

Article

The Genealogy of Play

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Abstract: In 1924, exactly a century ago, the world-famous children's author Alan Milne wrote this much-loved rhyme about the play activities of his young son: Where am I going? I don't quite know. Down to the stream where the king-cups grow-Up on the hill where the pine-trees blow-Anywhere, anywhere. I don't know. . .Where am I going? The high rooks call: "It's awful fun to be born at all". Where am I going? The ring-doves coo: "We do have beautiful things to do". But in 2024, in much of the Western world, allowing a young child to wander in this manner would be seen by many as dangerous, reckless and negligent. For example, in 2019, Renee Umstattd Meyer and her colleagues found that a large proportion of children in the post-industrial world did not take the recommended amount of exercise in the outdoor environment, and even where spaces were specifically made available to them, parents feared that they would be infiltrated by crime and violence. This article considers the emergent effects of significant cultural change in children's independent and collaborative free play opportunities. It draws on an ethological and biocultural perspective to argue why independent, active free play, particularly involving peer collaboration, is so important to human development.

Keywords: play; evolution; language; storying; biocultural; communities; schools; child development; education; social learning



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1. Introduction: What Is Play

When asked, adults worldwide might initially view 'what is play' as a relatively simple question. An image of children running around and laughing is likely to pop into the minds' eye. However, the deeper issues appertaining to play are surprisingly complex.

The American play researcher Scott Eberle comments:

The Oxford English Dictionary presents five, dense, three-column pages of definitions and usages of play and still manages not to exhaust the subject. Play is "diversion" and "pretense". Play is "exercise"... play is "free and unimpeded movement"... play is "any brisk activity"... "trifling with words", "dalliance"... To "frolic" is to play, to "abstain from work" is play... Play is "capricious", "brisk", "lively", and "irregular". The word appears as a transitive and intransitive verb, as a noun, and as an adjective. The word describes actions, the lack of action, and attitudes. The definitions encompass both causes and effects... We can see, then, why it is not so hard to identify play as to settle on a definition of it. (Eberle 2014, pp. 216–17)

Garvey (1977) posited five criteria for play with respect to human beings in general:

- Enjoyable;
- No extrinsic goals;
- Spontaneous;
- Voluntary;
- Active engagement.

But this raises a plethora of questions. For example, what about sport, which in English is usually preceded by the verb to play, for example, to play football, or to play tennis? These activities necessarily involve formulating goals and inhibiting spontaneous behaviour.

[Bodrova et al. \(2023, online\)](#) referred to the ‘elusive nature of play. . . there seems to exist some agreement about the features of an activity that qualifies as play: it must be pleasurable, process-oriented, intrinsically motivated, meaningful, iterative, and controlled by a child’. [Zosh et al. \(2018\)](#) attempted to redefine play more formally, concluding that it is most usefully constructed as a spectrum starting at free play, moving through adult-guided play to games with rules, concluding with ‘playful instruction’.

In summary, for highly diverse human beings, there are myriad behaviours that might qualify as ‘play’; therefore, it is best conceived as a relative behaviour category: ‘it is fruitless to devote time and effort to defining what play is and what it is not. . . by de-emphasising the label play it might be easier to get on with the problem of studying the development of behaviour’ ([Meaney and Stewart 1985](#), pp. 11–12).

[Sutton Smith \(1997\)](#) further proposed that the view of play that researchers bring to their research depends upon both their academic and personal background. He concluded that not only were there differences between disciplines, but that there may also be individual differences amongst researchers within the same discipline, further complicating the situation.

In my own research, I take the position that whether an individual is playing or not is probably best ascertained by asking them if they view a particular activity as ‘playing’ and if they are ‘having fun’. In my most extensive study ([Jarvis 2005](#)), my participants were four- to six-year-old children, observed engaging in the free, active play that [Zosh et al. \(2018\)](#) define as the starting point of their spectrum; the natural primate style of chasing and catching, which occurred in their school playground during breaktimes during the school day. Sometimes described as ‘rough and tumble’ (R&T), this play style has been found amongst human beings wherever play researchers have conducted investigations.

Rough and tumble play was a popular focus for ethological researchers during the latter half of the twentieth century. For example, [Konner \(1972\)](#) undertook an ethological study of the Zhun-Twa (!Kung) people, reporting that Zhun-Twa children engaged in R&T play that appeared very similar to the R&T of Western children. Common behaviours observed were reported as ‘chasing, fleeing, laughing, jumping, play noise and play face’ ([Konner 1972](#), p. 301). [Fry \(1987\)](#) found that similarly structured R&T play took place in the Zapotec-speaking children of Oaxaca, Mexico. [Whiting and Edwards \(1973, 1988\)](#) also found that R&T play occurred in all six of the cultures they studied (Kenya, Japan, India, the Philippines, Mexico and the United States).

2. Evolution and Play

Twentieth-century ethologists focused closely on the similarities of human R&T to play amongst young animals, particularly apes. One clear link they discovered was the importance of the primate ‘play face’ in signalling playful intent during R&T behaviours, initially identified by [Konner \(1972\)](#) and emphasised by several subsequent researchers in the field, linked to firm evolutionary roots.

[Van Hooff \(1976, p. 133\)](#) noted a ‘relaxed open mouth display typically accompanies the boisterous mock-fighting and chasing involved in social play’ in all primates, including human beings. [Chevalier-Skolnikoff \(1977\)](#) differentiated human and animal behaviour, remarking that only human beings accompany their ‘play face’ with vocal laughter. [Aldis \(1975\)](#) outlined the role of evolution in the creation of such similarities and differences, proposing that the open mouth descends from an evolutionary track of ‘play-biting’, which occurs in older species than the primates. He noted that the degree to which the open-mouth posture has become ‘emancipated’ from play-biting seems to be most clear-cut in apes. Such behaviours, he proposed, in agreement with Chevalier-Skolnikoff, are generally accompanied by laughter in human beings, and a mischievous expression comprising ‘an

open mouthed smile with the teeth covered', similar to the play face of primate species *Macaca* and *Pan* (Macaques and Chimpanzees).

One marked difference between human and non-human primates is that human children accompany their chasing and catching play with language, which creates a basic narrative to underpin their activities. In English-speaking societies, the game is called by several different names; for example, in England it is 'he', 'tig' or 'tag', depending on region (Opie and Opie 1969, p. 20). Non-Anglophone societies also have various names for this type of play, for example 'El Dimoni' in Spain and 'Oni' in Japan (Jarvis 2019a), both of these words translating to 'devil' or 'demon', indicating the role of the catcher.

Jarvis (2006)'s child participants additionally added deeper narrative constructs to much of their chasing and catching play, including concepts rooted in the culture of the relevant time, for example, Beyblades, Robot Wars, Batman, Disney Princesses, and even the primary hero of the England soccer team of that era, David Beckham. They used gestures alongside verbalisation to communicate meaning, including play face and play intention signalling, that is, human facial expressions and body language signalling playful intent when engaged in play, as opposed to aggression signalling in real fighting (Power 1999).

In general, the children adeptly negotiated roles and intentions, smoothly moving in and out of role when negotiations were required. The only time these peer communications were prone to crumble was when adult modifications were introduced. The adults observed clearly intended to be helpful, but their interactions were all too likely to become, however unwittingly, a 'use of adult power in the real world to enforce an... imperative against powerless children operating in a fantasy world' Holland (2003, p. 99).

Where adults intervened, they tended to show misunderstanding of the day-to-day conventions of the game, which had the result of completely disrupting the fragile rule systems created by the children... a lunchtime supervisor intervened and told the boys that she was going to help them to 'play [soccer] properly'. This mainly involved supervising a lengthy team picking exercise which was poorly understood by the children. When the game finally restarted, it very quickly became chaotic as boys left and joined at will in the customary fashion... While play was at a halt, the boys... discussed a name for their team. The oldest team 'captain' had previously designated his own team 'England'. Suggestions for the alternative name ranged from France (highly derided) to Manchester (quite popular) to Australia (generally seen as the best suggestion). (Jarvis 2007a, p. 253)

It is interesting to note that in this situation, the children were in fact far from powerless; they simply replaced the activity they had been diverted from to explore the complex concept of categorisation by nationality at their level of understanding, which appeared impressively sophisticated for children of the relevant age (five to six years).

My research findings are further disseminated in Jarvis (2006, 2007a, 2007b). In this article, I am going to focus on the human skills and knowledge children gain from active free play, principally of the type that is undertaken in outdoor areas, its roots in evolution, how it was a generally accepted, almost 'invisible' element of panhuman life up to the last two decades of the twentieth century, and how its importance seems to have been forgotten by Western nations since this time, particularly the United Kingdom and the United States.

3. The Evolution of Play: Words and Actions

The literature on active free play, the R&T literature in particular, strongly emphasises that human play styles are a mixture of evolved and culturally mediated behaviours. This corresponds with the concept of 'bioculturalism'. The 'biocultural model [of the human being]... reflects a confluence between innate and learned influences' (Mallon and Stich 2000, p. 143).

All mammals and some bird species engage in R&T play. Species spend different lengths of time in the juvenile pre-adult period, depending upon cognitive complexity and flexibility. Human beings, due to their evolved ability to communicate symbolically (in spoken language) are arguably the most complex species on earth, and do not reach full

adult cognitive maturity until their mid-twenties ([American College of Paediatricians 2022](#)). The principal pan-species mechanism that evolved for juveniles to engage in such learning is play. So, in this sense, like other mammalian juveniles, children are ‘born to play’, most particularly, in free-flow activity with peers.

[Gabora and Kaufman \(2010, p. 307\)](#) suggest that in linguistic, symbolic Homo Sapiens, evolution which occurred across the Middle/Upper Paleolithic resulted in an emergence of the ability to not only mentally represent ‘internally coherent systems of meaning’ but also causal relationships amongst them. Once this ability was in place, objects and people were not only represented as they basically appeared, but also in terms of the roles they could play in narrative and story. Children playing would therefore develop this very human skill, playing with the meanings they had been presented with in their existential worlds and reinterpreting these, both individually and collaboratively.

[Gabora and Kaufman \(2010, p. 308\)](#) give the example of the concept of ‘giant’, which has the basic meaning of an item of larger than usual size. But once we meet the term in a story, for example, “Jack and the Beanstalk”, the word connects to other areas of meaning within our minds, indicating that ‘working memory expands to include peripherally related elements of the situation’ in search of a solution to meaning. It is only after this cognitive work has taken place that the meaning is decided upon, ‘at which point attention becomes more focused and thought becomes more convergent, as befits the fine-tuning and manifestation of the creative work’.

Play activities provide essential practice experience to develop these symbolically sophisticated skills, essential within human adult life, and as such, a fundamental evolved behaviour. ‘The play of children (and of young animals) has an essential functional value. . . preliminary training for the future activities of the individual’ ([Piaget and Inhelder 1969, p. 60](#)). For human beings, highly dependent on their ability to cooperate, collaborate and compete, rooted within an ability to communicate abstract thoughts through the medium of language, the connection of words to synchronous, autonomous action upon the physical environment becomes a pivotal life skill.

The chasing and catching play I observed, underpinned by culturally relevant ‘storying’ can therefore logically be posited as a play style that is crucial for human beings to undertake in order to build such cognition.

Narrative requires our unique capacity for meta-representation, not only to make and understand representations, but also to understand them *as* representations. This develops in children without training between their second and fifth years. ([Boyd 2009, p. 129](#))

Boyd outlined his theory that young children have a natural urge to engage in active play underpinned by language to develop the capacity for ‘meta-representation’. In summary, he proposes that storying is essentially what [Geary \(2007\)](#) calls a ‘primary skill’; biology provides the basic cognitive mechanisms for language use, and then culture provides the underpinning content which children further work on collaboratively through free play, learning to move with increasing fluidity between words and actions.

Many researchers have pointed out that language and culture separate human from non-human animals ([Bruner 1976, 1990, 1996](#); [Bronfenbrenner and Ceci 1994](#); [Low 1989](#); [Tomasello 1999](#); [Geary 1998](#); [Dunbar et al. 1999](#); [Boyd 2009, 2018](#)), which underpins human beings’ highly developed capacity to understand and innovatively adapt to different environments, frequently working collaboratively.

Jerome Bruner proposed that human beings are creatures who evolved to critically rely upon meaning-sharing: ‘depending upon the human capacity to internalise language and use its system of signs. . . such a social meaning readiness is a product of our evolutionary past’ ([Bruner 1990, p. 69](#)).

[Bruner \(1991, p. 9\)](#) emphasised the central role that narrative comprehension plays in this process, proposing that it is ‘among the earliest powers of mind to appear in the young child and among the most widely used forms of organising human experience’. He later commented that different human societies can construct similar aspects of their

environment very differently, depending on the meanings that they attach to them (Bruner 1996). Lyle (2000) posits that human beings are a ‘storying animal’, making sense of thoughts and events via stories and narratives, with the result that human beings live in ‘a largely story shaped world’ (Lyle 2000, p. 55).

Human beings therefore operate within an essentially ‘biocultural’ paradigm (e.g., Tomasello 1999; Bruner 1996; Jarvis 2006) in which the evolved human competency for symbolic communication is mediated through language, bestowing great cognitive flexibility. We can communicate complex ideas to one another through symbolically shared sound ‘codes’ (later culturally extended to writing) and understand others’ communications by translating these codes within our own thoughts. But this competency is not fully programmed by nature. The long human developmental period in which we naturally engage in active play with peers, drawing on evolved primate signalling modes whilst becoming increasingly adept at using cultural concepts from the surrounding milieu to connect language to actions, is a crucial period for learning the core human skill of symbolic meaning making.

The associative play activities of other mammalian species build neuronal connections in the amygdala and dorsolateral prefrontal cortex of the brain which deal with emotion regulation and social skills (Pellis and Pellis 2012). In 2022, Colliver et al. (2022) found, in a study of 2213 Australian children, that the more time children spent in unstructured play in the toddler and preschool years, the better their self-regulation abilities were at ages 4–5 and 6–7 years, even after controlling for earlier self-regulation abilities and other known predictors. Their overall results supported the hypothesis that between 1 and 5 h of preschoolers’ unstructured active play time significantly predicted self-regulation 2 years later.

This supports the logical hypothesis that human beings, as evolved mammals themselves, follow a similar neuronal developmental process to that of other mammalian species, but with the added task of attaching language to action to enter a society which uses a verbal symbolic signalling system, including ‘storying’, to enhance the transmission of meaning. ‘... Language gets a footing in the subjective domain of individual experiences by... which we display “how it is with us” in public’ (Harré and Tisaw 2005, p. 186).

Klein (2000, p. 480) proposed that the principal emphasis in any study of human beings should be upon ‘our species-specific ability of abstract thinking’, combining symbols in both internal and shared narratives. Hutt et al. (1989) proposed that such meaning created by children within their ‘ludic’ or ‘creative’ play is the route to deeper levels of cognition, thence learning, whilst Polkinghorne (1988) commented that the use of language rooted in culture is the only way that human beings can give true meaning to the objects and events in their world. Friedman Hansen (1982, p. 190) proposed that ‘learning cannot be understood in isolation from the dense network of cultural information in which it is embedded’.

From this perspective, children apparently ‘rough and tumbling’ may appear to the casual viewer to be purely engaging in physical behaviour that is very similar to the play of other young mammals. But in fact, they are adding another symbol manipulation ‘layer’ to such play, and thus addressing cognitive and social maturation at least as much as the development of physical fitness.

If we consider active free play from this perspective, we can begin to ‘think twice before modifying children’s environments to achieve... more focused learning opportunities... at the expense of play’ (Bjorklund and Pellegrini 2001, p. 331). Active free play is an essential evolved mechanism for learning in symbol-dependent human beings because a crucial mechanism for cultural evolution is contained within it.

The creativity of human cultures is reminiscent of biological evolution because of the adaptive and open-ended manner in which change accumulates. New inventions don’t just build on old ones, they do so in ways that meet our needs and appeal to our tastes, and as in biological evolution there is no limit to how

any particular invention or creative work may inspire or influence other creative works. (Gabora and Kaufman 2010, p. 280)

However, this warning has not been heeded by many national and local policymakers over the past four decades. Slow but extensive modification of children's environments has had the cumulative result of removing a significant amount of time and space for free play activities in many Western and Westernised societies.

4. Forgetting How to Play: The Post-Industrial Dilemma

Playing around the Home Environment

In 1969, British researchers Iona and Peter Opie published a study of children's free play carried out in streets and playgrounds during the 1950s and 60s, either interviewing or directly observing the play of some 10,000 children across England, Scotland and Wales. They commented 'there is no town or city known to us where street games do not flourish' (Opie and Opie 1969, p. vi). Their study encompassed children of all ages, as young as three and as old as fourteen (Opie and Opie 1959, 1969).

The Opies made an exhaustive list of styles of play, games and rhymes. In terms of language and culture, they reported that some of the terms their 1950s and 1960s child participants used in their outdoor free play were outdated expressions that could be traced back into much earlier versions of spoken English. For example, children in Southern England used the word "fainites" to call "truce" on playfighting or chasing, while children across Northern England, Wales and Scotland used other words, for example "kings", "crosses", "keys" or "barley". Children in Cornwall used 'bars', apparently more closely related to Northern than Southern terminology, possibly denoting a link between the Gaelic languages of Cornwall, Wales and Scotland.

The Opies explained that in the *Canterbury Tales*, Chaucer comments that "lordes mowe nat been yfeyned" (in modern English, "lords' orders must not be declined"), indicating that 'fainites' has descended from "fains I" meaning "I decline" in modern English. They further sought out the term "Barley", and found it also represented in fourteenth century literature, in the poem *Gawayne and the Grene Knight*: "to dele him an other barley... and yet gif him respite" (Opie and Opie 1959, p. 148). In modern colloquial English, "barley" thus translates to "parley" (from the French "parlez", to speak), commonly used up to the mid-twentieth century to mean a halt in a battle for peace talks. The children the Opies observed were using "barley" to denote a similar meaning, pleading for brief respite in a game, either for a short break or to miss a turn to take a rest.

The Opies outlined many other rich cultural constructions in the children's play they observed, and their two reports on their research make absorbing reading, particularly for people of the twenty-first century, in which the play culture the Opies described has largely vanished. Films of children's play in the mid-twentieth century, now located in the British Film Institute archive, make fascinating viewing (British Film Industry 1957).

By the turn of the twentieth century, children's leisure activities were beginning to change. Sutton et al. (2007) found that suburban children were principally spending their free time in adult-organised activities, for example riding, tennis, swimming, dancing and gymnastics lessons, and learning to play various musical instruments, which ate up their out-of-school time. O'Brien et al. (2000, p. 273) commented: 'letting children play out is becoming a marker of neglectful or irresponsible parenting'. Corsaro (1997) described a process of adults colonising children's out-of-school time, with adult agendas stealthily encroaching on children's leisure activities.

Holloway and Pimlott Wilson (2015) commented that over the last quarter of the twentieth century, childhood in the global north became far more geographically restricted in terms of 'roaming' than was the case in the past, imprisoning children in homes, gardens and adult-regulated spaces, leading to the 'over-scheduled child' (p. 164). They raised concerns about a lack of research on 'what has replaced outdoor [free] play' (p. 164), and 'a fast-developing industry of commercially provided enrichment opportunities' (p. 165) which constructs the child as 'a project to be developed' (p. 621) rather than as an organic,

evolved creature needing the freedom to develop spontaneous interaction skills required for socially competent adult life.

The fields and woods where rural youngsters once roamed, the streets and sidewalks where urban kids invented amusements and... the parks and playgrounds where children cavorted away from adult eyes no longer constitute the cherished playscapes that they once provided. (Chudacoff 2007, p. 189)

Whether children were ever *entirely* 'away from adult eyes' is a point that can be questioned. Most Western adults over fifty will remember that passing adults sometimes interfered in free play activities, frequently with threats of making reports to parents! But the key point is that there was no cultural expectation that adults would constantly direct children's activities. It is this relentless, focused adult control that is at the heart of cultural change, a process Holloway and Pimlott Wilson (2015, p. 65) described as 'intensive mothering'. In today's Western societies, this appears to extend to a concept of 'intensive caretaking', encompassing not only parents, but schools, teachers and policymakers.

In the early 2000s, the British government created some funding streams to finance the creation of inner-city outdoor free play initiatives. Adrian Voce described the problems that beset the project as it progressed through layers of government, spawning difficult communications between practitioners and government funding agencies, intent on imposing objectivised and, frequently, business-focused agendas. 'The play movement's voice was small within a burgeoning industry that was being subsidised by the taxpayer, not for all the rhetoric, to improve the quality of children's lives, so much as to allow their parents to go to work' (Voce 2015, p. 65).

In 2019, Umstattd Meyer et al. (2019) found that a significant number of children in post-industrial Anglophone economies did not meet the recommended levels of physical activity defined by the World Health Organisation, for example, 22% in England and 19% in Australia, and, in the US, 4 out of 5 or 80% when evaluated from US national guidelines. They state that the reasons for this are poorly considered 'features of the built environment, including sidewalks, parks, connectivity, and traffic patterns' and, when places for children to play were provided, these were 'more frequently perceived by parents as unsafe for children due to crime and violence'.

Upstart Scotland reflected on the disappearance of children from public areas as analogous to the disappearance of birds from areas in which chemicals had tainted the environment, concluding:

There isn't one simple reason that children don't play out anymore. The build-up of road traffic, break-down of local communities and changes in parents' working patterns are all implicated, as are the ready availability of indoor sedentary entertainment and a generally more fearful climate (probably related to occasional horrifying media stories about abduction). (Upstart Scotland 2018, online)

There are clearly myriad reasons for the curtailment of free play opportunities that relate to both urban and existential concerns. But the fact of the matter is that, in post-industrial nations, the contemporary urban environment has become increasingly less likely to provide sufficient opportunities for children to engage in the spontaneous free play that is crucial to their natural development as organically evolved primates. This is clearly a pivotal problem for the future of the species.

5. Playing in the School Environment

Might the provision of opportunities for free play in school present an answer? This also raises complications given the intrusion of managerialism (Lynch 2014), schooling narrowly constructed as a means for the expedient transmission of information directly relevant to a working life within a post-industrial economy. An example is found in a recommended schedule of teaching proposed by Barak Rosenshine (2008, online):

1. An explicit step by step strategy of exactly what is to be learned.
2. Development of mastery at each step in the process.

3. Teachers are given specific correction procedures to use when students make errors.
4. Gradual fading of teacher direction as students move toward independent work.
5. Use of adequate and systematic practice through a range of examples of the task.
6. Cumulative review of newly learned concepts.

In this, the teacher always originates what is to be learned, and the learners are taken through the to-be-learned procedure via a rote process until they can precisely regurgitate the to-be-learned material. In 2022, England's association of English teachers complained that 'a transmission model of teaching appears to be advocated and formulaic responses to texts are recommended' ([English Association 2022](#), online); in other words, those in governance who set the curriculum also dictate the ways in which students are 'allowed' to respond to concepts introduced in literature through formal assessment processes.

The English Secondary School Curriculum document ([DFE 2014](#)) uses the word 'play' exclusively in its meaning to 'play a role'; there is no mention of the concept of play-based activity in learning, not even within teacher-directed situations.

But surely, there might be more space for free play in primary schools? Henley et al. described the effects of the federal (national) 'No Child Left Behind' Act (2001) ([Congress.Gov 2002](#)) in the United States, which imposed payment by standard assessment test results upon public education services within every state.

The playground at Maple Street Elementary School is quiet these days. The only movements on the swing sets are a result of a strong west wind edging the swings back and forth. The long lines that once formed for trips down the sliding boards are empty. There are no softball or kickball games nor are there any games of tag or duck-duck-goose being played. . . No, Maple Street Elementary School is not closing. It is squeezing every minute of the school day to meet the mandates of the No Child Left Behind Act. ([Henley et al. 2007](#), p. 61)

Not all schooling in Western nations has developed along these lines. The Scandinavian nations are a significant outlier, with thriving 'forest schools,' particularly for children in the early years of education. Such schools view outdoor learning as a way to connect children with the natural environments in which their ancestors learned through active free play.

[Kangas et al. \(2022, online\)](#) explain that this is due to the different culture of education that exists in Scandinavia compared to the managerialism of Western Europe and the United States.

The pre-primary tradition (e.g., Belgium, France, Ireland, the UK and the USA), focus[es] on cognitive goals and 'readiness for school' as important aims, and the social pedagogic tradition (e.g., Nordic countries and many parts of Central Europe), focus[es] more on children's play and social development with an emphasis on children's agency.

[Benke \(2023\)](#) pointed to a wealth of studies indicating that children who are afforded such experiences in their early development are less likely to be obese, and have higher levels of mental well-being, increased resilience and faster cognitive development. She also proposed that regular experience of outdoor learning instils a sense of responsibility towards the natural world, raising the likelihood that children will develop an informed sense of issues emergent from climate change as they grow older, citing [Dabaja \(2021\)](#).

However, in England, [Baines and Blatchford \(2019\)](#) found that, since 1995, primary school children in England have lost 45 min of playtime a week, whilst children aged 11–16 years have lost over 65 min.

In 2019, I wrote an article in the TES pointing out that children in primary school lacked time and space to engage in free play in which they could independently and collaboratively act out and build upon cultural narratives:

I am. . . in complete agreement with [Hirsh \(2016\)](#) about the imperative for adults to transmit cultural narratives; indeed human beings have been doing this since

they became human. . . However, where I differ is in the construction of the child's role in this process, which for as long as human beings have been *Homo Sapiens*, has been to independently and collaboratively explore the ideas with which they have been presented in a free-flowing, independent, 'disembedded' manner, in play. This is the way that we have evolved; language and narrative are creative and dynamic, not static. (Jarvis 2019b)

A government document deceptively entitled 'Bold Beginnings' (OFSTED 2018) contains some disparaging references to play in the early years of education. It is reported on p. 16 that some Head Teachers saw the notion of free play as a key activity for children's development as 'rosy and unrealistic'. They were more enthusiastic about the role of educational games, but warned that 'children are at risk of losing value if an adult is not present' (p. 17). Throughout the document, adults are depicted as teaching children *how* to play. There is also criticism of Initial Teacher Education for damaging the importance of reading, writing and maths for children under five by encouraging students to engage in 'play-based pedagogy and child-initiated learning [which]. . . prevented effective progression' (p. 29).

This is similarly found in the US, which also has a preparation imperative for even the very youngest children to take standardised assessments in later schooling. Pyle et al. (2020, p. 78) make the point that simplified mainstream media depictions of play characterise it as 'a pleasurable, child-directed activity distinct from academic learning. . . misaligned with current understandings of play as a continuum'.

The roots of such concepts are, similarly to the disappearance of play outside school environments, located in the last quarter of the twentieth century. Sylva et al. (1980, p. 60) provided an early example of dismissing the value of active, free play, proposing that it is 'conducted with ease, little mental effort and not much care'. And even at that point in time, with evolutionary and biopsychological research in its infancy, this view was robustly challenged. 'What the playground offers is an enormous scope to initiate, discuss, influence and change the rules in a way that we cannot imagine between children and adults. Indeed, when teachers supervise play it is exactly these types of opportunities that are missing' (Sluckin 1981, p. 119).

Forty years later, the debate has moved on. More recent research points to the crucial role of free play in developing linguistic and 'storying' competences required for adult life, which are completely missing within the managerial approach to educational practices within many Western nations. Lenters et al. (2022, online) point out that 'institutionalized educational settings may not easily recognize children's capacities for storying' in the managerialist cultures they inhabit; that 'late-stage capitalist educational policies' ignore the emerging evidence that indicates the huge importance of human storying because it does not 'fit the timeline of progress' in terms of what can be simplistically and statistically assessed.

Turkish researcher Buldu (2022, online) concludes that, consequently, in various countries, governments are creating education policies that result in the disappearance of play.

The desire for greater academic success appears to outnumber free and child-initiated play practices. . . Despite the fact that all children are born with a natural ability to learn through play, there are significant differences between what research says and what is practiced in schools.

6. What Now for Play?

The evidence outlined above indicates that twenty-first-century children lack access to the time and space to undertake free spontaneous active play in the company of peers in which, prior to the late twentieth century, generations of children dating back to prehistoric times naturally engaged within local communities.

In England, contemporary children spend approximately half the time playing outside that was common in their parents' generation, and many lack access to outdoor environments in general (Child in the City 2018). These findings created the impetus for the

[Guardian Online \(2019\)](#) to draw together an article outlining a range of neighbourhood projects focused on ‘giving children back their freedom’.

But in 2020, social distancing and lockdown in response to the COVID-19 pandemic created a barrier to such efforts, and hugely increased the time that children spent online, associating with each other in artificial, programmed environments in which a lot of human communicative signalling is missing.

The place of play and socialisation online is a complex cultural development, bringing mixed threats and opportunities, which I discuss at greater length in [Jarvis \(2021\)](#). For example, while we may be quick to simplistically target the online environment as the major source of problems such as bullying, this has always been present in children’s peer interactions. However, collaboratively working out solutions in real-life interaction forms part of the developmental experience, and it is this process, which is likely to involve some amount of ‘storying’ as the interlocutors negotiate, which has not, as yet, effectively translated to the online environment.

The full extent of human social signalling, in terms of evolved facial expressions and “body language” cannot yet translate to the online environment. Additionally, the physical isolation of individuals whilst interacting online and the permeability of online communications into human time and space—the ‘can’t turn it off’ problem—are highly unnatural phenomena. In summary, the online arena is, in many ways, a poor fit with the organic environment in which human beings evolved and much further research is needed to consider its effects, particularly upon children’s developing cognition.

Human beings’ basic physiology has not changed for many thousands of years. We evolved in an environment which offered us a natural forum in which to learn how to attach language and story to action and by so doing, independently, collaboratively and flexibly problem solve within natural, fluid situations: ‘the natural school [and]... self teacher’ ([Luria and Vygotsky 1992](#), p. 3).

As developing children, human beings need regular free play opportunities to independently test and modify autonomous interaction skills, connecting language and story to their own and others’ actions, using evolved signalling processes and feedback from playmates to self-correct and ‘stay in the game’. By so doing, they build neuronal pathways to be further modified and extended as they move into greater social and cognitive independence in adolescence and adulthood.

A group of children engaged in collective free play can spontaneously create new rules, learn to follow them, or find opportunities to break established ones. This rule-playing can be considered as a specific manifestation of the more general phenomenon of collective creativity. ([Kalaydjian et al. 2022](#), online)

And what is traditionally termed ‘rough and tumble’ can be a fruitful ground for this process:

Greater curricular flexibility and the development of a situated teaching reflexivity, attentive to children’s interests, could also lead us to take advantage of the learning potential of play that, in principle, we might judge inappropriate, such as “rough-and-tumble” play... this type of play is associated with developing emotional and social skills... We can also consider other potentialities when this activity is mixed with the more socio-dramatic or role-playing type of play... whose importance for children’s cognitive development has been highlighted, particularly in terms of taking a reflective distance to one’s action. ([Rupin et al. 2023](#), online)

This, then, is the genealogy of play that descends to human beings through their heritage from primate ancestors. From our species’ evolutionary pathway, we need time during our developmental period to gradually attach words, and then stories, to independent action in order to develop a competent human social self. The challenge for contemporary policymakers is to embrace this requirement in the programmes of activity they design

for children in both schools and communities, fully grasping the fundamental need for children to experience the rich and complex learning that occurs during active free play.

Playground-based social events. . . are highly developmental experiences for the child concerned. These form a set of ongoing learning experiences relating to the human social world, which are both relevant to the child's independent management of his/her day-to-day life and underpin his/her eventual adult potential to deal competently with the vast range of complex social situations, including misunderstandings, that one meets in the adult world. (Jarvis 2008, p. 12)

In conclusion, time and space for children to play independently and collaboratively without adult direction were naturally present features in all societies until very recently. However, in many contemporary Western and Westernised societies, these hours and spaces have gradually been subsumed by the highly artificial environments we have created for ourselves. It has therefore become imperative for play scholars to articulate the overwhelming evidence that directs contemporary adults to urgently reinstate sufficient time and space for children to play in the natural manner of their species to facilitate the building of full human social and cognitive competence. Hopefully then, a 'Spring Morning' in 2134 will be more similar to the one described by Milne (1924) than the one experienced by a typical child in a post-industrial society today.

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