Two nations underground: building schools to survive nuclear war and desegregation in the 1960s

Professor John Preston, Cass School of Education, University of East London

In the 1960s federal agencies in the United States encouraged the building of protected schools designed to survive a nuclear attack. A number of designs, including underground schools, were constructed. In order to promote the building of protected schools, the US government produced a number of propaganda films for school boards and governors. In addition to promoting post-nuclear survival, these films considered that protected schools were beneficial in terms of progressive and child-centred education and sometimes racial assimilation. This paper considers the extent to which securitisation and progressive education found a common purpose at this time and considers the implications of this for race equality.

The data is based upon rare, archival film from the US National Archives in College Park, Maryland on school protection during the Cold War. These films, intended for wider public consumption were intended as promotional shorts for schools boards and other decision makers to show the advantages of adding fallout protection to school design. The method involved an archival search to scope the range of films produced at this time. Each film was viewed multiple times at the archive to transcribe text and image descriptions. This dual data was then used to form a narrative account of the argument structure of the films to identify the ways in which interest convergences and divergences around 'race' are deployed. The discussion uses conceptions of 'flexible whiteness' to examine how securitisation, a discourse identified with white hegemony, can additionally contain conceptions of race equality and progressivism.

Acknowledgement

This work was supported by the Economic and Social Research Council under grant number ES/K000233/1

Whiteness, nationhood and interest convergence in the early cold war

In this paper I examine a particular cold war architectural experiment in schooling in the United States (US): the building of underground schools: to consider how such security measures were 'sold' to teachers, governors and pupils and the implications for school security today where US schools are fully integrated into a national critical infrastructure surveillance system. Unusually, the approach taken foreground the way in which concerns for racial equality were sometimes deployed, and sometimes countered, in the promotion of protected and underground schools.

In the United States (US) the conception of nationhood and belonging have been founded on a conception of individual whiteness (Roediger, 2008, 1) as property (Harris, 1993). Although this conception may appear to exist '...invisibly, colorless, undefined by geographical or psychological descriptions' (Patterson, 1998, 103) it operates as a form of national identity based on white supremacy (Allen, 2001, 2004; Leonardo, 2005; Gillborn, 2005, 2006) where whites gain economic, social and psychological benefits at the expense of people of colour. Aside from institutions and practices that continue to benefit white citizens of the United States (Leonardo, 2005) and indeed globally (Gillborn, 2006) the cold war was not only a period of white supremacy, but also of white segregation where white race separation was widely politically accepted (Dobratz and Shanks-Meile, 1997, 42). The continued salience of whiteness as an '...existing and evolving system of exploitation' (Roediger, 2008, 35) meant that the cold war as a time of increased racial equality, integration, and enhanced civil rights, can be called into question.

Dudziak (2011) considers that foreign perceptions of the US during the Cold War influenced the approach to race relations and civil rights in education and other areas. The US, at various times during the cold war, needed to adopt at least a cosmetic, demonstrable commitment to race equality of a notional kind. In US propaganda films, civil rights in the US was presented as a progressive force in US policy, as part of an inevitable historical trend towards progress, when actually concerns of national security provided the impetus for change (Dudziak, 2011, 87). For example, the Brown vs Board of Education decision to legislate against school desegregation was motivated by national security policy (Dudziak, 2011, 101). However, in practice Brown II allowed the actual progress towards desegregation to proceed slowly and be adjusted according to local and state level circumstances. So whilst, for even the supposedly civil rights friendly Democrat President Kennedy '... civil rights was not a distraction from economic and foreign policy. Rather it was intertwined with Kennedy's other objectives: "the third leg of the stool" (Dudziak, 2011, 201), but this leg was not sturdy. Kennedy was reluctant to use presidential Executive orders (which were frequently used to pass cold war emergency legislation, Grossman, 2001) for civil rights purposes (Risen, 2014, 21). Although the Civil Rights Act (1964) and the Voting Rights Act (1965) '... helped motivate civil rights reform, it limited the field of vision to formal equality' (Dudziak, 2011, 252). According to Bell (1980) the impetus behind school desegregation was in terms of cold war international relations - '...the decision helped to provide immediate credibility to America's struggles with Communist countries to win the hearts and minds of emerging third world peoples.' (Bell, 1980, 524). In addition,

domestically desegregation '... offered much needed reassurance to American blacks that the precepts of equality and freedom so heralded during World War II might yet be given meaning at home' (Bell, 1979, 524). Desegregation, on the ground, was often notional (Bell, 1980, 524) and often did not mean racial equality within schools. In fact, there were more frequent examples of interest divergence (Bell, 1980; Guinier, 2004; Gillborn, 2013) where desegregation was opposed and used to subjugate African Americans further. In Virginia, for example, some schools were closed rather than desegregated and in Texas legal obstacles were put in place against desegregation. Furthermore, civil rights was often used as an impetus for economic measures that, in the main, benefited whites. Paradoxically '...a desire for Cold War national identity could actually lead to further...racism North and South. The ongoing expansion of the welfare state continued to divest benefits overwhelmingly to whites' (Roediger, 2008, 186). Kryder's (2000) conclusion regarding the impact of World War II on race equality in the US 'Overall, wars have produced both ameliorative and repressive federal race policies...' is equally true of the cold war, but it is important to consider even ameliorative policies are frequently partial and are motivated by propaganda, rather than ethical considerations.

Underground and protected schools

The racially divided and structured US of the 1950s and 1960s was a time when a war between the US and the Soviet Union was a very real possibility, and where cold war scares such as the Cuban Missile Crisis meant that the possibility of national annihilation was a real political and cultural concern. Aside from the former Soviet Union, and in some neutral countries such as Switzerland, the extent to which civil defence entered into the life of children in the 1950s and 1960s was exceptional (Grossman, 2001). In effect, the US was in a permanent state of emergency with regard to the threat of nuclear war (Preston, Chadderton and Kitagawa, 2014). Children undertook "Duck and Cover" drills in schools and many schools had an area where pupils should go to in the case of a nuclear attack (Preston, 2009, 2012).

The aim of the FCDA (Federal Civil Defense Administration) was for civil defence to be universal and cross-curricular and they specified that every single child should have access to civil defence education:-

In order that every school child may understand according to his ability and maturity how to care for himself and others in the event of any emergency, such understandings should be built into the curricula and course of study of schools

Working agreement between Department of Health, Education and Welfare (DHEW) and Federal Civil Defense Administration (1953)

However, schools were not always willing to engage in civil defence during this period (McEnaney, 2001). The FCDA, and successor agencies, did put various kinds of pressure on schools to intervene in civil defence. In a booklet produced for the civil defence authorities 'Current Status of Civil Defence in Schools' (National Commission on Safety Education, NCSE, 1966) the organisation speaks directly to parents, school principals and school

teachers. In fact they state that 'This entire booklet is really a letter to two people: a schoolmaster and a CD (Civil Defence) official.' The report is based on a questionnaire survey given to schools and visits to ten states to observe CD in practice. The questionnaire and survey were designed so that a representative sample of school systems would be included. The report considers that the majority of children do not have civil defence protection and makes a direct appeal to parents as to whether this is satisfactory. The report says that 'We have nothing to sell – except our survival and that of our children' (NCSE, 1966, 2) and, using an analogy with safety at sea 'Educators are our captains; the people are our shipowners' (NCSE, 1966, 3). The results of the survey show that, with a school population of over 40 million, over 35 million do not have shelter spaces. It also shows that most teachers and school administrators report that they have 'little' or 'no' training. The NCSE report says that 'Where facilities are inadequate...the school administrator must decide which children will be given a chance for their lives and which will not.' (NCSE, 1966, 5). In making the case for why schools should be involved in civil defence, apart from an emotive appeal, the reasons are in terms of an extended curriculum. 'Civil defence subject matter includes meteorology, physical science, nutrition, physiology, communications, arithmetic and materials from other fields' (NCSE, 1966, 23) and that, even given limited time, basic CD education needs to be provided to all students (NCSE, 1966, 24). There is also a role for the 'whole school' including school administrators, parents and canteen staff. From this booklet, we can therefore see that the civil defence authorities were making direct, emotive, appeals to schools to engage in civil defence based on their low participation in CD and that the approach preferred was a whole school approach, involving many different school personnel.

Within this Cold War atmosphere, the idea that schools should be hardened to withstand an atomic bomb, or should even be built below ground, was also promoted by civil defence agencies, but there was resistance from educators. Rose (2001, 133-140) considers that in the mid-1950s school administrators and civil defence directors were already considering whether school designs could be reimagined to prepare for nuclear attack. There were plans to adapt the Boswell High School in Texas for shelter use in 1961. In 1963 a Congressional Hearing was held to consider whether schools should have fallout shelters. However, there was often opposition to such plans at a state level and issues of cost and educational utility of shelters came to the fore, as well as the effects of such measures on school children's anxieties and fears (Rose, 2001). Given the lack of federal funding, a number of local solutions were proposed. In Norwalk, Connecticut it was proposed that twenty five shelters would be built underneath the playgrounds of schools in 1962 and similar plans were made in New York schools. One school, Abo Elementary in New Mexico was actually built underground in 1962 with its own water supply, food, generators and even a morgue. It could provide shelter to over 2000 students in the event of war. Another school, the United High School in Webb County Texas (discussed in this paper) was also built to be protected against nuclear attack and on two levels, one of which was underground. The hardening of schools, and the addition of shelter facilities to school designs, was part of a more general move to construct shelters in private and public dwellings (Rose, 2001). Schools were considered to be well equipped and socially ordered sites, appropriate for shelter construction (Rose, 2001: 134) and the protection of children had a symbolic value in fostering support for civil defence more generally (Preston, 2012, 34).

As with civil defence as a whole, the idea that schools should be hardened, made windowless and even built underground was resisted on the grounds of expense, practicality, pedagogical soundness and the ethics of choosing who should gain access to shelter and who should not. The FCDA, DOD (Department of Defense) and other civil defence agencies, therefore needed to 'sell' the conception of civil defence to audiences. Surprisingly, one of the major ways in which they did so was not to highlight the benefits of underground schools in terms of their protection against nuclear attack but rather to use the discourse of progressive education (which was at that time suspected of being Communist in nature by some elements of US society, Hartman, 2008) to make the case that such schools were pedagogically superior and more inclusive environments. The arguments used were based around conceptions of rationality, progressivism and equality. Firstly, it was argued that such schools employed rational techniques of managing pupils, were cost effective, employing new cold war disciplines of game theory and cost-benefit analysis (Erickson, et al, 2013) to argue that protected and underground schools were the optimal choice for educators. Secondly, that such schools were more progressive in terms of using new pedagogical methods such as vocational classrooms and new educational technologies. Such developments were eagerly accepted by progressive educators in the Cold War who often saw convergence between their own interests and civil and national defence (Hartman, 2008; Brown, 1988). Thirdly, as discussed above, school desegregation which had been made illegal following Brown vs. Board of Education (1954) had led to calls for more racial equality in schools but also served the cold war interests of white legislators and educators, but this was still partial and cosmetic as discussed above. In this context, underground schools were sold with a dual purpose: that white children (in particular, but not exclusively) would be protected whilst 'managing' what were perceived, by whites, to be the downsides of segregation. Hence, underground and protected schools can be seen to be part of the continuing racial project of white supremacy and white segregation in the US. Moreover, such schools were dually positioned as being emblematic of both US cold war preparedness and also of equality and civil rights. They therefore served a useful internal and external propaganda purpose for the US DoD (Department of Defense). Internally, such schools ideologically confirmed safety and security under the guidance of government with a notional and cosmetic nod to equality. This would reassure whites that they would not have to compromise white supremacy, whilst providing people of colour with some reassurance that their children may be provided with some (separate, if not equal) protection against a nuclear war. Externally, these films can be seen as part of the US' more general propaganda offensive in demonstrating a continued commitment to civil rights, even if there should be a nuclear war.

It must be noted that efforts to maintain 'Jim Crow' in Cold War shelter arrangements did not go unnoticed by African American civil rights protestors and cultural commentators. Ever since Du Bois' short story 'The Comet' (1999, originally published in 1920) where a destroyed New York becomes a site of continued racial oppression the apocalypse (nuclear or otherwise) has been used to consider the racial inequities of American culture. Langston Hughes, in a series of satirical sketches, considered that 'I would be Jim Crowed out of Bomb Shelters...down there they will have some kind of voting test, loyalty test' (Rose, 2001, 109). Du Bois himself participated in a series of protests in New York city in which African Americans, and white citizens, would refuse to take shelter in civil defence drills in protest over US policy (Foner, 2000). Although it is not possible to ascertain the impact of these satirical and protest activities on decisions regarding underground and protected schools, they were part of the context of the cold war US where resistance was necessary to advance the civil rights struggle in all domains.

Selling protected schools

This research is based upon a unique source of data being rare archival film from the US National Archives in College Park, Maryland, on school hardening in the cold war. These late 1950s and 1960s films, intended for wider public consumption, were intended as promotional shorts for school boards and other decision makers to show the advantages of building fallout protection and shelter into school design. The films were, after the cold war, classified, and not available for the general public to view. The promotional materials discussed here found their way into the public domain largely through army repositories (rather than through civil defence authorities). This is therefore by no means a random sample of films and in a way, these are films that have 'slipped through the net', not being released to archives by the departments concerned, but through a circuitous route. This is often the case with government archives where processes of acquisition or selection means that data in neither compete or representative - a process that Hill (1993) refers to as 'sedimentation'. In this case, rather than a sedimentation of data over a long period of time, what is available for analysis is more of an opportunistic trickle. However, there is some use in fragmented research data. Firstly, it presents what the archivists and interviewees consider to be the 'public' face of their plans. I was left with data which was fit for public consumption, which indicates that this is data which the organisations and groups would, to a certain extent, like to present to the public. Secondly, when researching national security often data is (tautologically) not placed directly in the public domain. Fortunately, three films remain from this era on underground schools and still remain in the US National Archives. 'The A+ School' (Motion Picture 60940: 311.2, 'The A+ School', 1966), 'Texas Had a Brand New School' (Motion Picture 61028: 311.84, 1965) and 'Civil Defense in Schools' (Motion Picture 60953: 311.15, 1958). All of the films make an appeal to the audience in terms of the rationality and progressiveness of underground schools whereas each film separately represents two sides of the same coin of interest convergence / divergence. 'The A+ school' focuses purely on white children and their protection, whereas 'Texas Had a Briand New school' focuses on the inclusion, but also the compliance of, Hispanic parents and students and 'Civil Defense in Schools' on the notional inclusion of African Americans.

The A+ school: South Salem Elementary

A Department of Defence and Office of Civil Defence film, 'The A+ school' considers the construction of the South Salem elementary school. The film begins with a montage of white children playing, and it is only white children who are shown in the promotional short. Throughout the film a common image presented is that of the circle. Children are shown in shots of spinning on a roundabout, holding hands and spinning in a ring and swinging in a semi-circular arc on a swing. This is mirrored in the panning shots around the school and eventually resolved in terms of the 'round' 'inner core' / fallout area of the school itself. The film begins by considering that photographers have often been captivated by images of children at play, and with schools as a theme. It then considers the strategic importance of school buildings:-

NARRATOR: Our subject here is children too, and our subject schoolhouses...in some cases the only substantial building for miles around...this school is the new South Salem elementary school...it's a rather unusual school, a kind of school in the round

The film then shows the circular inner core of the school, making much of its pedagogical features in terms of being a shared, flexible space, for teaching. However, this area is also promoted as a cheap way of providing fallout protection at very little cost:-

NARRATOR:..this area called 'common space because it is shared by three adjacent classes...for this area has even more to offer, a plus feature that can not be seen at all, it is also a fallout shelter, designed into the building, an integral part of it ,and all above ground....it was done without fanfare..the architect came up with this design, a circular building with 21 classrooms...the technique for designing fallout shelter space into a building is called slanting.. making a few adjustments to windows, the location of doors, or the reinforcing of a wall or ceiling to give fallout protection...only 16 cents per. square foot was for the plus (protection) feature

The film then makes a direct appeal to various levels of civil society to promote the idea of 'common space' schools with fallout shelters:-

NARRATOR: What can you do? The Office of Civil Defence and Protection asks you as a citizen, you as a school board member and you as a parent to be aware of the way in which fallout protection can be added to buildings..but we urge you to see to it that they have the added plus, as this school does, for as many reasons as there are children

In this appeal, fallout protection is considered something that can be added cheaply to modern schools. However, fallout protection is not simply given as a cost which schools must bear but rather as something that is a pedagogical advantage in design, using the 1960s theme of 'common space', in vogue in progressive educational theory at this time. The appeal in this film is to members of school boards, parents and citizens rather than to government departments. Finally, the film states 'for as many reasons as there are children'. This portrayal of white children's lives as inviolate (irreplaceable) and that saving one child's life is sufficient reason for school redesign appears as a prominent motif.

Texas had a brand new school: United Consolidated Independent School, Webb County

The film "Texas had a brand new school" also emphasises school design, and the advantages of building (in this case) an underground school. Unusually, for a civil defence short of this time, the film features a school with a largely Hispanic population (most films of this period, and in the civil defence literature more generally, focus exclusively on white children). The school included in the film, the United Consolidated Independent School, was one of the first to introduce bilingual programmes for Hispanic students. The film begins with footage of a school bus taking the children to school:-

NARRATOR: In South Texas they grow cactus, and kids. Some say that cactus has all the luck. All it has to do is stand there, the kids go to school. Times have changed, needs have changed, and that's the reason behind this school...the United Consolidated independent high school...a new and very different school...

The film then shows a montage of photographs of the local school board in a meeting. Through still photographs, the images convey the message that this was a school board with a mixed White and Hispanic ethnic composition:- NARRATOR ...what they wanted for their children was something extra, protection from nuclear fallout. Berlin, Cuba, they'd left their marks...but most people forgot them as soon as the crisis ends, but not these people..

The narrator explains that in a time of crisis the school would be open to the school pupils, their parents and the wider community. The point is made that the school would be an example of a 'protected school'. As in the previous film, the rationality of saving children's lives is mentioned:-

PARENT AND MEMBER OF SCHOOL BOARD: our thoughts were, if we were saving one child for the expense we were making it would be worth every cent we spent.

In the protected school, part of the school was built underground:-

NARRATOR: ...the lower floor below grade, this part to serve as both schoolroom and shelter...to be a normal classroom in normal times, a shelter in times of need...of course there were questions...windows...how would the children react in an underground school?

These fears are quickly addressed in the film:-

CHILD VOICEOVER: You don't get any feeling of claustrophobia...it's just like a regular school without any windows

The narrator continues to say that there are 'no signs of depression' shown by the children and that good lighting, plants and mirrors on the walls make it a more welcoming environment. Further quotes look at the positive factors of an underground school in terms of progressive notions of student morale and achivement:-

CHILD VOICEOVER: There are no students looking out at the sky..it keeps our attention on what they're teaching

PARENT VOICEOVER: My son Tommy was such a daydreamer and he used to look out of windows all the time, and he can't do that anymore, and I think that it's improved some of his work.

PARENT VOICEOVER: This school itself is so beautiful and so unusual, it has the morale of the kids so high that I have noticed my girls grades have gone up, they feel like they have to live up to the school itself

CHILD VOICEOVER: Since I've been at the new school my grades have come up from being a C student to As and Bs.

NARRATOR VOICEOVER: The slab gives the lower floor a fallout protection factor of 152, a factor better than most community shelters...it brings another blessing silence. In the library downstairs, you can concentrate on a book.

The underground school also engendered a 'whole school' approach to preparedness:-

NARRATOR: One of the key areas in the underground part of the school, the kitchen and cafeteria, preparing meals now for the school, ready in any emergency to feed and supply the whole community. This was a dual use plan. If a crisis came, each below ground room would go right on as a normal classroom to keep the children cheerful and busy, or if needed it would be switched at once to its emergency function as a dormitory, nursery or hospital.

The rest of the film makes points about the social inclusion of the school, facilitated by its protective function in scenes that concentrate on the Hispanic students:-

NARRATOR ...and so Webb county has its school, the community has what it wanted, a fine modern school...with bilingual teaching equipment where 70 per cent of the students spoke only Spanish.

NARRATOR: With a woodwork shop to give vocational training for those who go out to work

The aesthetics and appeal of the school are also noted:-

NARRATOR: An active and attractive school with all the advantages, plus one, the knowledge that protections' always there, or only a few feet away

PRINCIPAL: The plan is no longer necessary, we're in the plan

PRINCIPAL: We have more teacher applications than we can possibly take care of

PRINCIPAL: There are many contractors and people, superintendents, school board members that have come to our building to look at it to get ideas

In the penultimate sequence, the film refers to the community participation required to produce the school and notably includes scenes of co-operation between Hispanic and white school governors:-

NARRATOR: It took the co-operation of all the community to build this school as a shelter, and it will take the same co-operation to run it

NARRATOR: The shelter serves the whole community, and is big enough to serve them all.

Civil Defense in schools

The third film, Civil Defense in Schools, is concerned with wider issues than school design, but makes similar points regarding the benefits of protected schools to the above films. The film starts with an account of the different types of disasters that schools may face:

NARRATOR: The threat of disaster is never pleasant. For a long time schools have been protecting children from the disasters and accidents that we have come to expect. Now there is a new form of disaster, for this is the age of the atom.

The film then goes onto show how school civil defence should be built into all aspects of planning:-

NARRATOR: Protection of our children must be a basic goal of every educational program...There is a general concept for every school board to follow in developing a civil defence program.

The planning process is shown to be devolved down to the school level, and a 'whole school approach' is implied:-

NARRATOR: A few days later the superintendent meets with his staff and school principals to explain the new directive. The curriculum co-ordinator heads the curriculum committee. The safety supervisor is appointed chair of the protection committee...The civil defence director explains how schools fit in with the community civil defence survival plan Before calling a meeting with their entire staff, principals' discuss the plan with some of their key people.

This involves the same 'dual use' benefits as shown above:-

NARRATOR: This school needed additional classroom space. But to build it above ground would have taken away valuable playground area. The problem was solved by building dual purpose classroom shelters underground.

The whole school approach was also emphasised in terms of the inclusion of cafeteria staff in planning and here we see the only African American characters in the film, women working in the canteen:-

NARRATOR: An adequate school fallout shelter should contain enough provisions to sustain students and staff for at least two weeks...In this combination shelter cafeteria, the cafeteria manager is in charge of emergency feeding facilities

Discussion: notional race equality and promoting security

In each of the three films we can see the same themes of rationality and progressive education. Firstly, that protected and underground schools are a rational choice. That it makes sense architecturally to build schools in this way given that they can have the 'plus' of protection against atomic attack is implicit in each film. It is argued that this can be achieved at limited cost and that systematic planning would mean that the schools are not only fully prepared, but also aesthetically better than non-protected schools above ground. Secondly, in each school benefits in terms of progressive education are referred to. The first school, South Salem elementary, would be constructed with an 'open space' and circular orientation which would mean that the classroom space could be modified depending upon the activities of the teacher. The 'common space' at the centre of the school could be used for collective group learning activities. In the second school, the United Consolidated Independent School, the argument is made that the school design is progressive in terms of increasing student's concentration in providing no windows to stare out of, and also in soundproofing the learning environment. It also points to the advantages in terms of creating new spaces for bilingual learning and for vocational study. The motivation is shown to come from an ethnically diverse school board to create an aesthetically pleasing school for the community. In the

final (unidentified) school the building design creates additional space for dynamic learning activities and engenders a whole school approach.

However, although the films appear to promote a *notionally* progressive notion of education, in terms of how racial themes are represented they are in keeping with the contradictory nature of racial equality following (notional) desegregation. The A+ school shows exclusively white children being protected in a new circular school and the themes in this film are close to the almost eugenic features of early cold war films more generally in which the protection of whiteness is central (Preston, 2012; Preston, Avery, Chakrabarty and Edmonds, 2011). It is interesting in the second film that it was a mixed White / Hispanic rather than a White / African American school that was chosen for an underground design. There is notional representation of Hispanic parents as advocates for underground schools and 'facilities' offered for bilingual learning, but no real emphasis on further integration beyond special provision. Finally, the final film does show African American characters taking part in the functioning of the underground school, but as cafeteria workers rather than representing African American children as benefiting from protection. The use of Hispanic children and parents in the second film, rather than choosing a school with a white / African American composition is perhaps indicative of the ways in which Hispanic students can, in certain contexts, be ideologically deployed by the state as 'honorary whites' in terms of a triracial system of oppression (Bonilla-Silva, 2002). Whilst African-American children are completely absent from the ideological depiction of protection, Hispanic children are notionally included.

We should be careful in terms of the extent to which we hold these films up to the standards (however lacking) of representation that we expect today. It would be a facile conclusion to claim that racial inequality was worse in the past and that we can comfortably judge it from our enlightened position today. The point is not that these films appear to be racist, but rather the contradictory nature of how concepts of rationality and progressivism are employed. On the one hand, the films consistently emphasise the rationality and enlightened notion of such schools and even possibilities for further racial inclusion. On the other hand they support notions of notional inclusion and a return to a segregated past. These contradictions do make sense in the historical context where the state was aiming to balance desires for interest convergence (to appeal to liberal white audiences - particularly principals, heads of governing bodies and teachers – and Hispanic, and to a lesser extent African American audiences) with interest divergence (from whites who wished to protect segregation, and if they had to have it to only experience it in a notional, and limited sense). This argument is further contextualised by the desire of the US to project an image of being a racially inclusive society to other nations. It must also be remembered that the civil defence authorities were aiming to appeal to (predominantly) white audiences during and after a nuclear attack. In the Southern States of the US there were concerns that fallout shelters would be desegregated (Rose, 2001, 110) and the post-apocalyptic following a nuclear war is frequently portrayed (in government documentation and popular culture) as preserving racial stratification (see Preston, 2012).

Conclusion: protected schools today and 'flexible whiteness'

In concluding, I consider both the ways in which school security is now even more firmly part of national security than in the nuclear age, the historical and contemporary dimensions of security and education, and some implications for conceptions of securitisation and whiteness.

Rather than, with the end of the cold war, schools being distanced from protection and security there has been a move to reinforce protection, adopting techniques of military security and militarisation into their architectures and designs. Instead of nuclear war, the motivations for this are factors such as crime, school shootings and terrorism but again, the justification is often that it is not only rational, but also progressive. Hence school security is promoted as offering safer learning environments and even improved academic performance. Within the state apparatus, the United States is exceptional when compared to other Western countries (Preston, Chadderton and Kitagawa, 2014) in including schools as part of the Critical National Infrastructure (CNI). This new system of infrastructure protection gives schools a new function, different from the underground or protected school. In the previous security architecture, schools operated as individual security nodes, with no obvious connection to other schools with similar security arrangements. The advantages of security were considered to be at an individual, school, level and benefits were realised through advantages in terms of learning and teaching. In the new, networked, security infrastructure, school security represents part of a layered network of security architecture across the United States. Whether schools participate or not in particular security programs, they are part of the security architecture. Similarly, individual pupils, teachers and other school administrators are the 'operators' of part of the critical national infrastructure. This may seem to be merely a semantic move, but it has profound implications in terms of the relationship between state security and the citizen at a school level. Firstly, there is no 'opting into' security. In the 1960s, schools were strongly sold the need to be a protected school, or an underground school, by government agencies. This selling was based around the advantages that would accrue to the school. Now schools are part of the CNI there is no opting 'in' or out of security, schools are automatically part of this layered and networked system. Secondly, the 'aims' of securitising schools in the 1960s were made clear in terms of benefits to pupils. In the new security paradigm, national security is an end in itself aside from any benefits to individual institutions. Thirdly, the nature of a networked and layered system of security is to produce a mapping of every possible available piece of geographical and personal relevant data. The security of schools therefore is indistinguishable from the task of national security (Kristensen, 2008, 74). Each and every school in the United States is a 'protected school' and in turn is supposed to enhance and support every other part of the CNI. This has obvious implications for racial equality in terms of how pupils and teachers are classified as racialised 'security threats' with networked surveillance but if history is a guide, these effects will be dependent on the complex ways in which interest convergences and divergences play out in society.

Conceptually, this empirical study allows us to further consider how we consider the discursive and material in examining race and security. Securitisation is defined by Wæver (1995) as being formed through a speech act. It is formed through discourse but this discourse has consequences in the real world. That securitisation can be formed through discourse does not mean that it is ephemeral, or that it can be undone through reclaiming, or subverting, the discourse. Securitisation materialises itself through artefacts, processes and procedures that become concretised as part of the security apparatus. Indeed, Wæver considers that securitisation is only mobilised through state-actors claiming special rights to use "...whatever means are necessary" to bring about security (Wæver, 1995, 55). Hence it is incorrect to consider that securitisation does not engage with materiality at least in its common sense meaning (if not in terms of materialism as a political philosophy). Similarly, whiteness is also both an ideological (discursive) formation but also one that mobilises real resources. There is a false dichotomy drawn in whiteness studies between those who focus

upon the ideological and the material aspects of whiteness. It is more appropriate to consider whiteness to be an amalgam of material and discursive formations as in the depictions of white supremacy considered by Zeus Leonardo and Ricky Lee Allen (Leonardo, 2008; Allen, 2001). As securitisation and whiteness are complex formations that iterate between the material and the discursive, then the space for contradiction is obvious. Such contradictions are not a sign that the theories have somehow 'failed' in a Popperian sense (that an exception proves that the hypothesis is incorrect) but rather that social reality is more complex. The case of securitisation and whiteness discussed in this article is a case in point where the mobilisation of a security discourse which appears to be, at least partly, motivated by a eugenic desire to protect (predominantly) white children is more complex, and contradictory in practice taking in both interest divergences and convergences. It illustrates the ways in which a more nuanced version of whiteness is required in understanding educational dynamics, such as Leonardo's (2008) notion of 'flexible whiteness', where contradictions in white supremacy can be managed and recuperated in processes of securitisation. In the contemporary era, whiteness is not as obviously segregationist and supremacist as it was in the 1950s and 1960s, but this is not to say that it has lost its oppressive characteristics. 'Flexible whiteness' considers that globalisation is shaped by processes of white supremacy, and increasingly both global and domestic notions of security are being shaped in terms of making a global system of travel of commerce that is 'safe' for whites (Leonardo, 2008). In all domains of security, including preparedness for terrorism, pandemics, riots and demonstrations, flexible whiteness often transcends national determinations of public safety and security (Preston, 2012).

In terms of contemporary school security whiteness is still manifested in school architectures but rather than the segregationist white supremacy of the 1950s and 1960s, this is a flexible form of whiteness that uses tropes of inclusion and the common good (in terms of securing schools against crime and disruption) to achieve similar kinds of exclusion and surveillance. In the Cold War, the architectures used in protected and underground schools were orientated towards a notional form of protection for (mainly white) children and the threat was externalised as Communist, albeit with implications for racial equality in schools.

In the US today, school architectures are not designed to withstand nuclear attack but security measures such as security guards, locker checks and metal detectors are explicitly orientated towards the social control of African American students (Kupchik and Ellis, 2008). Even in elementary schools, there is disproportionate expenditure on school security measures and designs amongst those of low socio-economic status and people of colour (Kupchik and Ward, 2014). Moreover, the ways in which schools are funded and organised to disadvantage African Americans (Ladson-Billings, 2006) and the role of schools in criminalisation (the schools-prison pipeline, Kim, Losen and Hewitt, 2010) are less visible, but salient ways, in which systematic disadvantage and security are coupled. Hence the architecture is orientated around the explicit protection of white children from a supposedly internal threat. Rather than post-racial security, paradoxically the new architectures of security in a militarized society seem to promise only a *post-racial racism* (López, 2010) in which racial disadvantage is explicitly encoded into the security architectures of schools.

References

Allen, R. 2001. "The globalization of white supremacy: Towards a critical discourse on the racialization of the world." *Educational Theory*, 51, 467–486.

Allen, R. 2004. "Whiteness and critical pedagogy." *Educational Philosophy and Theory*, 36, 121–136.

Bell, D. 1979. "Brown v. Board of Education and the Interest-Convergence Dilemma." *Harvard Law Review*, Vol. 93, 518-533

Bonilla-Silva, E. 2002. "We are all Americans! The Latin Americanization of racial stratification in the USA." *Race and Society*, 3-16

Brown, J. 1988. "A is for Atom, B is for Bomb': Civil Defence in American Public Education: 1948-1963." *Journal of American History*, 75, 68-90.

Dobratz,B. and Shanks-Meile,S. 1997. *The white separatist movement in the United States: "White Power, White Pride"*. Maryland: John Hopkins University. DuBois, W. E. B. 1999. *Darkwater: Voices from Within the Veil*. New York: Dover Publications.

Dudziak, M. 2011. *Cold war civil rights: race and the image of American Democracy.* Princeton: Princeton University Press

Erickson, P., Klein, J., Daston, L., Lemov, R., Sturm, T. and Gordin, M. 2013. *How Reason Almost Lost Its Mind: The Strange Case of Cold War Rationality*. University of Chicago Press: Chicago.

Foner, E. 2000. "The remarkable life of WEB Du Bois." *The Journal of Blacks in Higher Education*, Winter, 130.

Gillborn, D. 2006. "Rethinking white supremacy: Who counts in 'whiteworld'." *Ethnicities*, *6*, 318–340.

Gillborn, D. 2013. "Interest-divergence and the colour of cutbacks: race, recession and the undeclared war on Black children." *Discourse: Studies in the Cultural Politics of Education*, 34(4), 477-491.

Grossman, A. 2001. Neither Dead Nor Red. London: Routledge.

Guinier, L. 2004. "From racial liberalism to racial literacy: Brown v. Board of Education and the interest-divergence dilemma." *Journal of American History*, 91(1), 92, 118.

Harris, C. 1993. "Whiteness as property." Harvard Law Review, 106(8), 1709-1791.

Hartman, A. 2008. *Education and the Cold War: the Battle for the American Dream*, Palgrave: London.

Hill, M. 1993. Archival Strategies and Techniques. London: Sage.

Kim, C., Losen, D. and Hewitt, D. 2010. *The School-to-Prison Pipeline: Structuring Legal Reform*. New York: New York University Press.

Kristensen, K. 2008. 'The absolute protection of our citizens': critical infrastructure

protection and the practice of security, In: Cavelty, M. and Kristensen, K. (eds.) *Securing the Infrastructure: Critical Infrastructure, risk and (in) security.* London: Rouledge.

Kryder, D. 2000. *Divided Arsenal: Race and the American State During World War II*. Cambridge: Cambridge University Press.

Kupchik, A. and Ellis, N. 2008. "School Discipline and Security: Fair for All Students?" *Youth and Society*, 39, 4, 549-574.

Kupchik, A. and Ward, G. 2014. "Race, Poverty and Exclusionary School Security. An Empirical Analysis of U.S. Elementary, Middle and High Schools." *Youth Violence and Juvenile Justice*, 12, 4, 332-354.

Ladson-Billings, G. 2006. "From the Achievement Gap to the Education Debt: Understanding Achievement in U.S. Schools." *Educational Researcher*, 35, 7, 3-12.

Leonardo, Z. 2009. Race, Whiteness, and Education. London: Routledge.

López,I. 2010 "Post-racial racism: Mass Incarceration in the Age of Obama." *California Law Review*, 98, 3, 1023-1074.

McEnaney, L. 2000. *Civil Defense Begins at Home: Militarization meets everyday life in the fifties.* Princeton, NJ: Princeton University Press.

Motion Picture 60940: 311.2, 'The A+ School', 1966 (Department of Defense), Records of the Federal Emergency Management Agency, 311.2, National Archives II, College Park, University of Maryland (NACP).

Motion Picture 60953:311.15, 'Civil Defense in Schools', Office of Civil and Defense Mobilization, (1958), Records of the Federal Emergency Management Agency, 311.2, National Archives II, College Park, University of Maryland (NACP)

Motion Picture 61028: 311.84, 'Texas Had A Brand New School' (The Protected School), 1965, (Office of Civil Defense), Records of the Federal Emergency Management Agency, 311.2, National Archives II, College Park, University of Maryland (NACP)

National Commission on Safety Education 1966. *Current Status on Civil Defense in Schools with Guidelines for Action*. Washington DC: NCSE.

Patterson, M. 1998. 'America's Racial Unconscious: The Invisibility of Whiteness', In: Kincheloe, J., Steinberg, S., Rodriquez, N. and Chennault, R. *White Reign: Deploying Whiteness in America*. New York: St Martin's Press.

Preston, J. 2009. "Preparing for Emergencies: citizenship education, whiteness and pedagogies of security" *Citizenship Studies*, 13, 187-200.

Preston, J. 2012. Disaster Education. Rotterdam: Sense Publishers.

Preston, J., Chadderton, C. and Kitagawa, K. 2014. "The 'state of exception' and disaster education: a multilevel conceptual framework with implications for social justice." *Globalisation, Education and Societies*, 12, 3, 1-20.

Preston, J.; Avery,B.; Chakrabarty,N. and Edmonds,C. 2011. "Emergency preparedness as public pedagogy: the absent presence of race in 'Preparing for Emergencies'." *International Journal of Lifelong Education*, 30, 749-762. doi: 10.1080/02601370.2011.625518.

Risen, C. 2014. *The Bill of the Century: The Epic Battle for the Civil Rights Act.* New York: Bloomsbury.

Rose,K. 2001. *One Nation Underground: The Fallout Shelter in American Culture*. New York: New York University Press.

Working agreement between Department of Health, Education and Welfare (DHEW) and Federal Civil Defense Administration, continuing responsibilities assigned to the Office of Education, Book S: records of Dean Snyder, Defense Delegations, FCFA / DHEW, 1953 – 54, Files of Dean Atlee Snyder, 1940 – 1958, General records of the DHEW,1935-1981, RG 235, National Archives II, College Park, University of Maryland (NACP).