' procedures. These accounts were then confirmed or questioned in the semi-structured interviews with teachers. In most of the schools visited in Denmark and all of them in England, I was accompanied by a member of the teaching staff at all times when observing the school site. The presence of a chaperone undoubtedly impacted the behaviour of the students and the 'pathway' around the school.

Interviews were used to gain a greater understanding of the views of adults regarding the school boundary. Despite a recent emphasis to include children's voices in educational research, students were not interviewed for this study as gaining parental consent was not feasible in either the UK or Denmark. As a result, all interviews were conducted with adults and in particular those who I or my gatekeepers identified as 'information rich' (Patton, 2002). All school-based interviews were organised by the gatekeepers following a discussion over email about the nature of the research. Given the busy and hectic timetables of teachers, interview subjects were not always identified until the morning of my arrival. This meant that I was unable to control the interview sample in any meaningful way. The hectic schedules also demanded flexibility in the timings of the interviews. Often this meant I was unable to inspect the site before an interview. Despite these planning issues, in all of the schools, at least one interview was conducted with the head teacher or one of their deputies. Interviews with policy-makers, civil servants and architects were conducted over the phone or in their offices. In both Denmark and England, a gatekeeper pointed me towards those they determined as the 'most relevant contact' in either the national or municipal education departments.

The interviews were semi-structured. Questions covering the main topics of study were determined before the interview and formulated as an interview guide (Kallio et al., 2016). The guide 'focused the structure of the discussion' (ibid: 2955) but was not followed too strictly. This flexibility enabled a 'reciprocity' between the interviewer and participant to be established. Without a strict adherence to the interview guide, I was able to 'improvise follow-up questions based on a participant's response' (ibid) and allow 'space for participant's individual verbal expressions' (ibid). In this way respondents were able to

influence the trajectory of the discussion and express their own accounts of complex and sometimes sensitive issues (Barribal and While, 1994). All the interviews were conducted in English and were taped using a voice recorder having ensured the consent of the participants. The interviews were then transcribed in full detail including all spoken utterances (Roulston, 2014). The grammar, sentence structure and vocabulary of the excerpts were edited for clarity, readability and continuity when deemed necessary. The transcriptions were then sent to respondents so they could edit any of the content. Subsequently, the data was systematically coded and then organised according to a number of themes (Schreier, 2014).

See **APPENDIX 1** for summary of the interviewees

3.4 Analysing policies

The aim of policy-analysis was to understand how legislation contributed to the socio-material 'bordering' of school children. Due to time and language constraints, it was not possible to examine all the 'layers' of legislation overlapping in school environments. From the content of lessons, to the food in the refectory, schools are intensely regulated environments. As a result, a detailed account of the impact of legislation on children's geographies in schools was considered too time-consuming. Therefore, the policy research was limited to two strategies. The first focus was on the national and municipal school-building guidelines. By 'sweeping' online data bases I created summaries of the advice regarding the physical/material boundaries of schools. This policy research was then supplemented with interviews with policy-makers and civil servants from municipal or national Education Departments. In these interviews, policy-makers were asked to outline the types of legislation or guidelines which determined the physical school boundary. Once this policy landscape had been established, the next step was to determine how these policies were actually interpreted and acted-upon by teachers in schools. The aim was to understand whether these policies influenced the socio-spatial practices 'bordering' students in schools by shaping the built environment and/or the behaviour and attitudes of teachers.

3.5 Choosing case studies: issues of sampling, access and reliability

See **APPENDIX 2** for summary of the school case studies

The decision to focus on Danish and English schools was mainly driven by issues of practicality and access. Given my own background as a secondary school geography teacher in England, I was afforded high levels of access to schools in London and Birmingham. Secondly, having lived in Denmark for a number of months, I was able to build a network of gatekeepers who were able to facilitate contacting *folkeskolen* in Aarhus and Copenhagen. This was especially important given the difficulty in accessing schools abroad without sufficient language skills. Additionally, upon investigating academic literature surrounding school architecture, the two countries were identified as 'atypical or extreme cases'

(Flyvbjerg, 2006: 230) of i) hyper- (England), and ii) low-securitisation (Denmark) (Wagner, 2006; Rooney, 2012). The aim was to juxtapose these case studies to highlight the trends and peculiarities of the school 'bordering practices' and the education systems more broadly.

Due to the difficulties in finding schools willing to engage in research, there was little in the way of a sample strategy. The case studies in England and Denmark were drawn from the two urban areas with the largest populations (London/Copenhagen; Birmingham/Aarhus). This was based on the rather crude assumption that the areas with the largest population would have the greatest number of schools, and therefore the chances of finding one willing to participate in my research would be higher. State-funded secondary schools and 'folkeskolen' were then emailed individually. Initially they were selected based on the number of pupils in the school (+700), the date of school construction, and their central urban location. However, following a low response rate in Denmark, this rudimentary sampling strategy had to be abandoned; despite having contacted over fifty schools by email and by phone, only four responded positively in advance. In the end, schools that were willing to participate in any of the cities were chosen regardless of their size, year of construction or location. This meant that there was a wide range in terms of the schools' socio-economic contexts and demographic composition. Undoubtedly these contexts make a difference to 'bordering practices'. However, the need to use a 'superficially 'similar'' (Braun et al., 2011: 587) schools was not seen as strictly necessary. According to Braun et al. (2011: 587) such rigid sampling strategies have become a flawed methodological imperative in educational research. The 'situated and material context' of schools, 'their specific professional resources and challenges, and their different external pressures and supports' (ibid: 595) in fact make them all unique anyway. As a result, to control one element of a sample of schools is thus to deny their intense complexity and difference.

In total, twelve schools were visited over a period of two months. The aim of this 'multiple-case study' (Yin, 2003) was to generate findings that could be used to analyse 'within each setting and across settings' (Baxter & Jack, 2008: 550). It must be noted however that this sample does not seek to be statistically representative or the results generalizable on any particular national or regional scale. Rather, the in-depth case studies provide insight into the complex ways children are bordered in English and Danish schools. It is hoped that the findings can be used to *refine* understandings of 'school boundaries', bordering practices and their relationship to ideas of 'childhood' and 'the urban'.

4.0 Analysis

4.1 Material bordering practices in English Schools

Arrangements of overlapping material structures, technologies, and symbols co-construct the physical school boundary in the English schools to produce highly securitised environments and a 'hard' boundary between the school and the surrounding area. Only a small number of materials were sampled for this

study (see Fig 3) and an even smaller number are discussed in this analysis. The list and discussion below are by no means an exhaustive list of the ways in which materials and technologies 'border' school children.

Material \ Schools	School 1BE	School 2BE	School 1LE	School 2LE	School 3LE	School 4LE	School 1AD	School 2AD	School 3AD	School 4AD	School 1CD	School 2CD
CCTV	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reception / entrance area	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✗
Anti-climb fencing	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
Gated perimeter	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
Electronic door control & locks	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✓
Guest identification / marker	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✗
Other	*Multiple 'layers' of school fencing *Intercom system & car barriers	*Windows facing the street were frosted *Padlocks & chains on outside gates	*Multiple 'layers' of school fencing *Highly supervised reception areas	*Direct sight line from reception to entrance gate *Multiple layers of electronically locked doors	*Authorised personnel and vehicles sign *Multiple layers of internal fencing - partitions within the site	*Air-lock reception *Multiple layers of internal fencing *Fencing partitions within the site		*Doors to the street kept open during the day *Very low fencing present				

Figure 3: Sampled security features in case study schools [England and Denmark]

4.11 Securing the perimeter: sealing kids 'in'

> *'There is an obsession with the space being secure and inaccessible; there's an obsession in terms of people getting in …'* (IBE1.2)

The English schools were entirely enclosed through a combination of fencing, 'building edges' (Fig 6) and gates. These perimeter fences encircled the buildings, playgrounds, and sports areas. The properties of these fences and gates differed in terms of their height (Fig 4), their 'anti-climb' features (Fig 5), and their strength. Any single school perimeter incorporated a multitude of physical barriers and deterrents. It was not uncommon to see spikes (Fig 12) or overhangs at the top of high fences or gates. CCTV, video intercoms, and key pads were common and used to monitor and secure any areas deemed vulnerable or penetrable. The overall effect of these different technologies and materials was a distinct impression of security. From both the interviews and the experience of being 'inside' the boundary, it was clear that the aim was to establish a strict control over the movement of students and visitors.

> *'Well it's the bottom line. It's to do with student well-being. [...] What it comes down to [is] their safety. Our primary goal is always to keep parents' sons and daughter safe and happy. Knowing who is on site is a fundamental health and safety precaution….'* (ILE1.1)

Fencing types in England: height, structure, and strength		
Fig 4: School 2BE	Fig 5: School 2LE	Fig 6: School 1LE

For teachers, sealing students 'in' and controlling their whereabouts was the school's most fundamental duty and act of care. Teachers hoped to mitigate any risks their students might otherwise encounter by encircling them with multiple physical and psychological barriers. This was seen as a necessity given the perception of the dangers facing young people in Britain's urban centres:

> *'This is Birmingham, not Denmark. Poverty is higher. The drug issue is massive. The knife crime issue is massive. We have got a protective factor, we have to because of where we are. We are in Birmingham and that is how it is.'* (IBE1.3)

The dangers confronting children were deemed to justify extensive security arrangements. This is what Jenks (2005: 88) has termed the 'process of insulation'. The need to shield students from the dangers of the urban was particularly explicit in one school in East London. Here, the head teacher wanted to create an environment entirely separated from her student's everyday lives:

> *'If I go through every single one of these pictures [of my pupils], I will stop at every other picture and tell you a story about the dysfunction in that young person's life, that's no exaggeration. And I am not talking about, you know, 'she bunked school once'; I'm talking about real hard things. You know: Dad being in prison; or them being sexually violated by somebody at home; or them being sexually exploited. [...] That's the noise that we want to block out. [So] that when [a pupil] come[s in] here, this is a different world, this is a different life.'* (ILE1.2)

The physical and symbolic separation of students from the city was, for this head teacher, an imperative. By securely sealing students behind a perimeter fence, the teacher was releasing them from the stresses, insecurities, and the 'noises' of their everyday lives. Removing the child from the city was thus an act of welfare. This perception of the street as an unsafe and morally deleterious environment echoes the sentiments of schoolmasters in the 19th and early 20th centuries.

4.12 Keeping strangers 'out': children at risk inside the school

To create 'insulated' environments, schools needed to be able to not just keep kids in but also threats out. 'Strangers' were positioned as a danger to the safety of staff, students, and school property. This 'stranger danger' gave the fence another target: outsiders. For many of the teachers the need to make the school impenetrable to would-be intruders was in fact a more important necessity than actually keeping students inside:

> *'The reason why those fences are there is to create an impression [amongst] the wider public that they are not allowed in there. Yes, to create a fortress so that kids can't easily leave; but it is keeping people out of the site which is key.'* (ILE2.2)

'Restricted access' notices	
Fig 7: 3BE	Fig 8: 1BE

The facilities manager of one school in Birmingham attributed the recent strengthening of their perimeter fencing to growing levels of perceived insecurity in the school area. Incidents of intrusion, burglary, and assault in *neighbouring* schools triggered a pre-emptive response:

> *'We've gone through transitions in terms of fencing and it has been driven by outside influences. Only last week there was a story of a man with mental health issues climbing into a school in Birmingham. They had to go into lock down. Stories like this drive the move to a stronger, harder, taller fence. …'* (IBE1.1)

In this case, the hard perimeter fence was both an implicit and explicit signifier that the 'outside' urban dweller was seen as an inherent and increasingly dangerous threat to school property and child welfare. This theme emerged repeatedly during the interviews. The interviewees, both in their role as teachers and also sometimes as parents, saw children as being 'at risk' even inside schools. Students were discursively positioned as vulnerable targets of malicious external strangers who were intent on harming them if given the chance. The 'hard' school boundary and security measures were thus reframed as an essential protective shield and the only thing stopping children from coming to harm:

'But they're our children, you know. There isn't any measure that [goes] too far, as far as I am concerned, with regards to keeping them safe. Whether that means keeping them in..., or keeping people out that want to cause any harm to anybody.' (IBE1.32)

'[Through these fences] we are communicating that 'these are our prized possessions', It's not open for everybody, [for]Tom, Dick and Harry to just walk in… It is not [...] your place. These are our children, we are protecting them...' (ILE1.2)

The school was thus reframed not as a 'safe haven' or 'separate safe island' (Burke & Grosvenor, 2008: 12) but as a space under threat. The tight site security and the strategies implemented to ensure children's safety **in** the grounds were seen as rational responses to the students' increasingly insecure lives and the growing incidence of youth violence and criminal activity:

'The culture of extreme violence, of knife crime, particularly amongst our young, [...] is a huge factor in the [need for school] security. We know that our kids are vulnerable to that... You hear of incidents. There was a local school recently that had a group of boys run into the school and commit a robbery and then leave again.' (ILE1.1)

'I think there is greater fear: fear in the adult population around the behaviours of some [yong people, around]the level of street crime, and violent street crime, that is going on. Parents feel safer knowing that the school is secure and that 'what is going on out there can't get in.' (ILE3)

The responses of the interviewees demonstrated that the schools were not symbolically or socially 'disconnected' from their local environments. In fact, the use of warning signs, 'hard fencing', and a range of protective monitoring practices, were all regarded as necessary and reflected a growing concern and unease regarding children's safety. Here, the fortification of schools and the shielding of students were driven by fear and perceptions of an urban environment replete with dangers.

4.2 Socio-material reinforcements: rituals and social practices

A number of socio-material rituals in English schools also reinforce the boundary. These practices, during which humans and materials interact and combine, create moments which emphasise the school's status as an exclusive and separated space. In each of the schools, particular entrance and exit routines were performed to reinforce the difference between 'inside' and 'outside'. Both 'insiders' and 'outsiders' were subject to these procedures.

Schools / Practices/Rituals	School 1BE	School 2BE	School 1LE	School 2LE	School 3LE	School 4LE	School 1AD	School 2AD	School 3AD	School 4AD	School 1CD	School 2CD
Welcome ritual - the reception	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✗
Challenge culture	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗
'Lanyards, visitor badgers & chaperoning'	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗
Boundary inspection	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
Student rituals - langauge and uniform	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
"Beating the bounds"	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓
"Group play"	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓
Observation & 'duties'	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
"Lock down" practice	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗

Figure 9: Boundary rituals and performances

4.21 Wearing the boundary: uniform

For students, crossing the school boundary is a matter of transformation that begins much before they actually pass through the perimeter fencing. In all of the schools, the children were expected to adhere to a strict uniform that included blazer, tie, and smart shoes. For one teacher, this act of getting dressed in the morning was an important symbol and part of the school performance:

> *'When you put that uniform on it should be one of the most powerful moments of your day… This is belonging; this is who I am; this is what I do when I am here. I don't do what I do on the weekend whilst I am at school.'* (ILE1.2)

The uniform signalled the beginning of the school day and the start of the transformation of 'child' to the 'pupil'. As the child navigates through the city from home to school, their status as 'student' is expressed through the uniform. The distinctive colours of the student blazers and the crests emblazoned on the front pocket distinguish the child as being from one particular school or another. The students thus carry a symbol of the school's temporal and spatial domination; they and members of the public know that when a child is wearing uniform they *should* be in school. The uniform begins the child's spatial and social transformation; the 'child', who inhabits the city on the weekend, becomes the uniformed pupil during the week. So powerful is the symbol of the school uniform, that even when students are not 'on site' they are still deemed as being subject to school rules and discipline:

> *'We have it at times where students turn round and say: 'You can't touch me sir, I am outside of school. What can you do? I am not inside the gates'. I say: 'Well actually I can [discipline you] because you are in school uniform and while you are still in school uniform you are deemed [to be] still part of us.'* (ILE3)

4.22 'Good morning Miss': welcome routines and 'shutting up shop'

The transition from 'child' to 'student' is reinforced upon arrival at the school gates. Pairs of teachers, standing at the school entrance, routinely disciplined students for not appropriately demonstrating their identity of 'school child'. By policing the uniform, language, and behaviour of students as they passed through the gate, staff reminded pupils of the exceptional status of the school environment:

> *'When they come through the gates, we want them to understand that there are really clear boundaries about what is expected of them… It starts with checking uniform on the door, on the gate, making sure that mobile phones are put away, making sure that if they have a piece of uniform on that they shouldn't have, questions are asked of them, because, 'this isn't the streets anymore'.* (ILE1.2)

> *'When they walk through those big, heavy gates, with a teacher saying 'good morning', they know they're in [...] school. It is official.'* (IBE1.1)

Teachers also employed a number of 'soft markers to indicate things are changing' (ILE1.1). These social interactions include eye contact, questioning, uniform check, and controlling of pace. At these gates, students were expected to respond to staff using the formal prefixes of 'Miss' or 'Sir'. These interactions had a deep symbolic meaning that signalled to students that they had entered a new discursive space in which they now assumed new identities and behaviours. By passing through the fence, the child became 'the student' and was expected to adhere to certain hierarchies and rules:

> *'When they come through those school gates, there is absolute certainty: that this is not the streets; this is not even their home; this is school.'* (ILE1.2)

> *'We clearly delineate between outside and in here… It is about separating the school as a distinctive space from the locale.'* (IBE1.2)

Teachers saw this interaction at the physical perimeter as a means of emphasising the school threshold which unambiguously communicated new expectations. These moments were an essential performance of the school boundary. The rituals reinforced the physical separation of students from the urban landscape by emphasising the school as an exceptional discursive space in the city. This message was emphasised further by the ceremony of 'closing the gates'. In all the schools, the school gates were only open for students for a limited period of the day. Often a bell or procession marked the 'sealing' of the gates:

'*At 08:30 we request that they go to something called 'lineup'. They stand in their separate year groups; they line up in form order, alphabetical order. Then we close the gates.*' (ILE3)

The bells and the 'roll call' spectacles constitute daily rituals that emphasise the spatial and temporal distinction of the school from the rest of the city. For the students, the city becomes both physically and socially out-of-bounds.

Reception and gating types in England: height, structure, and strength

Fig 10: School 1LE	Fig 11: School 2LE	Fig 12: School 1BE
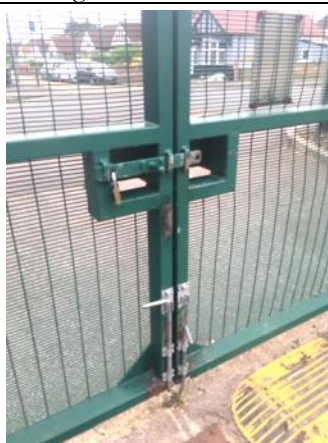
4.22 'Receiving visitors': identity markers and chaperoning

A major difference between English and Danish schools was the experience of gaining legitimate entry to the schools. In England, every school had a clearly defined and secure reception area. These were the only means of access for visitors to the site. They were staffed and in every case included some form of security barrier which blocked the 'holding zone' from the rest of the school. In one instance, a school also had a security guard who monitored the waiting area. Often even gaining access to the reception room, let alone the areas containing children, required passing through some form of security control. This usually came in the form of introducing yourself through a video intercom and stating you name and purpose:

'*[Visitors] have to press on the buzzer. [....] The receptionist would then activate some system which allowed her to speak remotely to the person outside of the gate. That person would then communicate their purpose…The receptionist would then remotely allow electronic access and the gate opens.*' (ILE2)

'*Then you would come to the front entrance, we've got an airlock You can speak through the intercom but I have one-way glass on there, so you can only see shadows from the outside but we've got a full vision of you from the inside.*' (IBE1.1)

Upon being granted access to the reception room, more security procedures took place. All visitors had to manually or electronically 'sign in'. Their personal details, the time at which they entered and exited the building, and their pathway around the school, all had to be detailed. Next, in every school bar one, a photograph was taken. This photo was then printed on to an ID card and attached to a lanyard (necklace) that was to be worn by the visitor at all times. In three of the six schools, the colour of the lanyard corresponded to the wearer's DBS[4] status:

> *'The black lanyard will say that you have a 'full disclosure DBS' certification and that then will allow you to come on to the school site. If however, you are a visitor, and you don't have a DBS [...] you will not be allowed in unless we see proof of identity. If you don't have a DBS, you wear a red lanyard.'* (ILE1.1)

Whether a visitor has a 'DBS check' determines their mobility and interactions on the school site. Without a DBS, a visitor had to be accompanied by a member of teaching staff at all times. This included even 'after hours' when students were no longer present in the school and even in one case when visitors went to the loo.

'Markers of diffence' in schools	
Fig 13: 4LE	Fig 14: 1BE

These coloured lanyards and ID badges constituted physical markers of difference and were symbols of 'otherness'. Their purpose was to signal to staff and students the presence of an 'outsider'. In one school, students were explicitly trained to monitor visitors and report any unaccompanied 'red lanyard holders':

> *'We train the kids in it: 'If you see anyone walking around the building on their own with a red lanyard, you have to challenge or tell another adult'... If a visitor hasn't got a lanyard on they will be intercepted and questioned.'* (IBE1.2)

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[4] A 'DBS check' is a criminal records vetting procedure provided by the UK government which assesses the suitability of an applicant for work involving children or vulnerable adults.

These 'reception routines' typified the cautious approach of schools to outsiders. The ID checks were seen as imperative to safeguard children and ensure that high levels of health and safety standards were maintained. They signalled to 'outsiders' that their presence in the school was only temporary and that they were being closely monitored. In addition, the lanyards and visitor badges were created explicitly to act as 'early warning signs' to inform students and teachers how to interact with 'strangers'. This reinforced a view of 'outsiders' as inherently suspicious.

4.3 Immaterial drivers: discourses, attitudes and policy

Materials, technologies, and rituals co-constructed English school boundaries to produce high-security environments characterised by a hard boundary between 'inside and out'. Whilst the schools shared many of the same security features and similar rituals, the arrangements of the elements were unique to each school and created a variety of security cultures and experiences. During the interviews with teachers and policy-makers it became clear that a number of overarching discourses, emanating from pieces of legislation and views about childhood and parenting, were essential drivers in creating the borders. These discourses informed the architectural designs of schools and drove the actions of teachers.

4.31 Policy and legislation: safeguarding students in schools

The legal duty of schools and teachers to ensure the safety and well-being of students was an essential driver in the development of high-security environments. Guidance and regulations regarding safeguarding, enshrined in statutory law, 'teaching standards', and school contracts were repeatedly identified as major determinants to teachers' attitudes and practices:

> '*We have a statutory duty to protect and look after our young people. Knowing who is on site is a massive part of that. It's just part of the health and safety guidance and culture that we have in this country.*' (ILE1.1)

The need to closely follow central government legislation regarding student well-being and safety was expressed by all teachers. This is hardly surprising given that in policy documents it is stipulated as mandatory that '**All** staff should be aware of systems within their school or college which support safeguarding' (DfE, 2018: 6 point 12) and that '**All** staff have a responsibility to ensure a safe environment in which children can learn' (5; point 7). This duty to safeguard children's wellbeing is also part of the teacher's code of conduct known as the 'Teaching Standards' (DfE, 2013). Any contravention of the Standards can lead to a disciplinary hearing and teachers being 'struck off'.

> '*You're always told this is what you have to do, and this is what you shouldn't do… You've always got something in the back of your mind thinking 'What if? What if I send him there [on his own] and he got run over? '… If*

something happens on the way, then of course, that's [my] career over basically, because I haven't guaranteed his safety…' (ILE1.1)

Individual teachers and the school more generally were fearful of falling foul of these rules and this fear was an important factor in the heightened sensibility towards student safety and school boundaries. In particular, teachers worried that any breach in security would trigger an OFSTED[5] inspection:

'Schools are so paranoid about being THAT school that allowed THAT paedophile to come in and molest someone's kid on their premises. That would automatically mean a failed OFSTED inspection, because safeguarding is the first thing they look at.' (ILE2.2)

'If we lessen our site security, OFSTED will come knocking real quick' (ILE1.2)

This anxiety reflects the importance that OFSTED places – or is thought to place – on the safety and security of pupils. OFSTED's (2019) official guidance on assessing safeguarding requires inspectors to evaluate whether schools have created a 'culture of vigilance' (pg 3; point 3) and environments in which 'children and learners are protected and feel safe' (pg 7; point 13). However, the inspectorate does not specify how to achieve this. Instead, schools are asked to 'assess the risks posed within their own context and take appropriate and proportionate steps to keep children safe' (OFSTED, 2018: 16). Indeed, inspectors are encouraged not to 'have a pre-determined view on the need for perimeter fences' (ibid).

OFSTED's ambiguous guidance on 'appropriate and proportionate' security arrangements poses a problem for schools. The easiest way to ensure they match the expectations of inspectors is to err on the side of caution and put in place extensive socio-material boundaries and physical protection measures. One teacher said such a 'belt and braces[6]' (ILE3) approach was adopted to ensure the school did not fall foul of OFSTED's powerful audit system. Schools have translated the legislative imperative and inspectorate framework into a socio-material environment which carefully and extensively manages risks and threat.

4.32 School construction guidelines

Confusingly, whilst OFSTED does not stipulate precisely what sort of security measures **must** be implemented, the building guidelines that stipulate the standards of school construction do. 'School specifications' provided by the DfE are very clear about the physical features of newly built or refurbished schools. A document called the 'Generic Design Brief' (DfE, 2019a) outlines the expectations

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[5] The Office for Standards in Education, Children's Services and Skills (OFSTED) is a department of the UK government (founded in 1992) that is responsible for inspecting and grading educational institutions. A 'failed' inspection results in a school being put in 'special measures' and significantly restructured

[6] 'Belt and braces' is a phrase in England which denotes 'using two means to achieve the same end'.

of government for any contractor designing or building a school. These technical requirements must be met by any company seeking any public-sector contract to work on schools. In this way, the documents pass from being 'guidelines' to a binding framework.

The Guidelines cover many of the material elements sampled for this research (see Table 2). It is interesting to note just how prescriptive they are, even stipulating micro-details of school fencing and the layout of reception areas, with minimal specific input from local teachers or other stakeholders. The specifications, which derive from the recommendations made in the Cullen Report (1996) and the DfEE's response (1996), can only be changed through extensive public consultation process.

Intriguingly, the Guidelines explicitly address the tension between school security, openness, and appearance: '*Whilst security of both buildings and occupants is clearly paramount… a 'fortress' appearance should be avoided.*' (DfE, 2019a: 2.14.1.2). By stating this, the DfE is acknowledging that the Guidelines have often been interpreted and implemented by contractors in ways that create unwelcoming and austere school environments. What is clear is that safety and security is an essential theme running through the design process. Staff, students, and school property are all portrayed as vulnerable to intruders or harm. This discursive framing of vulnerability drives the creation of hard boundaries and a securitised school architecture.

4.33 Parental expectations: 'in loco parentis' and the fear of litigation

Pressure on schools to deliver environments with the lowest possible levels of risk was not solely the result of state diktats. The expectations of parents were also important. As discussed in Section 4.1, a common theme in the interviews was that the lives of young people were increasingly threatened by violence, abuse, and harm. As a result, parents are themselves implementing more extensive security precautions to maintain a risk-free and safe childhood:

> '*I think there is greater fear – a fear in the adult population – around the behaviours of some young people. The level of street crime – violent street crime – is [...]out of control.*' (ILE3)

These fears are being translated into children's spaces and security landscapes. Parents expect schools to adopt a similarly protective approach to their child's physical and emotional wellbeing. This expectation is supported by the notion of teachers being 'in loco parentis' when students are at school. 'In loco parentis' frames the relationship between parents, staff, and students. The term which is commonly used in English schools, suggests that parents 'delegate' their authority and responsibility to a teacher during the school hours. In practice, this means that a 'teacher has a duty to take the same reasonable care of the pupil that a parent would take in those circumstances' (NUT, 2012: pg 3; point 3).

Document	Author	Paragraph	Feature	Description
Generic Design Brief (2019a)	DfE	2.2.2.1	School layout	a. Ensures the safety and security of pupils staff and visitors
				b. Provides clearly defined boundaries which discourage trespass and vandalism and, ensures good visibility to facilitate surveillance across the Site (within site constraints)
Generic Design Brief (2019a)	DfE	2.2.3.2	Site access	a. Ensure that there are no more than two easily controlled access points to each School Site...and allow clear visual supervision in order to the School to manage the movement of pupils and visitors onto and off the School Site.
Generic Design Brief (2019a)	DfE	2.3.22.2	Entrances & circulation	a. The main entrance is clearly defined, accessible, and secure
				c. Unauthorised access to the main School Buildings is not possible beyond the main entrance lobby, with visitors being subject to access control operated from the general office.
Generic Design Brief (2019a)	DfE	2.5.1.1	External fabric	a. Robust materials and finishes are used that are resilient and durable and provide protection against potential malicious or physical abuse
Generic Design Brief (2019a)	DfE	2.14.2.5	Security	a. Ensure that the School has clear and well-defined boundaries, fences and gates to help control who gains access to its Site and Buildings
Generic Design Brief (2019a)	DfE	2.14.1.2	Safety and Security	Whilst security of both buildings and occupants is clearly paramount it shall not be to the detriment of the overall appearanec of buildings; a 'fortress' appearance should be avoided. Schools need clear, well-defined and secure boundaries to help control access to their sites and buildings, and to ensure that vulnerable pupils do not wander off.
Technical Annex 2B: External Space and Grounds (2019b)	DfE	8.1.1.1	Boundary fencing	a. Be a minimum of 2.4m in height
				b. Be constructed of appropriately spaced posts and panels of anti-climb weldmesh with no horizontal footholds
				d. have gates at agreed locations; the design, height and construction of which match the corresponding fencing system and maintain the same level of security
Technical Annex 2G: Electrical Services, Communications, Fire and Security Systems (2019c)	DfE	5.2.1.1	Access control	Door entry systems operated by the staff shall be provided at the main entrance and as required for out of hours use.
Technical Annex 2G: Electrical Services, Communications, Fire and Security Systems (2019c)	DfE	5.4.1.1	Closed Circuit Television (CCTV) Systems	Intercom systems with integral CCTV cameras shall be provided at the main entrance to the School and at the secure line

Table 2: Table showing some of the construction guidelines for schools in England

'As staff, we all have that duty of care, [...which] really is to ensure that we are acting 'in loco parentis' and as a parent...' (IBE1.1)

'…You hear parents say that 'You know I drop my son at your gates, I handed him over to you, 'in loco parentis', at your school gates. Therefore, he's now your responsibility.' (ILE1.1)

Schools' practices therefore reflect parental views on child-rearing and development. As a result, parents select schools for their children that best match their expectations of a secure and safe environment:

'Parents send children to school and expect them to be safe, don't they. It is a massive determining factor for them; and so it should be.' (ILE1.1)

Whilst no one questions the need to keep students safe in schools, some teachers were sceptical that the expectations of some parents of a risk-free environment could ever be met. The level of insulation and protection demanded by parents was already limiting what teachers felt they could do and the activities they could expose children to:

'There was a student who took part in a football lesson. The lesson was safe; all the boxes had been ticked. The student slipped, broke his leg, and four years down the line we are still in a battle with the parent, a legal battle, as to whether we should take responsibility.' (ILE1.1)

'Suppose a member of staff was there and a kid was climbing a tree, and that she said: 'Yes, that's fine'. If the kid fell [and] broke a leg, it could potentially end her career'. (ILE1.1)

Teachers, wanting to avoid parental complaints or any litigation process, adopted a risk-averse approach to lesson planning and school security. The types of places that the students were allowed to inhabit and the activities they could partake in were shaped by staff worries about the threat of legal proceedings. This, combined with teacher's perceptions of parental expectations, shaped the school spaces and contributed to the 'bordering' of 'vulnerable' students in 'safe' and 'risk-free' schools.

4.34 Breaking out: children as 'deviant'

Given the fears of both teachers and parents regarding student well-being and safety, it is unsurprising that instances of pupils leaving the school site without permission are taken very seriously. Teachers explained that they had to be vigilant at all times to the repeated attempts of students to bypass security measures. In response, schools sought to reinforce and strengthen the barriers surrounding them. The

'boundary' was hardened through a combination of physical measures such as raising the fencing and by increasing levels of staff observation of vulnerable areas of the school perimeter during break times:

> *'We have had to review our fencing because some of the kids are climbing over fences or under gates at times and we've had some truancy.'* (ILE3) [See Fig 15 & 16]

> *'We are playing a game of cat and mouse. We've fixed it one day – it would be patched up nice and neat, strong – [and]they'd go and climb it or cut it the next day.'* (IBE1.1) [Fig 17]

Student 'escape routes': enclosure 'push back'		
Fig 15: 1LE3	Fig 16: 2BE	Fig 17: 1BE

These security measures were seen as essential to ensuring students stayed in their 'correct place'. Teachers thus saw themselves in a constant struggle to contain the errant and wandering child. Without a strong school border, transgressions were seen as inevitable:

> *'We know that there are students who, if given the opportunity, and if there weren't procedures in place, would manage to leave school, and then we couldn't guarantee [their] safety to the parents.'* (ILE1.1)

> *'Children, being children, if they can get through a hole in the fence, if they can climb over the gate to get the ball, they'll do it…'* (IBE1.1)

It was clear that teachers characterised their students as being naturally curious, deviant and keen to transgress the adult expectations/boundaries dictating where they should be and when. The parental and legal pressure to ensure students were safely protected within the confines of the school, combined with the fear of them 'breaking out', meant that a hard socio-material boundary was a necessity.

5.0 'Open' Schools in Denmark

In Denmark, the practices of containment and exclusion were markedly different. The functional boundary between the school and the surrounding area appeared much weaker than in England. As a result the schools were more spatially and temporally 'unbounded'. Whereas in Birmingham and London there had been an emphasis on containing students within the nurturing and protective confines of the school, students of similar ages in Aarhus and Copenhagen were given more freedom to roam the surrounding area:

> *'The older kids can go down to the shop and buy a little sandwich or something for a snack. We like this and they go down together.'* (IAD1.1)

> *'From the 7th until the 9th [grade (i.e. ages 13 – 16)], they are allowed to do whatever they want. If they want to go home, they can go home. They go to shop for something and so on.'* (ICD1.2)

In addition, the 'outsider' – who in England was perceived as posing such a threat to student well-being – was treated with less suspicion. Informal and formal networks of parents, local stakeholders, and neighbours were actively encouraged to view the school as their 'second home' (IAD1.2). Schools, in their site layout and their approach, actually welcomed non-school community members and 'outsiders':

> *'It is the same with the basketball areas on the roof. Anybody can come up; they can use it, even if it is during the school day. If we don't need it, it is okay, it is not a problem. Why should it be a problem? Nobody is there.'* (IAD2)

> *'We see the school as a very important part of every pupil, parent, and local inhabitant who lives around here. This is a natural part of them; it is an important part of them. We are their community and they are our community.'* (IAD1.1)

In fact, all the schools under investigation were, as one interviewee put it, 'open to the public 24/7' (IAD1.2). Indeed, in each of the cases, the school playground was never locked or even encircled by security fencing. This meant that the public were able to inhabit the spaces after school hours without the need for staff supervision or permission:

> *'People are allowed to come to the school if they want to sit in the school yard in the evening. They are allowed to do it. We've had some problems with it a couple of times, but overall it is not a problem. That's the open door again…'* (ICD1.2)

In addition to these informal uses of the school facilities, there were many formal activities taking place after the end of the school day, independently of teaching staff. Local residents and voluntary organisations regularly used the facilities to provide a wide range of services for different age groups. One school playground even had a skate park that was open for the public after school hours (see Fig 19).

After-school activities in Aarhus: Skateboarding in the school playground	
Fig 18: 3AD	Fig 19: 3AD

5.1 Material bordering practices in Danish Schools

The anecdotes and figures above offer a glimpse of the material and social bordering practices in Danish schools and their inclusion within their urban landscapes (see Fig 3 (p.30)). Schools were spatially and temporally more open and 'border crossings' were regular. It was entirely acceptable for adults to enter the school site without needing to 'sign-in' or announce their arrival. Only in one school was there a formal, staffed reception area. Even in this school however, as in the others, all the building's entrance doors were unlocked and unsupervised during school hours. Indeed, the absence of teacher uniform or ID markers made it difficult to distinguish between staff members and visitors. For Danish teachers, this openness did not compromise the welfare of students but was in fact an important element of their education. Children are only loosely constrained and access to/from the surrounding city is high:

> '*I like the fact that the people from the area can see that kids in the school are not behind closed doors and windows. Actually we have our café here, along the street, and the kids eat out there – on the street* [See fig 24]... *I think it is important that we open up, [that]people can look into what is going on in the school, and the kids can look out and get inspiration, or be in a kind of context, so it is not a closed world... We think this blended reality is a good thing...*' (IAD2)

> '*All schools in Denmark have like a hundred doors all around them, and you can walk in all over... and that's because we think that everyone who comes here will help with the learning and the children...*' (IDAP1)

However, this approach to the 'open school' did not mean that there were no material bordering practices.

5.11 Border markers

In Denmark, materials were also active in signalling and constructing the boundaries of schools. Whereas in England, guidelines stipulated 'clear, well-defined and secure boundaries to help control access' (DfE, 2019a: 2.14.1.2), the architecture and materiality of Danish folkeskolen did not seek to achieve the same effect.

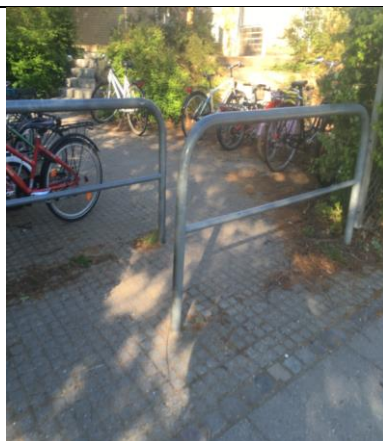| The materialities of Danish schools: entrance and exit routes in Denmark		
Fig 20: 1AD	Fig 21:1CD	Fig 22: 4AD

The school borders were not secured and fortified by perimeter fencing but rather signalled by a number of symbolic thresholds. These were not designed to prevent access or physically enclose the students. Instead, they marked the territorial extent of schools. Low walls, bollards, landscaping, signs, and contrasting pavement materials indicated to visitors or passers-by that they were entering a symbolic and discursive space that was different to other forms of public space.

These symbols/markers were not physically capable of containing 'insiders' or excluding 'outsiders'. The result was that schools were integrated into their surrounding areas. Indeed it was not uncommon to see students and adults sharing the public spaces during the school day. In one school, a public footpath ran through the middle of the playground and anyone was entitled to pass through, under the proviso that they respected the presence of children and the authority of teachers:

> *'People are allowed to walk through our outdoor areas... There is actually a path through our site that was there before the school was built...'* (IAD2)

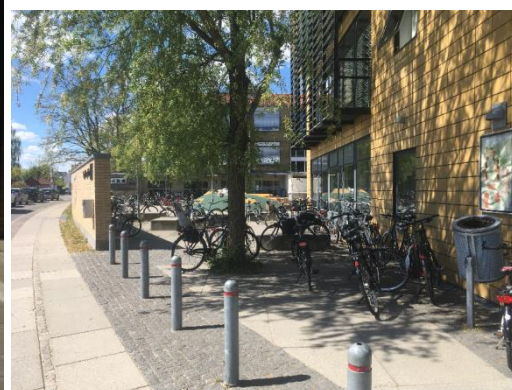| Boundary markers: signalling school territory		
Fig 23: 2CD	Fig 24:2AD	Fig 25: 1CD

5.12 CCTV

The only ubiquitous physical feature of Danish schools was the presence of CCTV (see Fig 3 (p.30). All the schools had installed cameras as part of their security arrangements to monitor the perimeter of the school buildings. The CCTV was strategically trained on areas that were perceived as vulnerable to forced entry such as doors and windows.

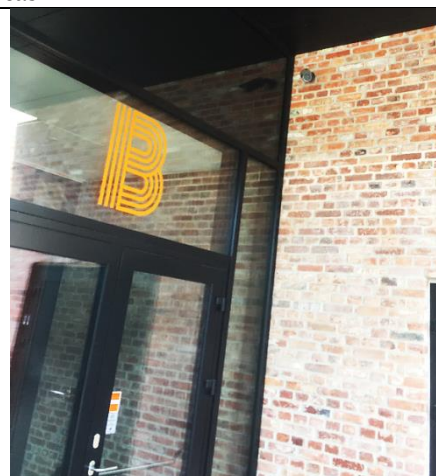| CCTV in Denmark: Signs and example of protecting 'vulnerable areas'		
Fig 26: School 1CD	Fig 27: School 1AD	Fig 28: School 2AD

Unfortunately, CCTV was only discussed in one recorded interview. According to the head teacher of a newly constructed school in the centre of Aarhus, security cameras were not initially installed. However, following a number of burglaries, the buildings had been equipped with the recording devices:

> *'We have CCTV for prevention. So we don't have any problems. The first days we were here, we had some people who smashed a window, walked in, and took computers. [...] We want to prevent [this, and] to catch people who think it is fun to smash something. We want to be proactive. So then we added cameras...Our neighbours told us*

the cameras worked because, before we had even turned them on, the people 'checking out' the school had gone.' [IAD2]

In this case, property rather than pupils were found to be at risk. It is perhaps unsurprising that this particular school was targeted by thieves given that it was newly built and was renowned for its impressive facilities. For someone from the UK, it was startling to hear that the head teacher had not envisaged employing CCTV prior to these incidents. It is important to note that the aim of the cameras was not to deter people from entering the school playgrounds but rather to protect the 'vulnerable' entrance points into the school building. The 'secure line of defence' in this school was not located at the site's perimeter but rather round the school building.

There were, however, clear differences in the way CCTV was used in the two countries. In England, where every school had installed CCTV, teachers certainly saw the technology as an essential deterrent against would-be intruders and thieves, particularly after hours. As in Denmark, cameras were used to monitor vulnerable entry points to the school buildings, but they also helped the staff identify potential 'troublemakers', such as aggressive parents or disgruntled former pupils:

'We do have a CCTV camera that is trained on the door so, although it doesn't prevent anything, it does record any incidents that could be used, you know, to bar somebody from coming to the school in future.' (IBE1.1)

In London and Birmingham the schools also used cameras to monitor 'inside spaces' and not just those at the perimeter. Thieves or intruders were not the only targets of recording. 'Insiders' were under surveillance too:

'We have CCTV cameras mounted throughout the buildings, for safety and security purposes. If incidents do happen, that are out of sight, because anybody can make themselves invisible, then we have something that is unquestionable.' (IBE1.1)

In this particular school in Birmingham, the cameras formed part of the safeguarding strategy. They were seen to protect students and staff from harm whilst also providing legal evidence of any crime/incident committed or alleged. The 'targets' of the camera were different in the two schools. In Aarhus, it was specifically school property that was seen to be 'at risk' and therefore the target of the cameras was 'outside' thief. In Birmingham however, the risk to school property from the 'outside' was equally matched by the risk of 'outsiders' harming students or teachers on the 'inside'. The different CCTV orientations point towards a dissimilar calculation and understanding of the nature and cause of threats faced in schools.

5.2 Social practices and bordering rituals

During the course of the research it became clear that the physical and material bordering of students in Denmark was much weaker than in England. However, following prolonged observation and in-depth interviews with teachers in the three main case studies (IAD1, IAD2, and ICD1), a number of social practices and rituals were revealed as being essential in constructing a number of 'invisible boundaries' (IAD1.2) that surrounded or indeed split the school sites (see Fig 9 (p.34)).

5.21 Teaching boundaries and the boundary as a learning tool

Given the weak physical constraints in Danish schools, teachers worked hard to ensure students were aware of any areas that were 'out of bounds'. This was especially clear in those schools surrounded by busy, trafficked roads or densely wooded areas.. The younger children were 'inducted' into the rules of the invisible boundary upon arrival to the school in each case study:

> *'The kids in the class, the teachers and the 'pedagogue' teach the new ones where they are allowed to go. They know they can go so far and then stop. It is the same with all the boundaries here because they're not physical, they are not visible. The students have to learn about the 'red line' that they can't see, but they know is there.'* (IAD2)

> *'We say to them; 'You see the big old oak and that tree there? You are not allowed to go beyond these.''* (IAD1.2)

At the beginning of each school year, these 'boundary expectations' were clearly communicated to new students. The rules were reinforced by adults observing and correcting 'wandering' students during break times. More teachers were placed 'on duty' in the playground to support students generally but also to police adherence to the socially constructed boundaries. Surveillance reduced once the teachers felt the students could be trusted to abide by the agreed boundaries:

> *'From August to October all the teachers are outside, taking care of the children running around. After that period, there are only one or two outside and the rest can take a break.'* (IAD1.1)

Interestingly, these 'invisible boundaries' varied according to the children's age and behaviour. There were a number of 'border layers' and, as students matured and progressed through the school, the territory they could inhabit expanded. The youngest children were commonly kept 'closer' to the building. In Aarhus (AD1), the youngest students (5-10) were not supposed to leave the four open play areas directly adjoining the school buildings. Similarly in Copenhagen:

'We also divide the areas outside... The small kids stay very close to the building. Most of the time they are together with adults, so they are a little bit closer in every way.' (IAD2)

Keeping the younger students 'closer' was driven by both issues of practicality and symbolism. The youngest students were seen as prone to 'getting confused' and 'running away' (IAD2) either as an act of distress or because they could not 'read' the symbols or rules correctly. Instances of children transgressing their invisible boundaries were not punished as acts of resistance or defiance, but rather taken as opportunities to reinforce social norms and to address issues of well-being:

'Sometimes we have a kid who is very 'out of himself' and when something goes wrong, he just gets up and runs away... These children go and hide somewhere, but they want to be found. So, the other children go out and find them and then we can all have a talk about things...' (IAD1.1)

'There is a fence but it is just a metre high, and they can easily climb over it. They don't do it because they have been trained, and what they're taught is not 'you are here because the fence keeps you here, but you are here because this is where you are supposed to be.' (IAD1.2)

In Denmark, students younger than those in English secondary schools are afforded more agency and trust by their teachers. They are not physically confined but expected to respect the invisible boundaries that were socially constructed upon entry into the school community. As they grow older, these boundaries are regularly renegotiated and re-established. The eldest students (14-16) were trusted to leave the school site during lunch or break times and expected to return on time. This freedom was however restricted if students could not behave property of if they did not have parental permission to leave during the day (no head teacher could recollect this ever being refused):

'We trust the oldest children and we expect them to come back... When they are in 6th grade, they look forward to moving into 7th grade because: 'Now we are allowed to leave the school'. But if they go to the shops and steal, and the shop manager calls me, we talk with them and say 'You can't do that, you are breaking the rules and now you have to be nearer us and stay inside our areas.' (ICD1.1)

'The older kids can go around there... Because [the older students] are not getting confused or running away, the world is a little bigger.' (IAD2)

'Teaching' the boundary and trusting students to adhere to it constitutes a different form of bordering practice from those in the UK. The boundaries in Denmark 'keeping kids in' were socially constructed and agreed by both teachers and students. These 'weaker' forms of physical enclosure suggest a range of different priorities and attitudes discussed in greater detail in Section 5.3.

5.22 'Looking out for each other': the 'buddy system' and adult supervision

The notion of 'community' was an essential organising principle in the structure and everyday practices of the Danish schools:

> *'Feeling part of a community is so important in Danish culture. Being a collective; being together. In this school everything is a community, the class is a community, the grade is a community, the adults are all a community. This is an extremely important thing.'* (IAD1.1)
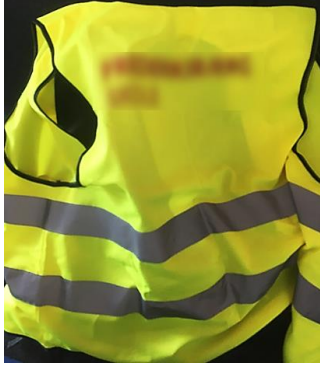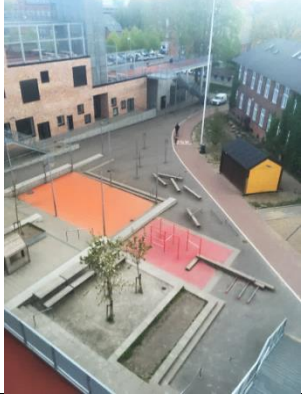
> *'We also like that people think the school is open, that it is not a secret... We can all interact, the whole society is connected to our school and they can help.'* (IAD2)

In AD1, the idea of students 'being together' underpinned their entire approach to site security and student well-being. During break and lunch times, periods of the day when students were 'furthest away' from the 'safety' of the building or adult supervision, students were instructed to always play with a 'buddy'. This 'buddy system' was reinforced by teachers who would, upon seeing a student playing alone, enquire: 'Is your buddy nearby?' and reprimand them if they were not. This system was considered necessary in this particular school given its extensive grounds and its proximity to several main roads.

> *'You can see, the children are never alone. They are always together. They always take care of each other so the risk of something bad happening is small.'* (IAD1.1)

> *'The 6th grade, every year, provide the 'play patrol'. We take one class and they play with the younger kids... [The 6th grade] look out for the students in the whole area and teach the younger ones how to play safely.'* (IAD1.1)

Behind this buddy system was the idea that students acting together would be able to effectively determine and manage risks. This was reinforced by the 'play patrol', who were tasked with ensuring that groups of 'buddies' or individual pairs played safely and respectfully with each other. This was a system of mutual observation; students looked out for the welfare of other students. This student community was the primary method of keeping children safe in the playground, especially in those areas that were far away or hidden from adult supervision. Cohesive groups of 'buddies' replaced the physical enclosure practices in England that were also designed to manage and control risk. Students were not 'bordered' by walls or gates, but rather safeguarded by their presence in a group which collectively is expected to be able to judge and control risk appropriately.

A group of 'buddies' playing independently from adult supervision	High visibility jacket worn by teachers	Playground with red public footpath running through it
Fig 29: AD1	Fig 30: CD1	Fig 31: AD2

Whilst there was a real emphasis on allowing students to play freely, teachers were still tasked with supervising the children and observing their interactions with members of the public. As in England, teachers were strategically placed around the school grounds and buildings to monitor students and visitors:

'All teachers and pedagogues at the school have supervision times and they have to be outside or in the building at break times...We have to spread the teachers everywhere because the kids are allowed to go everywhere...Our aim is to make it safe for everybody, so they feel comfortable and free...' (IAD2)

'We stand out there to help the pupils... and to notice someone who should not be there if they come into the area.' (ICD1.2)

In two of the three schools[7] teachers wore high visibility jackets (see Fig 30) when 'on duty' to emphasise their presence in the playground. This marker of distinction had two purposes. Firstly, it was to ensure that students could quickly identify the position of a teacher if they needed additional support. Secondly, the jacket was a marker of authority and the teachers' status as 'insiders'. The jacket ensured that any visitors or passers-by were not only aware of extensive adult supervision, but were also made conscious of the space's function and social hierarchy. Given the high levels of connectivity between 'school space' and 'public space', it was important to signal the authority of teachers in the blurred discursive realm:

'People can walk through all day and if the supervisors see something troubling - it could be an angry man on a bicycle getting irritated that kids are running across (the path) - they will go and say: 'Hello, this is a school, you are allowed to come through, but the kids have priority here...' (IAD2)

[7] Teachers in AD1 did not wear these jackets.

'I had an incident about two years ago. A man took something out of a car and went into the playground. I thought it could have been a gun or something. So I walked up to him, asked him what he was doing here, and then he told me he was a decorator... [laughter]' (ICD1.2)

Clearly, communicating teachers' legitimacy and authority in these quasi-public spaces was necessary to be able to manage and disperse tension. These examples demonstrated that whilst the material boundaries may not have been as visible as in England, the institutions were still able to create spaces of 'exception' in which an outsider's entry could be accepted or challenged. The incidents demonstrated that these Danish teachers did consider 'strangers' as posing some risk or threat for children and needed to impose some form of social boundary.

These practices of 'group play' and 'supervision' indicated, however, that, in the absence of a 'hard perimeter ', it fell to teachers to enforce a number of 'social boundaries' that applied both to visitors and to children.

5.3 Immaterial drivers: discourses and attitudes

Transcript analysis revealed that a number of discourses and normatives underpinned the Danish approach to school boundaries. It became clear that 'open' schools were seen as an essential element to a child's education and an important means of reproducing Danish society/culture more generally. In older schools, the weak material bordering of students was not just the product of 20th century architectural and pedagogical approaches to 'progressive education'. In fact, the 'boundaries' in all the case studies remained a topic of ongoing negotiation and change. It was clear that the material, social and textual bordering practices remained a matter of public debate. This research suggests that there are a number of important normatives that support the continued 'interconnectivity' of schools and their urban context.

5.31 The 'good childhood': trust and vulnerability

The Danish concept of the 'good childhood' (see Section 2.26) has clearly shaped teachers' and policy-makers' attitudes towards school enclosure practices and their relatively relaxed approach to 'keeping students 'in''. The notion that children should inhabit spaces 'free from excessive adult control, over-supervision, and interference' (Wagner, 2006: 293) and enjoy 'free play', was reflected in the relative independence that students enjoyed during break and lunch times. Older students were allowed to roam the entire school grounds and play in spaces 'far away' from teachers as long as the abided by the boundaries agreed with their teachers. These included spaces that were hidden, 'wild', or near/in the public realm. Younger pupils were slightly more 'enclosed' but were still afforded the freedom to roam indoor spaces independently and the playground with the presence of an adult. 'Invisible boundaries' did curtail the spaces that children could go. However, these boundaries were the product of negotiation and

teaching. The 'place' of students was not rigidly marked out using fences or walls. Instead, students were trusted to be able to manage risk appropriate and demonstrate competence. In England, the child was positioned as inherently 'deviant', always looking to escape the confines of the school. In Denmark however, students were generally trusted to adhere to the agreed boundaries and return to the classroom at the end of play time.

The act of establishing the boundary through cooperation, social interaction, and trust was a reflection of the ways teachers conceptualised the child as competent, independent, and an equal. Simply put, a 'hard boundary' was not needed to 'keep students in' as the Danish teachers and policy-makers trusted the children:

> *'If you make the pupils feel that this is their school, if they feel they can influence things, that you trust them, and that they can take responsibility, then you are in a good school. Do things **with** them, not **to** them.' (IAD1.1)*

Importantly the unrestrained child was not seen as in 'danger' or threatened. The fear of 'the outsider' and 'stranger danger' which had driven many of the practices in England was weak in Denmark:

> *'We trust the society. We trust that we can have a school here and people won't come here and hurt our kids... So when some of the kids are running around, I am not scared that somebody will come and hurt them. There is trust and this is a basic thing in our community and in our country.' (IAD2)*

> *'We do not expect when we send out children to school that they will get kidnapped, that they will be met by paedophiles. e We don't plan for that. Of course it happens, but not often, but we do not want to live our lives in fear.' (IDAP2)*

Just as the 'protectionist view' (Wagner, 2006) adopted in England was perceived as a rational response to the dangers posed by the urban environment for children, the relaxed school security measures in Denmark were a reflection of wider feelings of safety and security. Adults displayed greater levels of trust; they trusted students to act responsibly and they trusted strangers to act appropriately around children. As a result, the need to 'keep people out' was not as pressing. This created school environments that were more functionally 'connected' with their surrounding area.

5.32 Parental expectations and freedom from the fear of litigation

According to the interviewees, Danish parents expected schools to be 'open' in the way they were designed and in their daily practices. One head teacher worried that any heightened security or safety measures that 'erected walls' would generate considerable parental discontent:

> *'A lot of parents would take their kids out of the school immediately because they would hate to bring them inside a fence every day... They would think it was very bad for them , and the kids would feel like they were being put in prison.' (IAD2)*

The negative reaction of parents to school fencing was also echoed by a municipal policy-maker in Aarhus:

> *'I think it is important that schools are open and not closed-off... I think parents would be worried about the type of message it sent out to kids; that they needed to be scared of adults and society.'* (IDAP2)

Both interviewees characterised parents as sceptical of school securitisation. An 'open school' was not perceived as somewhere vulnerable or risky, but rather as the perfect pedagogical environment in which to educate children and a place that enabled a Nordic understanding of 'childhood'. Both teachers and policy-makers portrayed parents not as concerned about the interconnectivity of schools to their surrounding area, but active supporters of it. One teacher, who had two children in another local folkeskole, discussed in detail why parents and teachers placed such great value on openness:

> *'I thought about the reasons why we are open and I think you have to look at the folkeskole constitution... One of the first three rules mentions that a school's job is to provide an education for children* **with the help of the parents.** *So the whole approach to educating the children in Danish schools is that we are doing this together with the parents. So the parents come in and out of the school, without thinking about there being a threshold. It's just like a second home to them in some ways... We don't really have the idea that 'school is school', and 'family is family'. It is more intertwined here.'*

The weak physical school boundaries were an expression of the importance of transparency and cooperation. An open and inviting school environment, facilitating parents 'popping in', was a symbol of the folkeskole's responsibility to engage and interact with them.

In addition, the conceptualisation of Danish schoolchildren as 'competent' and 'secure in themselves', and the high levels of trust that parents had in teachers, meant that staff took a more relaxed approach to risk and legal responsibility. In England, there was a real emphasis on creating low-risk environments for students. One of the drivers behind such risk-aversion was the teachers' fears of being held legally responsible for a child's injury. A similar fear was not evident in Denmark:

> *'Of course there are responsible professional people around the children but it's not like they get sued if someone has a scratch.'* (IDAP1)

'What doesn't kill you, makes you stronger'. Some boys or girls, not very often, do something like break their leg. ...When the parents come to collect them they think, 'well the headmaster is a reasonable guy, a sensible guy with good rules, shit happens.' (IDA1.1)

Schools were not seen as places where children had to be entirely sheltered from risk. The notion of 'free play' which encouraged children to be independent, inquisitive, and active, meant that teachers were somewhat absolved of the responsibility of ensuring that pupils came to no harm. Without this fear, teachers were happy to enforce adult authority and strict boundaries only when absolutely necessary. As a result, the material and social bordering practices that were seen as 'protective' in England, were less apparent in Danish schools.

5.33 Pedagogy and citizenship

The physical, functional and symbolic 'openness' of the folkeskolen was seen to support a number of important teaching and learning practices. For the interviewees, the weakly-bordered school formed an important part of a 'progressive' educational strategy designed to support the holistic development of children.

The 'open school' was seen as the ideal environment to support forms of active, situated, and experiential learning that were identified by teachers as important pedagogical approaches. In Denmark, the best learning episodes were considered those during which students engaged with, or in, the very things they were learning about:

'I think that the times you learn the most are when you are in real society; seeing things, making connections. When you are outside, you learn more than you do inside. So we bring outside into the school and the children out of the school' (IDA1.1)

'We realise that the classroom is limited, it is just four walls. Rather than always looking at the same four walls, why not open up the mind for the children when they come out and see something else?' (IDP3)

Here, 'bounded' schools were considered dull and unsatisfactory in promoting student motivation and progress. Indeed, the restrictions that 'bounded' children and teachers in England were considered problematic. The strong distinction between 'inside' and 'outside' was seen to limit the ability of teachers to create engaging and informative lessons. The weak material, symbolic and legal boundaries in Denmark, by contrast, meant that teachers were encouraged to leave the school confines:

'If we have a German lesson and we are learning about nature, I just take them out to the forest or down to the lake and we look at the plants and we translate the words. They love it.' (ICD1.2)

In addition, by embedding the folkeskolen in their urban environments, students learned important notions of 'community' and 'citizenship'. The schools, deeply connected to their local contexts both in terms of design and practice, permitted students to navigate their urban landscapes and experience new encounters. This approach exposed young people to range of people, organizations and places. In so doing, students were able to practice skills and behaviours that were more difficult to replicate in the classroom:

> *'It is important to be part of the city. It is about becoming a human being, about learning how to engage in its social environments, learning about culture and 'community', learning about democracy, not just maths, equations... It is about creating rounded individuals, not just academics.'* (IDAP2)

Here, the 'community' was not treated with suspicion or considered a threat. Instead, it was an important teaching tool that supported students' holistic development and inculcated them into the ways of Danish society:

> *'If the community is on the other side of the wall or the fence, how can they learn about it? They will just see it [through the fence]and **we** would tell them how the world functions. **They** have to be a part of it, feeling it, smelling it...'* (IDC1.1)

> *'Putting a fence between the kids and the real world is like creating a fake world. A world that **we** build that is not the real world. I think they are better prepared for the world, the adult world, if they have tried it in small bits.'* (ICD1.2)

The ideal school was pointedly not 'a closed world, an island in the middle of a big ocean' (IDA2), but rather an important hub of the local community where diverse groups or organizations and people mixed and interacted. Great value was placed on students 'really being there' and gaining first-hand experience of the ways citizenship, responsibility, and trust were practised in Denmark. Physically and symbolically 'closing students off', by surrounding them within fences and excluding 'outsiders', would rob them this valuable 'informal curriculum'.

5.34 School tragedy and national trauma drive change?

Another driver behind the temporal and spatial openness of Danish schools was the absence of building guidelines relating to security features. In England, much of the physical bordering of students had been driven by the design specifications outlined by the DfE following the Dunblane attack in 1996. However, according to policy-makers at both the national and municipal level, there are no similar architectural guidelines in Denmark. One special advisor in the Ministry of Education stated that security was 'simply

not something that comes up in our discussions on school design' (IDP4). This was confirmed in all the interviews with policymakers. In absence of any mass school tragedy or national trauma, there has been no public or political pressure to adapt school security and enclosure practices in Denmark.

In Copenhagen and Aarhus students were not perceived as being at risk in school spaces or potential targets of adult aggression. Teachers were aware of school shootings in other countries, most notably in the USA, but considered them 'inconceivable' (IDAP1) in Denmark and 'just something that wouldn't happen here' (ICD1.2). The folkeskole was not therefore a fortress in which to create a safe haven for students, as was increasingly the case in England. There was little need to border children given the mutual feelings of trust and confidence in the Danish population; the spectre of the 'stranger' or 'mass shooter' did not weigh heavily on adults' minds. In fact, the school was an important symbol of this shared faith in the good intentions of adults towards children and was an important promulgator of this message for future generations:

> *'We are an open society and the school is open as well. We don't really want to make the pupils afraid of our community. They see it in the media in other countries, but we want them to be safe in the school and free. As long as there is not a direct threat, then we won't set up that kind of barrier.'* (IDP3)

However, for one school in Aarhus, this belief was increasingly being tested. The head teacher was becoming increasingly concerned about the openness of her school and the threat posed by outsiders:

> '*I am more worried about our open schools...Here, everybody comes. And that is a bit of a problem... With how the world is changing, that is maybe a problem. So there might be a risk of something to do with terror. We have to think about who is coming here and entering the school. If something happens, the day after it will change everything. Things will change like this [clicks fingers]'* (ICD1.1).

> *'Ten years ago I didn't worry about who came to the school. We just said 'Come, be together with us, be together with the kids.' That's a change in how the world has become. The other thing is that people can just walk in here. Here all the doors are open.... It's nice but the world is changing. We have to be aware of these things. I have made a [lock-down] plan for school shootings...'* (ICD1.1).

For her, the lack of defensible space and her inability to regulate flows into the school site was becoming problematic. The head teacher had begun to question the practicalities of an integrated school in the urban landscape given her sense of a rise in the risks and threats facing schools. This example points towards the potential fragility of the socially-constructed school boundary in Denmark. Should an event take place where students are harmed in the school environment, it may lead to louder calls for a reassessment of the range and strength of institutional 'bordering practices'.

6.0 Conclusion

This study has highlighted the complexity of the 'school-city' boundary by documenting the overlapping material, social, and political 'bordering practices' (Spyrou & Christou. 2016) in English and Danish schools. The primary research has confirmed that 'urban school enclosure' and the separation of students from their surrounding context are the achievements of dynamic assemblages of human, non-human, and discursive agents.

The schools in Denmark and England were physically and figuratively 'separated' from their urban environment to different degrees. Schools in Denmark, due to their weak material and architectural 'bordering' (Section 5.11-5.12), were more connected and 'open' to their surrounding context and 'outsiders' (Section 5.1). Teachers placed greater emphasis on trust; students and 'strangers' were trusted not only look out for each other (Section 5.22) but also to respect and abide by the 'invisible boundaries' they had been taught (Section 5.21). The interviews conducted with teachers and policy-makers revealed that this 'openness' was fundamental to Danish pedagogy (Section 5.33), deeply connected to understandings of a 'good childhood' (Section 5.31), and an important part of Danish identity.

In England, the schools were more highly securitised and there was a greater emphasis placed on physically (Sections 4.1-4.12) and figuratively (Section 4.11, 4.31 & 4.33) removing students from their urban contexts. The strict safeguarding legislation and detailed architectural guidelines, developed since the mid-1990s, in response to the perception of increasing urban insecurity, have created environments where students are materially and discursively (Section 4.31-4.32) 'enclosed' within the school perimeter. These 'fortress-like' architectural and legal bordering practices were supported by a number of 'rituals' (Section 4.2-4.22). These rituals remind students and 'strangers' of the institution's spatial and temporal dominance and its inaccessibility. The hard 'school-city' boundary and the 'risk-free' school environments were justified by a number of powerful discourses. Perceptions of children's vulnerability (Section 4.11, 4.12 & 4.33) and deviancy (Section 4.34), feelings of rising urban insecurity and danger, and understandings of parental expectations (Section 4.33), all drove attempts to ensure students remained in their 'rightful place' within the safe confines of the school and that 'strangers' were discouraged from entering.

This primary research has demonstrated that 'school boundaries' represent a social, material, and political manifestation of adult interests and concerns. The varying degrees to which schools are separated from the urban reflect and construct understandings of childhood, children's geographies and perceptions of urban vulnerability and trust. The school boundary must be seen as an assemblage which reveals 'the social and political values of larger urban worlds' at 'a particular moment in time' (de Coninck-Smith, 1990: 132). The boundary is a 'mirror' (Instone, 1999: 372) which reflects our adult and urban concerns back to us. As a result, further archival research is needed to explore the history of school enclosure and

more fieldwork needed to gain greater insight into the relationship between the 'bordering practices', 'school enclosure' and contemporary urban attitudes.

The divergence since the 1960s in the way Denmark and England approach school enclosure must be understood as a marker of the diverging socio-economic and political trajectories of the two countries and their contrasting urban histories. The conditions of England's securitised schools point towards an urban population which sees the city as marked by fear, insecurity, and risk. On the other hand, Denmark's schools which still adhere to a mid-20th century understanding of a 'progressive education' and school architecture, suggest that there urban dwellers maintain strong feelings of mutual trust. However, this approach to school enclosure does appear to be relatively fragile (Section 5.34) and calls to re-examine understandings of childhood and 'bordering practices' may become louder should a school tragedy occur.

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8.0 Appendices

Birmingham – School staff	
	Role
IBE1.1	Head of premises, facilities management and safeguarding lead
IBE1.2	Assistant head teacher
IBE1.31 & 1.32	Safeguarding officers
IBE2	Assistant head teacher

Aarhus – School staff	
	Role
IAD1.1	Head teacher
IAD1.2	Experienced teacher
IAD2	Head teacher

London – School staff	
	Role
ILE1.	Head teacher
ILE1.2	Head teacher
ILE2.1	Head of premises, facilities management and safeguarding lead
ILE2.2	Assistant head teacher
ILE3	Assistant head teacher and safeguarding lead
ILE4	Assistant head teacher

Copenhagen – School staff	
	Role
ICD1.1	Head teacher
ICD1.2	Experienced teacher

England – Policy-makers/civil servants/ architects	
	Role
IEP1	Design advisor (Architect) in the Department for Education
IEP2	Design advisor (Architect) in the Department for Education
IEA	School Architect

Denmark – Policy-makers/civil servants/ architects	
	Role
IDAP1	Civil servant for the Child and Youth Department in Aarhus
IDAP2	Member of the Aarhus City Council and council spokesperson on education
IDP3	Department for Education special advisor
IDP4	Design advisor (Architect) in the Department for Education

Appendix 1: Background of recorded interview participants

Appendix 2: School Case Studies: Birmingham (1-2 BE), London (1-4LE), Aarhus (1-4AD), and Copenhagen (!-2CD)

Birmingham, England

	Description	Location	Observations	Interviews
School 1BE	• Mixed secondary school • Converted into an academy in 2012 • Years 7-11 (11y/o – 16) • Part of a multi-academy trust that has recently been deemed as 'requires improvement' • Buildings constructed in the 2002 and funded through a PFI • Large playground bordered by expanse of forest • An average sized secondary school - 913 students enrolled	• Located in a north western suburb of Birmingham • Largely residential area • The school is part of a 'campus' which includes a primary school	Two full days in school. Particular attention paid to: • morning and afternoon entrance/exit routines; • play time; • Movement around the school of students, staff, and members of public	Recorded interviews with: • One deputy head teacher • One head of school facilities/premises • Two 'safeguarding' lead teachers Unrecorded interviews: • The head teacher
School 2BE	• Mixed free school founded in 2013 • School managed by a larger multi-academy trust • School in a former office block – only converted into a school in 2013 • Facilities continue to be remodelled to make school-appropriate • Site is surrounded on all sides by former industrial buildings which have been converted into office space • 507 students enrolled (smaller than average)	• Located in the centre of Birmingham • School was not purpose built but is a converted office block • The school is in a largely commercial area • Narrow streets and high levels of traffic	One day in the school Particular attention paid to: • Entrance routine • Play time • Lunch time • Movement around the school of students, staff, and members of public	Recorded interviews with: • A deputy head teacher Unrecorded interviews: • The head teacher

London, England

	Description	Location	Observations	Interviews
School 1LE	• A mixed secondary school and sixth form • School entirely redeveloped between 2007-2010 • All new facilities and buildings split over two sites separated by a road. A building acts as a bridge connecting the two sites • The large site has multiple entrances and exits including four staffed reception areas • 1, 461 students enrolled	• Located in East London (zone 2) - an inner-city school • Site is sandwiched between a railway viaduct and a busy main road	Two full days in school Particular attention paid to: • morning and afternoon entrance/exit routines; • play time; • Movement around the school of students, staff, and members of public	Recorded interviews with: • Two head teachers Unrecorded interviews:

School 2LE	• Mixed secondary school & sixth form • Converted to academy status in 2006 • Years 7-13 (11 y/o – 18) • The Academy is situated in extensive grounds. Large playing fields on site • Significant construction of facilities and remodelling of the school when it turned into an academy in 2006 • Some of the 1960s school buildings remain on the site • 798 students enrolled (significantly below school capacity)	• Located in a suburb in south London • The schools large grounds are bordered by roads on three sides and train tracks to the west • The school is adjacent to a large area of social housing constructed in the 1960s	One afternoon in school. Particular attention paid to: • Play time; • Movement around the school of students, staff, and members of public;	Recorded interviews with: • A deputy head teacher • One head of premises and safeguarding lead Unrecorded interviews:
School 3LE	• A coeducational community (i.e. maintained) secondary school and sixth form college • Years 7-13 (11 y/o – 18) • The school is situated in extensive grounds. Large playing fields on site • The entire school entirely rebuilt in 2006 • A school funded through PFI • Two buildings owned by the school added in 2012 and 2018 (i.e. not PFI) • 1,121 students enrolled	• Located in a suburb in the north east of London • The school is in a residential area • The school is poorly served by local transport • A primary school is situated next door but facilities are not shared	One day in the school. Particular attention paid to: • Movement around the school of students, staff, and members of public	Recorded interviews with: • One assistant headteacher ('safeguarding' lead) Unrecorded interviews:
School 4LE	• A non-selective academy and sixth form • Years 7-13 (11 y/o – 18) • The entire school entirely rebuilt in 2007 • The school is site is small • The playgrounds and sports facilities are situated underneath the dual carriageway • 1,120 students enrolled	• Located in west London (zone 2) – an inner-city school • Site is sandwiched between a busy railway tracks and a very busy dual carriageway /flyover	One afternoon in the school. Particular attention paid to: • play time; • Movement around the school of students, staff, and members of public	Recorded interviews with: • One assistant headteacher (safeguarding lead) Unrecorded interviews: • Head of school facilities/premises

	Aarhus, Denmark			
	Description	Location	Observations	Interviews
School 1AD	• A large and academically high-achieving Folkeskole • Grades 0-9 • School has posted some of the best 'value added' scores in the municipality • The main school buildings constructed between 1960-80s • Large playing fields, playgrounds and gardens surround the school • Plenty of pre- and after-school clubs • 950 students enrolled	• Located in a wealthy suburb in the East of Aarhus • Residential area • The school is bordered by two quiet roads with little traffic	Three full days in school. Particular attention paid to: • morning and afternoon entrance/exit routines; • play time; • Movement around the school of students, staff, and members of public	Recorded interviews with: • the head teacher • experienced member of staff Unrecorded interviews: • five classroom teachers
School 2AD	• School moved to a new site in 2016 • The first new school to be built in the centre of Aarhus for 100 years • Award-winning school design and spectacular school facilities including a 'farm' • School surrounded by playing spaces • Grades 0-9 • Strong emphasis on supporting learning through movement • Plenty of pre- and after-school clubs • 950 students	• Located in the centre of Aarhus • Formerly the site had been a hospital but it has been transformed into a school • Public footpath runs through the playground • Busy road border the school to the south	One afternoon in the school Particular attention paid to: • Play time • Lunch time • The exit routine • Movement around the school of students, staff, and members of public	Recorded interviews with: • the head teacher Unrecorded interviews:
School 3AD	• Main school building dates from 1921 • Only grades 5-9 in original building. Younger years on another site • The school is raised significantly from street-level • Playground and playing fields surround the school on three sides • In 2016 a skate park was built in the main school playground. Outside school hours, the skate park serves as an urban area for the city of Aarhus and anyone can skate freely • Plenty of pre- and after-school clubs • 350 students	• Now considered to be in the centre of Aarhus • At the time of construction it was on the edge of the urban area • Along one side of the school runs a main road but this is passed using an underpass	One afternoon in the school Particular attention paid to: • Play time • Lunch time • The exit routine • Movement around the school of students, staff, and members of public	Recorded interviews with: Unrecorded interviews: • 1 experienced member of staff member
School 4AD	• School buildings constructed in the 1970s • Grades 0-9 • School surrounded by playgrounds and open fields • School's results are well below the municipality's average • Recognition in recent municipality reports of the challenging school intake • Plenty of pre- and after-school clubs • Around 250 students	• In the suburbs of Aarhus • Local area characterized by a high degree of linguistic and cultural diversity • Local area has a high proportion of children and young people.	One afternoon in the school Particular attention paid to: • Play time • Lunch time • The exit routine • Movement around the school of students, staff, and members of public	Recorded interviews with: Unrecorded interviews: 1 experienced member of staff member

Copenhagen, Denmark				
	Description	Location	Observations	Interviews
School 1CD	• A large and academically high-achieving Folkeskole • Grades 0-9 • Oldest school buildings are from 1909 • School has had multiple periods of construction work - 1930s, 1970s, and 2000s • School is regarded as one of the best in the area • The buildings frame a central playground • School is located near open parks and a lake • Plenty of pre- and after-school clubs • 1000 students enrolled	• Wealthy northern suburb of Copenhagen • Residential area • The school is bordered by one main road to the south and quieter residential roads on the three other sides • School playing fields are located across the main road. Accessed by a tunnel running into the school	Two full days in school. Particular attention paid to: • morning and afternoon entrance/exit routines; • play time; • Movement around the school of students, staff, and members of public	Recorded interviews with: • the head teacher • experienced member of staff Unrecorded interviews: • two classroom teachers
School 2CD	• School split over two sites: Site 1 (Grades 0-3) and Site 2 (Grades 4-9) • Site 2's main building was constructed in 1904 • Site 2 was extensively remodelled and expanded in 2013-2014. Existing buildings were refurbished, a new sport's hall was added and new landscaping of the site • Previously passive and closed playground opened up to the surrounding area in 2012 • Plenty of pre- and after-school clubs • 892 students enrolled	• Located in the centre of Copenhagen • Predominantly working-class area that is experiencing rapid gentrification • School is split over two sites located within 5 minutes' walk of each other • Site 2's buildings are surrounded by an open playground. Playground is connected to a church yard • Site 2 bordered by a main road on one side and quieter roads on the others	Two afternoons in school. Particular attention paid to: • play time; • Movement around the school of students, staff, and members of public	Recorded interviews with: Unrecorded interviews: • one classroom teacher