PART 1

Continuities and Change

Children are often thought of in terms of change, representing the future. Indeed, this is one of the stable features of modern discourses on childhood. In a similar manner, since the early days of print, media have been defined and debated in terms of innovation. These continual mappings of change are themselves indications of the dilemmas and challenges which are taken up and analysed in this first part of the *Handbook*. The contributors set children's media culture within a historical perspective in order to trace the continuities and possible changes in the ways in which these cultures have been positioned by adults and practised by children. In so doing, they stress that historical analysis is a necessary antidote to any simple accounts of the relations between children and media, balancing the often grand claims made regarding the beneficial or detrimental implications for children. In pursuing this main argument, the authors range widely across theoretical conceptions, from a mainly deconstructionist focus on discourses on childhood (Prout) to a mainly socio-cultural focus on practices of appropriation (Fleming). These four chapters were selected in order to display some of these key conceptual approaches and to represent some of the main fields pursuing historical studies of the relations between childhood and media culture (sociology, visual culture, literary criticism, film studies). In their differing accounts, the authors take up a number of key questions and debates of significance for anyone wishing to engage with children's media culture from a time-based perspective. This introduction maps out some of the questions and debates that underpin most historical studies of children's media culture in order to clarify the theoretical and empirical landscape and draw out some of the main implications for future research.

The first argument concerns the very notion of historical enquiry itself. A popular claim is that we need systematic studies of the past in order to understand the present better, and even be in a position to predict the future. Historical studies are based on an underlying understanding of research in which comparisons across time appear valid, and so a salient issue is on what grounds such comparisons may be made. Most prevalent through much of the past two centuries has been a teleological view of history whereby historical development is understood as new events adding to existing states of affairs like pearls on a string. Such a view frames standard histories of childhood (Aries, 1973; Walvin, 1982) as well as most media histories (Briggs and Burke, 2002). Inspired by philosophers such as Nietzsche and Foucault, historical scholarship from the 1980s onwards began to argue for the adoption of an archaeological view of history. Here, the focus is on deconstruction rather than construction, on detecting possible sediments of practices and

excavating conflicting claims to power, with the present operating as the starting and end point of enquiry. This change of focus is part of a wider scholarly reorientation in the history of science towards shifting ramifications of power and claims-making, and it surfaces, for example, in new histories of women (Offen *et al*., 1991), children (Stearns, 2006) and ethnic minorities (Gilroy, 1993). In media studies, the clearest examples of this more deconstructionist approach appear in histories of technology and new media (Marvin, 1988; Winston, 1998).

The archaeological approach to history has served to undermine a determinist view of both childhood and media, and it has offered a welcome reflexive component to historical scholarship by insisting that analytical complexity is no less when studying the past that in understanding the present. In so doing, histories of childhood, for example, have gained in analytical insight by tracing commonalities across generations and by highlighting shifting definitions. For example, the pre-modern definition of youth according to social status may be resurfacing in late-modern societies permeated by discourses of youthfulness to a degree that it becomes less relevant to define youth in terms of age, as has been common in modern, industrialized societies.

The archaeological approach to history tends to offer fairly abstract, macro-level forms of analysis. Its popularity over the past two decades has meant that academic attention has moved away from studying children's media and their social uses in a historical context towards critiquing discursive constructions of childhood and media culture. This shifting focus brings into view another key question in historical scholarship. Is it at all possible to make distinctions between historical discourses and practices, or, as Swedish ethnologist Orvar Löfgren terms it, Sunday culture and everyday culture (Löfgren, 2001)? The authors in this part of the *Handbook* offer differing answers, ranging from Prout's meta-discursive stand in deconstructing historical notions of childhood as varying inflections of a dichotomous discourse of modernity to Reid-Walsh's incisive and eye-opening empirical study of analogies of interactivity in children's media since the advent of moveable books in the eighteenth century.

If it is, indeed, possible to conduct historical studies of children's media and their social uses, then we may begin to ask more pragmatic questions about what it is we may learn about today's media (and even tomorrow's) by investigating media in the past. How have media operated in children's everyday lives in the past, and may we identify similar functions today? Which aspects of children's relation to media have changed and for what reasons? Comparing media cultures across time is to begin asking questions about the grounds on which we may study empirical continuities and changes. The possible correlations between continuity and change remain among the most vexed debates in historiography; this is perhaps the historians' equivalent of social science debates about structure and agency. As Prout (this volume) cogently states, these very oppositions are not neutral conceptualizations, but are modern constructions. He links the discussion of continuity and change to a wider epistemological debate on universalism and particularism in which universalism is linked to biological laws and particularism is linked to socio-cultural factors; and he argues for an inclusive understanding of childhood as 'a heterogeneous biological-discursive-social-technological ensemble'.

This inclusiveness is productive, in that it stresses the value of conceptual complexity in understanding childhood. Still, in terms of empirical analysis, it leaves the problematic of development, or formative change, unresolved; or, rather, it transports it into a discussion of universalism and particularism which may be helpful in framing research questions but which is less felicitous in seeking to unpack more mundane dimensions of empirical analysis. So, the question of continuity and change raises fundamental epistemological issues about the knowledge claims made within different scientific paradigms (Danermark *et al*., 2002;

Schrøder *et al*., 2003); and it points to the necessity of defining which dimension of analysis are appropriate for conducting particular types of research. The contributions to this part of the *Handbook* represent forms of analysis ranging from macro-level (Prout, Holland) to meso-level (Fleming) and micro-level (Reid-Walsh).

All contributors to this part of the *Handbook* endorse the formative role played by media in children's lives both today and in the past. Prout emphasizes the conceptual importance played by Vygotsky's notion of material and symbolic technologies, including language, text and images, mediating between inner and outer realities through joint practices. Fleming and Reid-Walsh both note how technologies of play, such as toys, help constitute modern, Westernized definitions of childhood as an age-bound phase of life defined by the removal from economic production, yet preparing for its gendered realities; and they both offer insightful examples of the conflation of toys as objects of play and media as symbolic resources for play. The insistence on (mediatized) play as a defining feature of modern childhood is specifically linked by Holland to the visual representation of children as playful innocents set in the midst of nature, supposedly untainted by civilization and its perceived discontents. Speaking about 'the marketing of sentiment', she notes how this imagery has been reappropriated by media corporations for posters, press footage, and film, offering contemporary audiences a mental map against which other images may be set: of the deviant, the rebellious, the promiscuous, the victim.

When conducting empirical historical studies, the opposition between continuity and change quickly transforms into a more mundane question of defining and understanding the relations between differences and commonalities. Moveable books of the early eighteenth century display 'strange' characters such as Clown and Columbine; dolls dating from the 1920s seem oddly lifeless to an untrained eye; while images of teenagers from the 1950s look exotic with 'strange' postures and hair style. Historical scholarship immediately prompts discussions, not only of empirical contextualization and its limits, but of analytical contextualization and its possibilities. How much does the researcher need to know about which contextual aspects in order to make a valid analysis of, for example, children's film of the 1920s? Knowing very little, one detects only difference; knowing too much, one may recognize only commonalities. There is room for reflection on these demarcations in the following chapters, since they illuminate various historical moments in children's culture and offer analytical insights about childhood across a wide temporal and spatial spectrum.

The authors in this first part of the *Handbook* make a claim for the usefulness of historical studies in understanding the complexity of children's mediatized cultures of today. In doing so, they also illustrate important debates for future study. First, all the accounts are by adults and are framed by adult eyes and experiences, while children's own voices are absent. Attempts have been made by oral historians and others to collect interviews with children, their diaries and autobiographies (Stickland, 1973; Burnett, 1982) and this material, though piecemeal and partial, may operate as a contextual frame for more child-centred histories of children's culture, including irreverent or subversive uses of official cultural forms handed down to the young. When it comes to historical takes on children's media cultures, children's own accounts are even sparser, and historical audience studies focusing on children are few and far between (Drotner, 1988).

The bias of sources may become even more difficult to tackle in future. For while many children around the world produce an abundance of mediatized communication today, just how many text messages or chat strings are stored, and by which criteria? How will we know about the significance young people pay to being offline or online, if studying their social uses is decoupled from their textual practices? The current focus in internet and mobile research on political and economic implications of new media and on the more spectacular cultural practices may

easily result in a research perspective where children's own voices figure just as partially as in research on children's cultures of the past.

The chapters in this first part of the *Handbook* attempt to convey a holistic research perspective in studying children's media cultures. Such an ideal prompts discussions over social context and its limits, as we have noted. It equally prompts discussions on textual boundaries. While it is widely recognized that today's complex empirical media landscape requires equally complex theoretical approaches (Drotner, 2002), it is less debated what this entails for studies of children's media cultures in the past. Can we speak about a simpler media landscape in, for example, the 1920s than the 1960s; and, if so, does this make it more valid to select a single medium or genre when studying the 1920s? Questions such as these beg us to reflect on the interlocking and transmuting processes of mediatized meaning-making, on the ways in which textual practices have been interlaced also in the past (Bolter and Grusin, 1999; Peters, 1999). Evidently, the challenges are no less when studying children's media practices. As Fleming notes, reflecting on his own reminiscences of a favourite toy, to articulate the child's perspective at the time would not be accessible to any research technique in the methodological toolkit.

In this introduction we have mapped out some of the main challenges that are involved when approaching the relations between children and media from a historical perspective. A number of these issues tread on ground familiar to media studies and historiography in general. Others are more specifically linked to the particular socio-cultural position of children in modern, Westernized societies. This demonstrates that the research agenda that the authors of this first part draw up has much to offer major research traditions, just as it feeds on their conceptual advances. Children's media culture, now, as in the past, cannot feasibly be understood in splendid isolation from other scholarly insights and interventions.

REFERENCES

Aries, P. (1973) *Centuries of Childhood*. Harmondsworth: Penguin. (Orig. 1960.)

Bolter, J.D. and Grusin, R. (1999) *Remediation: Understanding New Media*. Cambridge, MA: MIT Press.

Briggs, A. and Burke, P. (2002) *A Social History of the Media: From Gutenberg to the Internet* Cambridge: Polity.

Burnett, J. (ed.) (1982) *Destiny Obscure: Autobiographies of Childhood, Education and Family from the 1820s to the 1920s*. London: Allen Lane.

Danermark, B., Ekstrom, M., Jokobsen, L. and Karlsson, J.C. (2002). *Explaining Society: Critical Realism in the Social Sciences*. London, Routledge.

Drotner, K. (1988) *English Children and Their Magazines, 1751–1945*. New Haven, CT: Yale University Press. (Orig. 1985.)

Drotner, K. (2002) 'New media, new options, new communities? Towards a convergent media and ICT research'. *Nordicom*, 24(2–3): 11–22 (rpt. in *Nordicom Review*, 23(1–2) (2002): 11–22).

Gilroy, P. (1993) *The Black Atlantic: Modernity and Double Consciousness*. Cambridge, MA: Harvard University Press.

Löfgren, O. (2001) 'The nation as home or motel? Metaphors and media of belonging'. *Yearbook of Sociology*, 2001: 1–34.

Marvin, C. (1988) *When Old Technologies Were New: Thinking About Electronic Communication in the Late Nineteenth Century* Oxford: Oxford University Press.

Offen, K., Roach Pierson, R. and Rendall, J. (eds) (1991) *Writing Women's History: International Perspectives*. Basingstoke: Macmillan.

Peters, J.D. (1999) *Speaking into the Air: A History of the Idea of Communication*. Chicago, IL: University of Chicago Press.

Schrøder, K.C., Drotner, K., Kline, S. and Murray, C. (2003) *Researching Audiences*. London: Edward Arnold.

Stearns, P.N. (2006) *Childhood in World History*. New York: Routledge.

Stickland, I. (1982). *The Voices of Children, 1700–1914*. Oxford: Blackwell.

Walvin, J. (1982). *A Child's World: A Social History of English Childhood, 1800–1914*. Harmondsworth: Penguin.

Winston, B. (1998) *Media, Technology and Society: a History. From the Telegraph to the Internet* London: Routledge.

1

Culture–Nature and the Construction of Childhood

Alan Prout

> … simultaneously real, like nature, narrated, like discourse and collective, like society (Latour, 1993: 6).

INTRODUCTION

How childhood has been constructed and understood, both contemporaneously and in the past, is a key concern for scholars of children and the mass media. Changing childhood and changing media, and the shifting and reciprocal relationships between them, is the context for many of the different strands of study discussed in this volume. In this chapter I will focus on one side of that relationship: the constitution of childhood as a phenomenon and the problem of studying its complexity, heterogeneity and ambiguity. The purpose of this, however, is to sketch out the theoretical grounds for an enhanced dialogue between childhood and media studies.

Although there were antecedents, the study of childhood in its modern form is often understood as beginning with Darwin's efforts to understand child development, an effort about what today would be referred to as evolutionary biology. The heyday of Child Study, as the movement inspired by Darwin came to be known, lasted from the 1880s through to the second decade of the twentieth century, though its influence lasted much longer than this. During the intervening period, childhood has continued to exert a fascination over scholars from a wide range of disciplines, a range so wide in fact that it encompasses the natural and social sciences as well as the humanities. Over this time, the leading discipline (in the sense that it imparted a new vigour to the effort) has changed, with the baton being taken up at various times by medicine, psychology and sociology. Along the way, important, indeed crucial, insights have come from anthropology and history, whilst many other disciplines (for example, geography and literary studies) have made significant contributions. Today, childhood studies is emerging as a distinct multi- or inter-disciplinary field of study in its own right. Its ambition and promise, difficult though it is to accomplish, is to draw on these different disciplinary perspectives, holding

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them together in a more or less coherent whole.

One way to understand the emergence of contemporary childhood studies as an inter- or multi-disciplinary field is to trace its historical development through the nineteenth and twentieth centuries. In the chapter, therefore, I will sketch its different moments and phases. In particular, I will examine three key strands of thinking: the Darwin-inspired Child Study movement and the later re-emergence of an evolutionary biology of childhood; the creation of paediatric medicine, its relationship with child psychology and its extension into concerns with the social conditions of children's lives; and, finally, the development of social constructionist accounts of childhood at the end the twentieth century.

At each phase of its emergence, the perspective, with both its strengths and limitations, of whatever discipline happened to be dominant at a particular time shaped how children have been studied. Nevertheless, despite the waxing and waning of disciplinary contributions, the process of forming childhood studies took place in a framework characteristically modernist in its mode of thinking. According to Bauman (1991), the basic project of modernity was the search for order, purity and the drive to exclude ambivalence. As a consequence Bauman (1991: 14) writes:

> The horror of mixing reflects the obsession with separating… The central frame of both modern intellect and modern practice is opposition – more precisely, dichotomy.

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Modernist thinking is marked by the proliferation of such dichotomies. The division between childhood and adulthood, and their association with various qualities (such as rationality, dependency and competence) is an example of this. It is also well illustrated by modernist social theory (see Jenks (1998)), which proceeds by dividing the social world into discrete aspects, each set in relation to its opposite: structure versus agency; local versus global; identity versus difference; continuity versus change; … and so on. A particular dualism, that of nature and culture, is, however, not only a very important axis of modernist thinking, but also has, I want to suggest, a particular salience to the trajectory taken by childhood studies during the modern period. This has, in its different phases, tended to zigzag between the poles of culture and nature. It is, I suggest, by breaking out of the conceptual limitation of this culture–nature opposition that childhood studies can traverse and project itself across a wide range of disciplines. However, the means that allow thinking of childhood in a complex way, as a biological–discursive–social–technological ensemble, have taken almost the whole of the twentieth century to appear, assembling and accreting along a circuitous route.

Why should such a theoretical reconfiguration be of concern to those interested in children and the media? The answer to this question lies in the relationship between childhood and media studies. A number of media studies scholars (for example, see Hengst (2000) and Livingstone (1998)) have been critical of contemporary childhood studies for its neglect of the media in children's lives. In this vein, for example, Buckingham (2000: 118) writes:

> … it has paid very little attention to culture, to the media, or even children's use of commercially produced artefacts more generally… In the process, it has effectively neglected the mediated nature of contemporary childhood.

True, this criticism is aimed specifically at that relatively recent strand of childhood studies that has been shaped by the sociological tradition. Nevertheless, the point is well made. For, if contemporary studies of children have neglected mediatization and the artefacts associated with it, this is, I contend, part of a more general tendency in childhood studies to eclipse the role of material entities (such as bodies, technologies, artefacts) in constituting childhood. In line with much sociological thinking, emphasis is placed more on the linguistic and symbolic aspects of social construction than on the material aspects, especially technological aspects. Unlocking that conundrum, one deeply entangled with modernity's tendency to hold nature and culture in opposition, is, I suggest, in

the interests of both childhood and media studies.

Such a move is currently being made within childhood studies. Prout (2000, 2005) and Lee (2001), for example, draw on ideas such 'actor networks' (Latour, 1993) or 'assemblages' (Deleuze and Guattari, 1988) to explore the potential for understanding childhood as a complex, *heterogeneously* constructed phenomenon. Such concepts break down the boundaries that separate the material and the discursive, the biological and the cultural, the technological and the social, and open up the possibility of merging these different perspectives and their disciplinary correlates. My suggestion is that both childhood and the mass media will benefit from such an approach and that it could form a set of shared conceptual resources that will deepen their dialogue.

CHILDHOOD AND MODERNITY

Before enquiring into the trajectory that childhood studies has taken it is necessary to note that its emergence took place during a historical period when childhood, or at least the modern form of it, was itself under construction. The ground-breaking research of the French historian Aries (1962) is generally credited with first recognizing the historical specificities of childhood. Later work (Archard, 1993; Cunningham, 1991; Hendrick, 1997; Heywood, 2001) has questioned some of his assumptions, methods and conclusions. Nevertheless, the idea that between the seventeenth and twentieth centuries there took place the construction of a distinctively modern conception of childhood remains a powerful one. This modern form of childhood was characterized by its heightened separation from adulthood, a state of affairs accomplished through a labour of division carried out in many different spheres. One very important arena of this was the prolonged process by which children, first in Europe and the USA and then increasingly but very unevenly across the globe, were excluded from full-time paid employment but included in compulsory schooling (Cunningham, 1991; Lavalette, 1994; Cunningham and Viazzo, 1996; Hendrick, 1997; Heywood, 2003). This process, which took most of the nineteenth century and some of the twentieth century to achieve even in the then industrializing societies, was a continuation of the course of events described by Aries. By the end of the nineteenth century, conceptions of children as innocent, ignorant, dependent, vulnerable, incompetent and in need of protection and discipline were widespread. In general terms, by the start of the twentieth century these ideas had been diffused through most of the different social classes and groupings within industrial societies. They supported and were, in turn, reinforced by the effort to construct the school and the family as the 'proper place' for children. This emerged as an intended and unintended effect of many different strategies and practices, including the struggles of the early labour movement (Montanari, 2000), attempts at social reform and efforts at 'child saving' (Platt, 1977; Pearson, 1983). The overall effect of these practices was the establishment of the idea that children do not properly belong in the public space but should be located in the private domestic space of home or in the specialized and age-segregated institution of the school and related institutions. This idea of childhood, as an ideal if not a reality, has been propogated globally. As Cunningham (1997: 7) comments:

> … between the late seventeenth and mid-twentieth centuries there occurred a major and irreversible shift in the representations of childhood, to the point where all children throughout the world were thought to be entitled to certain common elements and rights of childhood.

DARWINISM AND THE CHILD STUDY MOVEMENT

Childhood studies, then, emerged alongside the modern idea of childhood. As noted above, its beginnings are often located in Darwin's work, produced at a time when the mass of children did not in fact experience childhood as a distinct, protected and extended period of 'growing up'. This kind of childhood was

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confined primarily to aristocratic children and those of the emerging middle classes. Nevertheless, childhood as an idea and as an ideal against which the lives of poor children were measured exercised an animating influence. Darwin seems to have been caught by its fascination. Based on observations of his son, he published two books, *The Expression of Emotions in Man and Animals* (1872) and *Biographical Sketch of an Infant* (1877). These triggered a wave of interest in child development in the form of the Child Study movement. In large measure, this Darwinian legacy tied childhood studies in its earliest phase to a largely biological view of childhood. Hendrick (1997: 48) sums up the situation thus:

> In effect, Child Study helped to spread the techniques of natural history to the study of children, showing them to be 'natural creatures'; through its lectures, literature and the practice of its influential members, it popularized the view that the child's conception differed from that of adults, that there were marked stages in normal mental development; and that there were similarities between the mental worlds of children and primitives….

The Child Study movement *per se* was in decline by the first decade of the twentieth century. Its legacy was its emphasis on the biological roots of behaviour and its preference for an (albeit nineteenth century) idea of scientific knowledge – themes that continued, primarily through polarized discussions about 'nature' and 'nurture', to swirl around childhood studies until the present day. However, it was not until the end of the twentieth century that a more completely realized evolutionary biological account of childhood started to be expounded. Like Darwinist Child Study, this has its starting point in the idea that humans are a species with an evolutionary history, but it adds elements from contemporary mathematics (especially games theory, see Maynard Smith (1982) and Axelrod (1984)), primatology (Pereira, 2002), and physical anthropology (especially work on the co-emergence of human language, sociality and tool use – see Ingold (1993)).

Through this combination it is suggested that the observation that some species have a juvenile stage in which individuals are no longer dependent on parental care for survival but are not sexually mature is an important evolutionary puzzle in search of a solution. At first blush such a phenomenon would seem contrary to evolutionary theory, because the main direction of evolutionary pressures would seem to be towards reproducing as much and as quickly as possible – a pattern that is, indeed, seen in many species. However, as Pereira insists, the emergence of a juvenile stage of development can also be understood as an evolutionary strategy (Pereira, 2002: 26):

> The general function of animal juvenility is modulation of growth and the onset of reproduction. In many cases it functions to maximize the rate and/or extend the duration of growth, therefore allowing it to escape the period during which small size renders it particularly vulnerable to predation and virtually ineligible to compete for reproductive opportunity …. Conversely, when small size entails little cost or when large size is penalised by the environment, juvenility often is abbreviated or does not occur in a life history. Juvenility is also diminished when adult size can be attained by or soon after the exhaustion of parental provision, as in many birds and mammals, or when early reproductive effort does not compromise further growth.

In this sense, an extended period of juvenility in humans, longer than that found even in other primates, is a key feature of the evolution of the human species and is associated with other species characteristics, such as the development of sophisticated linguistic communication and the use of tools. This human evolutionary strategy can be understood as resulting in a long life, a long period of immaturity, few offspring but high levels of care, survival, mental agility and culture. The distinctive human pattern of growth and development over life course has some specific features that make it different from even close relatives such as chimps. In particular, Bogin (1998) argues that, compared with other primates, human evolution has involved the creation of a new phase, which he terms 'childhood', in the ontogenic pattern. For example, the human child uses an enormous proportion of metabolic effort on brain development,

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greater even than chimps, and this continues rapidly after birth. Human children, therefore, display a pattern involving very extended juvenility, the intense acquisition of skills and a prolonged period of socialization and developmental plasticity. As a reproductive strategy this allows mothers to share care of young with other competent members of the social group (fathers, grandmothers, other young), freeing them to give birth to other young. Developmental plasticity allows a long period of interaction between the individual and the environment, leading to greater adaptedness and greater survival rates.

CHILDREN, BIOPOLITICS AND THE NATION STATE

At the end of the twentieth century, this reappearance of an evolutionary biological account of childhood, together with new ideas about the role of language, technology and material artefacts in human life (see also below), created the possibility of thinking of childhood as a heterogeneous biological–discursive–social–technological ensemble. However, this possibility took almost the whole of the twentieth century to appear, unevenly accreting along a complex and circuitous route. So, at the *start* of the twentieth century the proximal effect of the Child Study movement was paradoxical, for, despite its roots in a biological conception of the child, it helped to create an intellectual climate in which childhood was no longer seen to occur naturally. It did this by promoting the idea that childhood needed the attention and intervention of experts. The opening of this space accounts for many of the developments in the study of children in the decades up to and beyond the Second World War. What started as an essentially biological project, locating childhood as a natural phenomenon, was marked by a growing awareness of the social and cultural ramifications of childhood. Childhood studies thus described an uneven trajectory during which it gradually accreted such elements.

However, at the time, viewing children as natural primitives played into nineteenth and twentieth century concerns with Empire and race. The child became an instance of the 'Other', a homologue for all such 'primitives' and a demonstration of the gulf that divided the 'civilized' from the 'uncivilized' (see Christensen (1994)). This divide was applied both to internal social divisions, such as the abiding concern of nineteenth and twentieth century social policy with how to handle the 'troublesome classes', and to external 'Others', like the subjects of imperial rule, deemed racially inferior. However, alongside its ideological kinship with such ideas, the Child Study movement can also be seen as part of another key development of the nineteenth century: the construction of children as a concern of the Nation. The advent of compulsory schooling in the industrializing societies of Europe and North America gave children as a social group an unprecedented visibility. Much 'biopolitical' concern, to use Foucault's term, was generated through research and discussion about the physical and mental state of what came to be seen as a national resource for international military and economic competition. Children became a target for investment and were seen as the 'children of the nation' (Hendrick, 1997: 49).

Armstrong's (1983) work suggests that this trajectory can be seen particularly in the development of paediatric medicine from the late-nineteenth to mid-twentieth century. A crucial step in it was the migration of child surveillance from the clinic to the community setting, a move that created an enormous new terrain for panoptical practices. This, he writes:

> … further refined this (medical) gaze, these techniques of analysis, to fix them, not on individual bodies so much as the interstices of society; (it) was a mechanism of power which imposed on the spatial arrangements of bodies the social configuration of their relationship … a device, above all else, for making visible to constant surveillance the interaction between people, normal and abnormal, and thereby transforming the physical space between bodies into social space traversed by power. At the beginning of the

> twentieth century the 'social' was born as an autonomous realm. (Armstrong, 1983: 9–10)

Armstrong is, of course, not the first to borrow this account of the emergence of disciplinary society from Foucault. Donzelot (1979) makes essentially the same point in relation to the surveillance of the family in France. As he points out, children were the points of access for the surveillance of the French family, the great moral cause that sanctioned the breaching of its privacy. In the USA too, child saving was an influential and important social movement (Platt, 1977) that opened up the family to inspection.

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In addition to health and the family, children were also enmeshed in another set of panoptical powers, exercised through mass schooling. Indeed, all the areas of surveillance overlapped. The understanding of childhood disease as a specific and separate branch of medicine emerged alongside the extension of the modern ideal of childhood to greater and greater numbers of children from a wider and wider range of social classes. Through the intersection of educational and medical regimes childhood became one of the main targets for new practices of preventive medicine, applied, for instance in surveillance practices such as health visiting, school health inspections, clinics for mothers and children, and so on. By the first quarter of the twentieth century, then, mechanisms were in place in the UK, and with parallels in other countries, through which the health of children could become a topic in its own right and be monitored, studied and measured in systematic ways.

However, it was not until the Second World War that a panoptical device was created through which the social aspect of childhood was brought to a high level of refinement. This device was the child development survey. In the UK, the survey technique can be traced back to the nineteenth century, where the work of Rowntree and Booth springs immediately to mind, and in the medical sphere was developed in the inter-war period. Studies of child development had been carried out in the USA by Gesell during the 1920s, although these were still relatively small samples and often carried out in special observation domes rather than in the settings and communities in which the children lived. However, the surveying of children in the family and community found its clearest expression internationally in the post-1945 era with the institution of the longitudinal survey. For example, in England, four main studies have been started, in 1946, 1958, 1970 and 2000. These continue to track cohorts of children and their descendants. The 1958 study, for example, is currently tracking the grandchildren of those born at the start of the study. These longitudinal studies had their counterparts in countries around the world and were added to by many cross-sectional studies looking at different aspects of child growth, development and rearing. During the second half of the twentieth century, then, a vast amount of data on many of the key physical, behavioural and emotional patterns of growth were established, especially for children growing up in the industrialized countries. Normal development and growth, the product of hundreds of thousands of individual measurements, was used as the template against which the abnormal could be identified.

In such studies the development and growth of nationally representative samples of children could be tracked over time. Through this the object that was constructed was not the pathology of the individual child, as had proliferated in the pre-war period, but a picture of the 'normal child'. It was this emphasis on the normal, together with the developmental perspective, that gave paediatrics its distinction as a medical specialism. Even more crucially, through this it was possible to draw together a range of disciplinary inputs under the umbrella of paediatrics:

> … such diverse aspects of growth as the bio-chemical and immunological, the intellectual, the emotional and the social. (Apley, cited in Armstrong (1983: 59))

This broad multidimensional perspective could be and was readily endorsed by social

scientists. Indeed, such a statement describes the arc from the biological to the social, which paediatrics had described over the previous period.

Interwoven in the growth and extension of medical studies of children was the emergence of psychology, the discipline that perhaps most directly took on the mantle of the Child Study movement. The history of child psychology in the twentieth century is a highly complex matter, which it is here possible merely to gesture towards. In the UK, as well as other industrial societies of the time, its growth overlaps substantially with the developments in paediatrics described above. In 1944, for example, the British Paediatric Association created a Child Psychology Sub-Committee concerned to challenge too firm a line between physical and psychological disabilities. Illingworth's (1986) landmark paediatric text, *The Normal Child*, was as concerned with psychological development as it was with the physical, and these concerns were both rolled up into the wave of surveys that aimed to establish patterns of growth and their correlates.

Whilst child psychology has developed a large number of different theoretical schools and strands (Freudianism, Skinnerian behaviourism, Piagetian developmentalism, Vygotskian activity theory and so on), its concern with the individual child won an almost hegemonic position among the emerging social sciences of the early twentieth century. As Rose (1989) has suggested, its wide range of topics and approaches to children, which he terms the 'psy complex', became closely entwined with the emergence of health and welfare policies and practices around children. These too were, according to Rose, a form of biopolitics through which the state and other organizations sought to define and regulate normality. Like paediatricians, psychologists set about examining and testing children in order to define the 'normal' range of functioning and behaviour. In the process, they constituted what was abnormal, pathological and in need of intervention. These processes straddled the main locales of children's lives, but they were especially concentrated in nurseries and schools. Their object of intervention was often the family, and, as many have noted, the child became the entry point for the state and other agencies into the family. From the 1920s onwards, and up to the present day, there was a proliferation of professions concerned with identifying children's abnormality and attending in some way to it: Child Guidance Clinics, educational psychology services, school attendance officers and so on. These practices have, in turn, demonstrated a huge appetite for childhood studies, represented in the libraries of books and papers, and the hundreds of professional associations and research institutes that are its inheritance.

However, towards the end of the twentieth century there was growing academic criticism of how psychology handled childhood. This came from both within and outside psychology as a discipline. Rather than seeing childhood as a universal constant, whether biological or cultural, in the post-Aries intellectual landscape it became possible to think of childhood as a variable and changing entity. This insight was greatly strengthened by the findings of social and cultural anthropology, which reinforced this possibility. These arguments marked psychology in many ways, such that by the 1970s a critical psychology began to emerge that was much more sensitive to the social context of individual behaviour. Significant and influential statements of this new thinking in psychology were, for example, found in volumes edited by Richards (1974) and Richards and Light (1986). In the second collection, Richards and Light (1986: 3) commented:

> A central theme in the earlier volume was the criticism of a psychology based on universal laws that were supposed to hold good across all societies and at all historical times. It was argued that terms such as "the mother" and "the child" not only conveyed a meaningless generality but misrepresented the relationship between individuals and social worlds and portrayed social arrangements as if they were fixed laws of nature.

Another statement of this approach came from Bronfenbrenner (1979) in the so-called

'ecological model' of child development, which envisions child development at the centre of a set of social contexts, including local ones such as the family, household and neighbourhood, and more distant ones such as social structure and policy. Another, perhaps more radical, has emerged from Vygotsky's (1962, 1978) concern to develop a psychology that could encompass social and biological concerns, and which assigns crucial importance to the mediating role of artefacts and technologies. According to Vygotsky, society provides the symbolic tools, both material and linguistic, which shape the development of thinking. Cognition can, thus, not be separated from the conditions and practices of life with which a child grows up. Indeed, thinking is not seen as located in the head of an individual, but in the interaction, including the material practices, taking place between the individual and the collectively constituted and historically situated culture created through joint activity (for example, see Engeström (2001)).

SOCIAL CONSTRUCTIONISM AND THE SOCIOLOGY OF CHILDHOOD

By the 1980s it was clear that childhood studies, through its engagement with children as biological and psychological entities, had brought itself, in both paediatrics and psychology, and the practices of biopolitical surveillance associated with them, to a position where the importance of society and culture was clearly recognized. This is not to say, however, that the way in which the social was incorporated into thinking was necessarily adequate. Social life was usually imported into medical and psychological thinking under the rubric of a shared scientific method, which claimed the production of objective and value-free facts in relation to social, psychological and biological phenomena. Although the outer reaches of these disciplines may have started to question the universal applicability of science, in general terms social life was admitted to knowledge only on the same terms as nature. Furthermore, the accretion of the social to thinking about childhood did not happen uniformly. The process was more akin to a genealogy in which certain branches or practitioners of the disciplines concerned were able to create new, more socially aware versions of their craft whilst leaving other streams of thinking more or less untouched.

The picture was one in which the addition of the social to the biological and psychological formed a blurred and fragmented mosaic. Perhaps the underlying reason for this was that, in general (and apart from pioneers such as Vygotsky, who was only just becoming recognized in Western thinking), the methodology was generally additive. In a characteristically modernist mode of thought, nature and culture were thought of as two more or less equivalent but opposite principles. The key questions were about 'how much' of each could be seen as constituting the mix. The implicit dualism of such an additive method is well captured by Cole's (1998) discussion of the three models of nature and culture that he sees as dominating theory about children's psychological development in the twentieth century. Each sees an interaction between 'biology' and 'culture', but gives a different weighting to them. The first is represented by Gessell, who recognizes both biology and culture as important but who places most weight on endogenous processes of biological growth. In this view, whilst the social environment can affect the intensity and timing of development it cannot influence its basic direction, because this is determined by inherent, maturational mechanisms. The basic picture is the same in the second stream of psychological thought, behaviourism, except that in this case the estimate of quantity is reversed. The biological material is likened to an inert lump of clay, which is shaped and sculpted by the action of operant conditioning, whose source is the social environment. The third, represented by Piaget, is a somewhat more sophisticated but still dualistic account. Here, equal weight is given to biological and social environmental factors, which are pictured as interacting together, with individuals also an active factor in shaping

their developmental pathway as they adapt to their environments.

Inadequate though these dualistic formulations may be, they each had the merit of viewing the child as heterogeneous, as somehow both biological and social. This additive approach to culture and nature was, however, to be radically disturbed in the final decades of the twentieth century through the appearance of an influential set of ideas that came to be known as 'social constructionism'. In its most general sense this term refers to what is almost axiomatic in the sociological tradition: that reality is made in specific social circumstances, varies across both history and culture, and is open to change, both intended and unintended. Building on the historical insights of Aries (1962), social constructionism in childhood studies stressed the variable, culturally relative and plural character of childhood. It did this, as Wyness (2006: 20) notes, by '… separat(ing) the cultural and biological aspects of childhood, with the former taking precedence over the latter… (a)ccentuating ideas, sentiments and meaning rather than the material elements …'.

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Although social constructionism was widely influential across the social sciences, it played an especially important role in the creation of the sociology of childhood (Jenks, 1980, 1990; Prout and James, 1990/1997; Stainton Rogers and Stainton Rogers, 1992; Thorne, 1993; Mayall, 1994; Frones, 1995; Corsaro, 1997; James *et al.*, 1998; Christensen and James, 2000; Lee, 2001; Wyness, 2006). This body of ideas, emerging in the 1980s and 1990s, was critical of two concepts that had dominated academic discussion of children in the previous period. The first, socialization, was criticized primarily for rendering children as passive; it was argued that children should be seen as active participants in social life and as actors with the potential for agency. In addition, because socialization focuses attention on its outcome in adulthood, it marginalizes the process of growing up and sidelines children's own actions, meanings and cultures. For this reason it was suggested that children should be seen as 'beings' rather than 'becomings'.[1] The emphasis on children as social actors has given rise to a rich variety of empirical studies that re-examine familiar settings of children's lives with greater sensitivity to children's active participation in them, often finding evidence for their agency and co-constructive capacities, as well as exploring the limits of them.

The second approach to be critiqued by social constructionists was the developmentalism dominant within psychological discourses of childhood. It was argued that developmentalism tends to set up adulthood as the standard of rationality against which children are judged deficient, that it renders putative stages of growth as natural, and assumes a universality to childhood which historical, social and cultural studies suggest that it does not have.

These critiques were informed by a number of theoretical resources deployed to highlight the social character of childhood. The sociology of childhood drew heavily on the interactionist sociology, developed primarily in the USA during the 1970s, which had problematized the concept of socialization as rendering children too passive (for example, see Dreitzel (1973)). Another strand of thinking applied the basic sociological notion of social structure to childhood by arguing that it should be seen as a permanent feature of society (Qvortrup *et al.*, 1994). Writers such as Mayall (1994) combined this with the influence of feminist ideas in order to portray children as a minority group, subject to oppression by adults.

Prout and James (1990/1997) synthesized a number of different critical elements in a programmatic statement for the 'new paradigm in the sociology of childhood'. I will quote its six points in their entirety:

1 Childhood is understood as a social construction. As such it provides an interpretive frame for contextualizing the early years of human life. Childhood, as distinct from biological immaturity, is neither a natural nor universal feature of human groups but appears as a specific structural and cultural component of many societies.
2 Childhood is a variable of social analysis. It can never be divorced from other variables such as

class, gender, or ethnicity. Comparative and cross-cultural analysis reveals a variety of childhoods rather than a single and universal phenomenon.
3 Children's social relationships are worthy of study in their own right, independent of the perspective and concerns of adults.
4 Children must be seen as active in the construction and determination of their own social lives, the lives of those around them and of the societies in which they live. Children are not just passive subjects of social structures and processes.
5 Ethnography is a particularly useful methodology for the study of childhood. It allows children a more direct voice and participation in the production of sociological data than is usually possible through experimental or survey styles of research.
6 Childhood is a phenomenon in relation to which the double hermeneutic of the social sciences is acutely present (see Giddens, 1976). That is to say to proclaim a new paradigm of childhood sociology is also to engage in and respond to the process of reconstructing childhood in society. (Prout and James, 1990: 8)

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In addition to creating a new emphasis on children as social actors and highlighting children's agency, social contructionism's benefit was that it problematized and destabilized taken-for-granted concepts of childhood. It insisted on the historical and temporal specificity of childhoods and focused on their construction through discourse (for example, see Jenks (1982, 1990)). However, whilst this energized an important new wave of social studies of childhood, it unwittingly entrenched the culture–nature dualism through which childhood studies had zizzagged throughout the twentieth century. Through it, the separation between nature and culture was heightened in an overreaching work of purification. The mediation that goes on between culture and nature, which the additive approach of paediatrics and psychology had at least recognized, was occluded. A strong statement of this perspective came from Rex and Wendy Stainton Rogers (Stainton Rogers and Stainton Rogers, 1992: 6–7). For them, the childhood is created through narrative practices. They write, for example, that:

> The basic thesis … is very simple. We live in a world that is produced through stories – stories that we are told, stories that we recount and stories that we create.

The implication of this statement for a social constructionist view of childhood is clearly spelt out: 'we regard "childhood" as constructed through its telling … there can *only be* stories and storytellers of childhood' (Stainton Rogers and Stainton Rogers, 1992: 12, my emphasis). This position entails a double move: culture is made dominant, whilst nature is excluded (except perhaps as stories about nature); at the same time, culture is itself reduced to narrative practices.

Of course, the insight that childhood is discursively constructed is very important. Showing how socially situated discursive practices apprehend and construct different aspects of childhood is illuminating. Nevertheless, it stands in danger of becoming merely a reverse discourse, declaring 'culture' (reduced to language or even narrative) where previously had been written 'nature'. Equally important, because the world is divided into the natural and the social/cultural, the character of the world in which children actually grow up is misapprehended. Consider, for example, the following statements (Maybin and Woodhead, 2003):

> Childhood is a social phenomenon ... Childhood contexts and social practices are socially constructed. There is not much 'natural' about the environments in which children grow-up in and spend their time: for children in Western societies mainly centred around home, classroom, and playground, as well as in cars, buses and other forms of transport, in shopping malls and discos. These are human creations that regulate children's lives.

Although these statements usefully draw attention to the population of children's lives by artefacts of one sort or another (like the ones listed above), by gathering them up under the category of the 'social' it misrepresents what an artefact is. In fact, such a statement only makes sense if one wishes to separate out nature and culture, forcing all entities to belong to either one or the other. In reality, there is much (but not everything) about technological artefacts that is 'natural', just as there is much (but not everything) that is 'social'. In them, natural

materials and processes are ordered (more or less successfully) around human purposes, interests and meanings. As such, they have an ambiguous quality, neither purely natural nor purely cultural; they are exactly hybrids of culture and nature.

CULTURE AND NATURE RECONFIGURED

This point has obvious relevance to the mass media, which depend upon and operate through material artefacts – be they based on 'old' technologies like print or the 'new' ones like electronic and digital devices. As the proliferation of technologies and artefacts proceeded through the twentieth century, social scientists began to ask new questions about the role of technology in social life. Their answers have produced new ways of thinking, not just about artefacts and technological devices, but through this also about the relationship between culture and nature. These new formulations challenge the assumption that the world can be divided into these two mutually exclusive kinds of entity. A number of different thinkers have addressed this possibility, but Latour (1993), in his book *We Have Never Been Modern*, makes a comprehensive case for reconfiguring the relationship. The essence of his argument is that what has been called modernity consists of a double set of practices. On the one hand, there is the work of *purification*, through which the spheres of nature and culture have been kept separate, with nature assigned to 'science', thought of as a culture-free, socially neutral practice that produces truth. Modernist discourse is constructed as a set of extremely powerful interlocking but paradoxical concepts, which until recently have proved difficult to crack open. Nature is simultaneously treated as both transcendent of society and immanent in the practices of science, a human activity that promises unlimited possibilities. Society is similarly both immanent (with humans free to construct it as they wish) and transcendent (with humans unable to act against its laws). Seen in these terms, modernist thinking seems to block all the escape routes and cover all possibilities.

Critically, however, Latour suggests that this credo has eventually been undermined by another great but unacknowledged work of modernity – that of *mediation* – for, whilst modernity separated Nature and Culture in its conceptual schema, it simultaneously proliferated actual, real, material hybrids of them. Every device, machine, technology is neither pure nature nor pure culture, but a networked set of natural and social associations. Modernity's submerged, unacknowledged but crucial work is the proliferation of such hybrid culture–nature entities, which Latour terms hybrid socio-technical networks. The scale of their proliferation has now become so great that the modernist edifice of Nature–Culture opposition has become insupportable.

In making this general point Latour is not alone. For example, Haraway (1991) urges the importance of the 'cyborg image' for understanding feminist politics in an age when the human and the technical are conspicuously merging. We cannot, she suggests, understand modern societies except by understanding the ways in which we, as humans, are produced within and are inseparable from socio-technical and biological networks. Similarly, in Deleuze and Guattari's (1988) writing, the world, including its human and social parts, is seen as a set of *assemblages* constituted from heterogeneous elements. Their vision is a very broad one, taking in wide sweeps of human and pre-human history, encompassing a Darwinian view of human life in which human existence is seen in the context of the evolution of life. The Enlightenment belief in the uniqueness and separateness of humans is no longer regarded as tenable, and human life has to be seen in terms of its emergence from, connections with and dependence on the heterogeneous materials that make up the world. Deluze and Guattari decentre the human world, seeing it in the context of broader physical and biological processes. Their discussion pays a great deal of attention to characteristics of the human species, such as technology and language. Indeed, they see the emergence of the human

species as involving the modification of the function of the hand and the mouth in a way that makes possible the use of tools and language. This led to the creation of what they term a 'social technological machine' (an ensemble of 'man–tool–animal–thing') and a 'semiotic machine' (or 'regime of signs'). These assemble heterogeneous materials – humans, animals, plants, minerals – in entities that mediate nature and culture and which produce new capacities to act and new fields of power. Technologies, artefacts and devices of various kinds, including those associated with the media, play a central role in this process. What it is to be human is thus decentred. Rather than seeing humans as isolated from the world, human capacities and powers derive from their connection with it. Human history is the process of borrowing from the non-human world and thus creating new combinations and new extensions of the human body and the mind.

Bringing these insights to the study of childhood, Lee (2001: 115) has noted that:

> … humans find themselves in an open-ended swirl of extensions and supplementations, changing their powers and characteristics as they pass through different assemblages …. Looking through Deleuze and Guattari's … eyes we do not see a single incomplete natural order waiting to be finished by human beings, we see many incomplete orderings that remain open to change…a picture of human life, whether adult or child, as an involvement in multiple becomings …. Deleuze and Guattari have given us a framework within which to compare (…) various childhoods…. Whether children are in or out of place, or whether new places are being made for them, we can ask what assemblages they are involved in and what extensions they are living through.

This perspective (see also Prout (2005)) has a number of implications for the relationship between childhood studies and media studies. First, it opens the way for a more coherent (but not necessarily more unified) multidisciplinary practice of childhood studies. Through a reconceptualization of childhood's ontology, it could move towards seeing children as neither 'natural' nor 'cultural', but rather as a multiplicity of 'nature–cultures'; that is, as a variety of complex hybrids constituted from heterogeneous materials (biological, social, individual, historical, technological, spatial, material, discursive, …) and emergent through time. In this approach, childhood is not seen as a unitary phenomenon, but as a multiple set of constructions emergent from the connection and disconnection, fusion and separation of these heterogeneous materials. Each particular construction, and these come in scales running from the individual child to historically constituted forms of childhood, have a non-linear history, a being in becoming that is open ended and non-teleological.

Second, such a perspective could link childhood and media studies across these different scales of social research and enquiry. At the relatively large scale, information and communication technologies play a crucial role in the changing (material and symbolic) construction of contemporary childhoods. During the early and mid-twentieth century, children were wrapped up in layers of protection, including family, home, school and welfare institutions. However, towards the end of the twentieth century this set of arrangements began to unravel. The strong boundary around the family home, which constituted it as a private sphere, began to weaken. The growing entry of women into the labour market significantly affected the division between the public, secular world of work, which had previously been monopolized by men, and the private sphere of the family. The home increasingly became the locus for the consumption of all sorts of new technologies. 'Labour saving' technologies, such as the refrigerator and the washing machine, responded to, but also helped to make possible, the emergence of a new division of labour between men and women. This created the possibility of further and broader forms of consumption; and with this, ideas about choice, rights and decision-making arose. The media played an important role in this, conveying into the 'private' sphere of the home ideas about consumer choice, as well as information and values about a multitude of other topics. So it was that the split between the public and the private, one of the oppositional dichotomies through

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which modern childhood was represented and constructed, began to weaken. As Lee (2001) notes:

> The form of patriarchy practised in the family home was dependent on the sustainability of men's position as exclusive interface between the family and the world of production. As long as productive work belonged to men, and as long as men could rely on finding employment, the family home could remain a place of 'innocence' and all within it could remain trivial. The private, secret space of the family home involved an infantalisation of children as much as it did an infantalisation of women.

The outcome of the encounter between childhood and the information and communication technologies is uncertain and still emergent. However, it is clear that, whatever direction it takes in the future, it has, for the moment, begun to create shifts in children's position and the character of childhood. Through their associations with media and communications technologies the reach of their experience is extended and the range of the images, facts and values that they encounter is multiplied. This occurs within the context of their existing everyday lives and not as a disjuncture from it, suggesting that it can be played out in many different ways. It is clear, however, that new socio-technical assemblages can extend children's reach into worlds of ideas and information previously unavailable to them, giving them the potential power to multiply these beyond those contained within the physical and temporal boundaries of their everyday locales (Prout, 2005).

In the smaller-scale settings of children's lives the perspective offers a way of understanding how children enrol and are enrolled by a large range of artefacts. This point is emphasized by Ogilvie-Whyte (2003) in her ethnography of a Scottish school, where she comments:

> In the micro setting of the Hillend playground it becomes more than apparent that the majority of social relations are held together in the interaction of humans and non-humans. A cursory glance shows that the landscape of the playground is characterized by small groups of children – each group bound together by an object or objects of sorts. The types of objects are diverse indeed – footballs, beyblades, beyblade stadiums, skateboards, inline skates, wrestling figures and wrestling rings, Barbie dolls, Gameboys and so on ….

Media-related artefacts are just a part of this heterogeneously populated world. But, as she shows, whatever their specific affordances, they are not merely props for social interaction; rather, they are embedded in and are part of social processes as much as the human actors are. Throughout her ethnography she explores how the field of possibilities from which children can draw such supplements and extensions is limited. Some people and things are available to some children but not to others, and it is often, she argues, these limitations that shape the outcome of interactions, especially the struggles that children engage in with each other and with adults. Ogilvie-Whyte (2003) shows how the agency of children is, in part, an effect of their relationship with such artefacts, commenting that

> … in their discussions of such issues (whether it be football boots, trainers or any other things) children have an implicit recognition that they can extend their agency as collective in some senses. At times they recognize that they can extend their agency through assemblages with some actants but also that, likewise, some assemblages – some actants – may impair their agentic powers.

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In drawing attention to this, her analysis maintains the focus on children as social actors, retaining this valuable and energizing contribution of social constructionism to the study of childhood. However, by showing how children's agency is produced through both linguistic practices and their relationships with material artefacts, she overcomes and renders unnecessary its tendency to one-sidedly emphasize the role of language in social relations.

CONCLUSION

In this chapter I have sought ways in which to merge the concerns of childhood studies with those of researchers in the field of children and the mass media. To do this I have retraced the steps of childhood studies, uncovering its history of multidisciplinarity

and panopticism, mapping its zigzag route through the relationship between culture and nature. Underlying this is a modernist practice of discursively separating or purifying culture and nature, while in the same moment carrying out an unacknowledged but intense mediation of them. Technology is formed from, and in turn intermingles with, nature and culture. The intellectual resources for understanding and, at least partially, unpicking, this imbroglio have only recently become available. From the perspective of childhood studies, this is beginning to allow childhood to be understood in terms of assemblages of heterogeneous materials. In order to understand this it is important to move away from the idea of a determinant process in which one entity, natural, social or technological, drives this process. Whilst the properties of nature and culture are not infinitely malleable, they are overdetermined, in the sense that they are complex, emergent and open to contingency. In fact, the entities that we call 'biological', 'technological' and 'social' are already networked together. The effects that are created by their interweaving create new assemblages, possibilities and problems in an unfolding but non-teleological process. Such shifting networks of heterogeneous elements span the life course in combinations that are empirically varied but do not, in principle, demand different kinds of analysis. There is no need in this respect to separate children from adults arbitrarily, as if they were some different species of being. Rather, the task is to see how different versions of child or adult emerge from the complex interplay, networking and orchestration of different natural, discursive, collective, hybrid and (especially) technological materials. It is in this task that childhood and media researchers can find common ground and shared interests.

NOTES

1 However, the being–becoming opposition, although useful in refocusing on children in the present, is perhaps another questionable dualism – see Christensen (1994), Lee (2001) and Prout (2005).

REFERENCES

Aries, P. (1962) *Centuries of Childhood: A Social History of Family Life*. London: Jonathan Cape.

Armstrong, D. (1983) *Political Anatomy of the Body: Medical Knowledge in Britain in the Twentieth Century*. Cambridge: Cambridge University Press.

Axelrod, R. (1984) *The Evolution of Cooperation*. New York: Basic Books.

Bronfenbrenner, E. (1979) *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.

Buckingham, D. (2000) *After the Death of Childhood: Growing Up in the Age of the Electronic Media*. Cambridge: Polity Press.

Christensen, P. (1994) 'Children as the cultural other', *KEA: Zeischrift fur Kulturwissenschaften, TEMA: Kinderwelten*, 6: 1–16.

Christensen, P. and James, A. (eds) (2000) *Research with Children: Perspectives and Practices*. London: Falmer Press.

Cole, M. (1998) 'Culture in development'. In M. Woodhead, D. Faulkner and K. Littleton (eds) *Cultural Worlds of Early Childhood*. London: Routledge.

Corsaro, W.A. (1997) *The Sociology of Childhood*. Thousand Oaks, CA: Pine Forge Press.

Cunningham, H. (1991) *The Children of the Poor: Representations of Childhood since the Seventeenth Century*. Oxford: Blackwell.

Cunningham, H. and Viazzo, P.P. (1996) *Child Labour in Historical Perspective 1800–1995*. Florence: UNICEF.

Deleuze, G. and Guattari, F. (1988) *A Thousand Plateaus: Capitalism and Schizophrenia II*. London: Athlone.

Donzelot, J. (1979) *The Policing of Families*. London: Hutchinson.

Dreitzel, H.P. (ed.) (1973) *Childhood and Socialization*. San Francisco: Jossey-Bass.

Engeström, Y. (2001) 'Expansive learning at work: toward an activity theoretical reconceptualization'. *Journal of Education and Work*, 14(1): 133–156.

Frones, I. (1995) *Among Peers: On the Meaning of Peers in the Process of Socialisation*. Oslo: Scandinavian University Press.

Haraway, D. (1991) 'A cyborg manifesto: science, technology and socialist-feminism in the twentieth century'. In *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge.

Hendrick, H. (1997) *Children, Childhood and English Society 1880–1990*. Cambridge: Cambridge University Press.

Hengst, H. (2000) *Reconquering urban spots and spaces? Children's public(ness) and the script of media industry*. Working Paper 18. Child and

Youth Culture. Odense University: Department of Contemporary Cultural Studies.
Heywood, C. (2001) *A History of Childhood*. Cambridge: Polity Press.
Illingworth, R. (1986) *The Normal Child: Some Problems of the Early Years and their Treatment* (9th edition). Edinburgh: Churchill Livingstone.
Ingold, T. (1993) 'Tool use, sociality and intelligence'. In K.R. Gibson and T. Ingold (eds) *Tools, Language and Cognition in Human Evolution*. Cambridge: Cambridge University Press.
James, A., Jenks, C. and Prout, A. (1998) *Theorising Childhood*. Cambridge: Polity Press.
Jenks, C. (ed.) (1982) *The Sociology of Childhood – Essential Readings*. London: Batsford.
Jenks, C. (1990) *Childhood*. London: Routledge.
Jenks, C. (ed.) (1998) *Core Sociological Dichotomies*. London: Sage.
Latour, B. (1993) *We Have Never Been Modern*. Hemel Hempstead: Harvester/Wheatsheaf.
Lavalette, M. (1994) *Child Employment in the Capitalist Labour Market*. Aldershot: Avebury.
Lee, N. (2001) *Childhood and Society: Growing Up in an Age of Uncertainty*, Buckingham: Open University Press.
Livingstone, S. (1998) 'Mediated childhoods: a comparative approach to young people's changing media environment in Europe'. *European Journal of Communication*, 13(4): 435–456.
Mayall, B. (ed.) (1994) *Children's Childhoods: Observed and Experienced*. London: Falmer.
Maybin, J. and Woodhead, M. (eds) (2003) *Childhood in Context*. Chichester: Wiley/Open University Press.
Maynard-Smith, J. (1982) *Evolution and the Theory of Games*. Cambridge: Cambridge University Press.
Montanari I. (2000) 'From family wage to marriage subsidy and child benefits: controversy and consensus in the development of family support'. *Journal of European Social Policy*, 10(4): 307–333.
Pearson, G. (1983) *Hooligan: A History of Respectable Fears*. London: Macmillan.
Pereira, M.E. (2002) 'Juvenility in animals'. In M.E. Pereira and L.A. Fairbanks (eds) *Juvenile Primates: Life History, Development and Behaviour*. Chicago: Chicago University Press.
Prout, A (2000) 'Childhood bodies, construction, agency and hybridity'. In A. Prout (ed.) *The Body, Childhood and Society*. London: Macmillan.
Prout, A. (2005) *The Future of Childhood: Towards the Interdisciplinary Study of Children*. London: RoutledgeFalmer.
Prout, A. and James, A. (1990/1997) 'A new paradigm for the sociology of childhood? Provenance, promise and problems'. In A. James and A. Prout (eds) *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood*. Basingstoke: Falmer Press (second revised edition, London: Falmer Press).
Qvortrup, J., Bardy, M. and Wintersberger, H. (eds) (1994) *Childhood Matters: Social Theory, Practice and Politics*. Aldershot: Avebury.
Rose, N. (1989) *Governing the Soul*. London: Routledge.
Richards, M.P.M. (ed.) (1974) *The Integration of a Child into a Social World*. Cambridge: Cambridge University Press.
Richards, M.P.M. and Light, P. (eds) (1986) *Children of Social Worlds: Development in a Social Context*. Cambridge: Polity Press.
Stainton Rogers, R. and Stainton Rogers, W. (1992) *Stories of Childhood: Shifting Agendas of Child Concern*. London: Harvester/Wheatsheaf.
Thorne, B. (1993) *Gender Play: Boys and Girls in School*. New Brunswick, NJ: Rutgers University Press.
Vygotsky, L.S. (1962) *Thought and Language*. Cambridge, MA: MIT Press.
Vygotsky, L.S. (1978) *Mind in Society*. Cambridge, MA: MIT Press.
Wyness, M. (2006) *An Introduction to the Sociology of Childhood*. Basingstoke: Palgrave Macmillan.