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INTRODUCING RITUAL, PLAY AND BELIEF, IN
 EVOLUTION AND EARLY HUMAN SOCIETIES



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This volume has its genesis in a multidisciplinary symposium held in the McDonald Institute for Archaeological Research in Cambridge entitled *From Play to Faith: Play, Ritual and Belief, in Animals and Early Human Societies*. All of the authors represented here contributed papers to the symposium and participated in extended discussion over four days, in light of which the papers were developed for this book. The symposium formed part of the project *Becoming Human: The Emergence of Meaning*, generously funded by the John Templeton Foundation. This project, which has also produced the volume *Death Rituals, Social Order and the Archaeology of Immortality in the Ancient World: "Death Shall Have No Dominion"* (Renfrew et al. 2015), had as its focus the early evidence for human behaviours that relate to central concepts in ritual and religion, and followed directly from the similarly motivated project *The Roots of Spirituality*, also funded by the John Templeton Foundation at the McDonald Institute.

The theme of the present volume derives directly from long-standing interests on the part of the editors regarding ritual and religion in prehistoric human societies and, in particular, the development of approaches to understanding these behaviours derived from exploration of the cognitive foundations of human behaviour and experience (often termed 'Cognitive Archaeology').

Pursuit of the specific theme of relationships between ritual and play behaviours in animals and humans was catalysed by the attendance of the present writer at a talk given by Gordon Burghardt in

Cambridge following the publication of his own book *The Genesis of Animal Play: Testing the Limits* (Burghardt 2005). Several of the key characteristics of play in animals that he outlined there seemed to bear striking similarities with key aspects of ritual practice and, furthermore, could be closely interwoven with our existing interests in relationships between ritual, performance, embodied action, music, dance and cognitive evolution (e.g. Renfrew and Morley 2007, 2009; Renfrew et al. 2009; Morley, 2009, 2013; Malafouris and Renfrew, 2010; Morley and Renfrew, 2010). In light of this we invited the colleagues represented here to contribute to elucidating the extent to which these apparent parallels and relationships between ritual and play are genuine and what, if anything, they can tell us about the origins of ritual and the importance of play, in our species, *Homo sapiens*, and in human societies in the past.

This book begins from the observation that ritual activities and play behaviours, including structured games, have a number of significant traits in common. Furthermore, play and ritualised behaviours are widespread in the animal kingdom, and a sequence of increasingly complex play behaviours constitutes an important, perhaps essential, part of normal human cognitive development.

These traits suggest deep-rooted biological foundations to play behaviours and, potentially, to some of the fundamental aspects of ritual behaviours as well. This volume constitutes an exploration of these apparent continuities between play and ritual, plus their discontinuities, and their relationships

with processes such as performance, transformation, mimesis and social learning in animals and humans. In a second strand of investigation, it specifically explores the relationships between rule-structured games, play and ritual in a cross-section of early human societies. It thus constitutes a contribution not just to the literature on the archaeology and prehistory of ritual, but to that concerned with the biological and cognitive foundations of ritual and religion.

We are not the first to propose such fundamental connections; Huizinga (1944/1955) coined the term *Homo ludens* in his seminal work (of the same name) to describe our species, seeing play, ritual and performance as fundamentally interrelated throughout our human activities. Others have since explored in detail the development and biological foundations of play behaviours in either animals or humans (several of whom contribute to this volume). Further researchers are especially concerned with the relationships between organised games and rituals (again, several feature within this volume). But, we believe, this volume represents the first attempt to explicitly explore the connections between play and ritual in prehistory by bringing together pre-eminent researchers in these fields.

The volume is organised around three major themes in the exploration of relationships between play and ritual.

The first section (Part I) examines play behaviours in animals and humans, their nature, roles, relationships with other abilities, including those that are important in ritual activities, and their possible roles and relationships in an evolutionary context.

The second section (Part II) looks at relationships between ritual behaviours, play and performance in a number of ancient societies from a selection of locations and periods, and the extent to which we can understand these relationships and their importance on the basis of archaeological and, where available, documentary evidence.

The third section (Part III) takes this theme a stage further by exploring the relationships between formal games, play and ritual, and their social and religious roles, in a further selection of ancient societies.

The volume concludes (Part IV) with chapters that take an overarching view of the topic, with discussion

and analysis of the issues and conclusions that are – and are not – raised by the preceding chapters.

The first chapter, by Colin Renfrew, outlines and explores the core concepts and issues underlying exploration of relationships between ritual, play, games, performance and religion, and previous major contributions to investigating these critical human behaviours. This chapter elaborates and considerably expands our original manifesto and motivation for undertaking the present study, and contributes significantly to developing an understanding of the major themes upon which the following chapters focus.

PART I PLAY AND RITUAL: FORMS, FOUNDATIONS AND EVOLUTION IN ANIMALS AND HUMANS

Burghardt

Gordon Burghardt has carried out extensive research on play behaviours in a very wide range of animals, their forms, roles and relationships with other abilities. Here he reviews this evidence, along with his own explanatory framework, situating play behaviours in their ethological contexts and exploring parallels and differences between these and ritualised and ritual behaviours. He highlights that there has been a long history of the scholars studying play behaviours in animals and humans proposing that play behaviours may contribute importantly to cognitive development, behavioural innovation and creativity, and that they can form essential scaffolding for the development of social norms such as moral behaviour and concepts of fairness. All of these are important prerequisites for and components of religious thought and ritual behaviours. Meanwhile, amongst evolutionary psychologists considering evolutionary foundations for ritual and religion in human evolution, the roles of play in humans and in other animals that have implications for our longer evolutionary heritage have largely been neglected. By considering core definitional components of play and ritual behaviours in both animals and humans he goes on to examine how these behaviours may indeed share important commonalities of form and function.

Bateson

Patrick Bateson has worked extensively on play behaviours in non-human primates and other mammals. Here he elaborates upon the universality of play behaviours in mammals, and upon the principal criteria for identifying play behaviours, including the extent to which ‘playfulness’ need be evident. Bateson explores the circumstances in which play activities are carried out and the characteristics that they exhibit in a wide variety of animals, before discussing the question of what play is ‘for’ – what beneficial roles it may be said to fulfil in the ontogenetic development of the animals, and in their evolutionary context. In particular, he then goes on to explore relationships between play behaviours and the development of creativity and problem-solving in different species, including in important examples of human innovations. Finally, he relates this creative aspect to the systematic alteration of states of consciousness by humans, which is so often a feature of ritual activities.

Smith

Peter Smith turns to detailed discussion of play behaviours in human children, to their parallels in the play behaviours of our nearest relatives, the higher primates, and to their differences, in the elaboration of forms of play that seem to be particular to humans. Smith has produced a large body of work studying the importance of play behaviours in human children and, recently, their place in evolution. In particular he focuses on *pretend play*, or *imaginative play*, as a form that is uniquely developed in humans, with potentially wide-ranging significance for cognitive development. This includes social pretend play, and socio-dramatic play, and has the potential to be viewed as part of a package of behaviours that rely on the development of symbolic capabilities, made possible by cognitive abilities such as self-awareness, theory of mind and language that, whilst having precursors in our closest relatives, are uniquely developed in humans. He looks at similarities and differences between play and games with rules, which have often been observed to have

similarities with ritual and, indeed, overlap in use (a theme explored further by contributors to the third section of this book). He then goes on to look in detail at the evolution of pretend play, evolutionary rationales for its function, and relationships between pretend play, imagination and creativity, traits that have important implications for religious and ritual thought, including testimony, pretence and belief in invisible agents.

Morley

The chapter by Morley situates these differences in the development of human play behaviours in the context of hominin evolution. The first part of the chapter explores the natures of different types of play behaviours in apes and humans and their relationship with the emergence of certain critical cognitive skills, including some of those required for ritual behaviours and supernatural beliefs. It examines the relationship between these play behaviours, especially *pretend play*, and life-history stages in ape and human development, in particular *infancy* and *early childhood*. Humans feature a uniquely extended *early childhood* stage of development, and it is during this stage that much of the development of *pretend play* occurs, including many of the elements of cognitive sophistication that have relevance for religion, performance and ritual behaviours. The second part of the chapter examines the palaeoanthropological evidence for the appearance in human ancestors of a modern human-like pattern of these life-history stages, and the implications that this may have for the emergence of *pretend play* and the abilities that underlie it in our immediate and more distant ancestors.

Dissanayake

Concluding this section, Ellen Dissanayake explicitly proposes that what is commonly recognised as ritual in humans has its origins in constituent elements of play and ritualised behaviours, as observed in many non-human mammals. She discusses how these elements also constitute antecedents and components of wider ‘arts’, which are also key ingredients of

rituals, and factors in the efficacy of arts-based rituals in instilling belief and doctrine in participants. Dissanayake explores the ritualisation of behaviours in a variety of ethological and human contexts, especially parent–infant interactions, and the evolutionary development and role of meta-representation in play and ritual. This is followed by discussion of the participatory aspects of ritual in particular, and then the components that ritualised and play behaviours contribute to human ritual practices. In particular, Dissanayake elaborates the hypothesis that the specialised components of play and ritualised behaviours in animals provided the evolutionary foundations for religious ritual behaviours in human ancestors, in which context they serve to, amongst other things, coordinate and unify the group and alleviate anxiety.

PART II PLAYING WITH BELIEF AND PERFORMANCE IN ANCIENT SOCIETIES

Freidel and Rich

In David Freidel and Michelle Rich’s exploration of sacred play among the Maya, they engage directly with overlaps that existed, and still exist, between toys, sacred items, performance and ritual. Their discussion of the “enduringly complex” relationship between play and ritual in the Maya world begins with the example of the ‘bring Chahk’ rain ceremonies in which boys perform roles with clear overlaps with *pretend/imaginative play* as outlined in the preceding section. This clearly also features elements that are far from playful, as did the Maya ballgames they discuss, which are also covered in detail by Taube in Part III. They examine a series of cases in which play behaviours and formal games carry great significance in Maya mythology and ritual practices. They go on to explore in particular the case of the Maya city of El Perú-Waka’. The material culture at the site shows clear overlaps between items used in chance games and musical performance with important ritual roles, linking play and ritual in the elite and common realms of experience. In addition, the monumental architecture and iconography reinforces connections between organised play and games, performance, play with identity, and ritual practice, including the

notions of solidarity and alliances and playing with risk in creating tension and cathartic resolution.

Halley

Moving to the North American Southwest, Claire Halley discusses the role of communal performance, especially dance, in the contemporary and prehistoric Puebloan populations of the region. Whilst these may be full of fun and laughter, the actions, paraphernalia and content are intimately tied to religious beliefs, worldview, values and identity. Play, including clowning and playing with (transformations of) normal conventions and accepted behaviours, is an integral part of religious practice and ritual performance. Meanings and roles are reversed, at once entertaining and playful, and serious in reinforcing conventions that exist under ‘normal’, non-ritual circumstances. Halley goes on to explore how ritual and symbolic meanings, identity and solidarity are created and reinforced in the context of these communal performances, especially dance, and the extent to which we can gain insight into the long history of these activities in the archaeological evidence of communal architecture and iconography generated by the occupants of this region.

Watkins

The chapter by Trevor Watkins further explores the preceding themes of the relationships between monumental architecture, performance space and activities, and the creation of ritual symbolism and communal identity, this time in the context of the emergence of Neolithic populations in South-West Asia. With particular reference to Göbekli Tepe in south-east Turkey, Watkins examines the archaeological evidence for a succession of large-scale, non-domestic constructions of late Epi-Palaeolithic and Neolithic date in South-West Asia, and their relationships with communal ritual practice and the creation of complex symbolic systems. He does so in the context of discussion of proposed limitations in cognitive evolution, which are argued to shape the necessity for the creation of communal activities for

the maintenance of social bonds, and in the context of niche construction theory. Amongst the critical elements of human cultural niches created, it is argued, is the developmental environment within which children learn the complex body of cultural knowledge and beliefs that they then begin to practice. Relating communal performance to recent theories of the cognitive science of religion, Watkins argues that the built environment, in which ritual performance took place, physically manifested cultural information as part of the niche in which the development of ideas and beliefs occurred, including the otherwise ‘make-believe’ of super-human agents.

Garfinkel

Retaining the focus on the Near East (South-West Asia), and on performance, Yosef Garfinkel focuses in particular on the evidence for performative rituals that play with identity, in particular, the evidence for masked ritual in the Neolithic of the region. Beginning with discussion of the universal nature in humans of religion, and the role of ritual in publicly consolidating the abstract concepts within religion and cosmology, he goes on to look at the universal performance of dance and its effects and roles in ritual and religious contexts. The chapter then examines in particular masks as used in ritual and dance performance. Garfinkel assembles (for the first time) a rich record of archaeological evidence for the use of masks in the proto-historic Near East, including masks themselves and depictions of their use. He goes on to discuss the use of these in ritual and dance, interpreting them in the context of evidence for the use of masks in performance amongst traditional societies. Masks have the potential to transform identity and roles, through hiding identity, homogenising identity, imposing identity or exaggerating characteristics, and through marking a distinction between the performance context and ‘normal’ contexts, all common features of play behaviours.

Sterckx

Roel Sterckx discusses the relationships between ritual, play and perception of animal behaviour in

pre-imperial and early imperial China. The behaviours of animals and humans were not only seen as parallel and contingent, but the behavioural (and anatomical) qualities of animals were described in terms of ritual requirements and human virtues, and “the origins of music, movement and dance were closely linked to animals”. Formal, ‘ritualised’ performative behaviour was seen to apply to both humans and animals, but adherence to ritual etiquette or ‘propriety’, as opposed to instinctive interactions, was seen to distinguish human from animal nature. The chapter goes on to discuss examples where appropriate human behaviours were seen as derived from, or to have parallels in, the ritualised behaviour of various animals, as well as the case of ritual games derived as performative enactments of animal contests. Melody, rhythm and dance were in particular seen as derived from the discovery and observation of sound and movement in nature, in which they were embedded. But meanwhile a clear distinction was maintained between the moral propriety required to behave ritually (to whatever extent possessing parallels with animal behaviours), versus, in contrast, play and sports, seen as lacking such moral propriety, in spite of their other parallels.

Malone

Returning to the theme of performative play-acting in the ritual context, Caroline Malone examines the evidence for competitive feasting and ritual at the Neolithic prehistoric temples of Tarxien, Malta. Reconstructing the evidence from the original excavation diaries, this chapter explores the relationships between feasting, animal conceptualisations and cosmology, looking at the roles of animals and identity in the symbolic expression of ritual belief. Artefacts from the temple complexes include monstrous hybrid and semi-human forms, imagery modelled in clay, incised on pottery or carved on limestone, some of which cause Malone to question whether their use was serious or humorous, as well as the extent to which transformations of identity between animal and human in ritual contexts may have been significant.

PART III THE RITUAL IN THE GAME, THE GAME IN THE RITUAL

Morgan

Lyvia Morgan explores relationships between ritual, games, play, performance and transformation, focusing in particular on the representations of these activities in ancient Egyptian and Aegean imagery. She observes initially that play can be ritualised in its form and function, effecting transformations, such as from youth to maturity or maturity to regeneration. Furthermore, it has been argued that underlying all performance is the ritualisation of play (in its broad sense); performance includes public play, games, dance, music, ceremony and ritual, and boundaries between these categories are permeable, with each potentially encompassing aspects of the others, especially in the ancient world. Her chapter goes on to focus in particular on the imagery of games, sports and hunting in Egyptian and Aegean Bronze Age art, proposing that underlying these are concepts of ritualised transition through social performance. These include scenes of the play and games of children and young men in which the performative play implies bodily preparation for adulthood. Morgan goes on to discuss the performance of the – often agonistic – games and their ritual significances, proposing that many of the representations of play, games and performance reflect transformational ritual content. She also proposes that direct parallels may have been made between the agonistic play (play-fighting) of animals and those represented in the ritualised human games, including the adoption of animal-like properties as a consequence.

Marinatos

Focusing specifically on the Bull Games in Minoan Crete, Nanno Marinatos discusses the ritual and ideological dimensions of the games, and their relationships with particular Minoan deities. The games consist of both bull-leaping and bull-grappling, as two different activities carried out in different ways by different participants, and Marinatos interprets the evidence for each of these in the context of their

representations as well as their comparative and cultic context in the wider geographical area. She suggests that the games were publicly performed for large audiences, fulfilling roles testing and reaffirming elite bravery and credibility, including their association with divine patronage and sanction.

Spivey

Drawing upon a range of evidence, from figured ceramics to military equipment, Nigel Spivey discusses the ideology behind the formal sporting contests of archaic and ancient Greece and the motivations for ‘play’ in the period. He explores the connections – and their limitations – of the organised games of sport and athletics with warfare. For example, certain sports are (relatively) ‘safe’ versions of behaviours that in their usual context (of conflict) would be dangerous or fatal. This shows a clear parallel with the ‘play-fighting’ of animals and children, and the wider common element of play and ritual of featuring behaviours that are transposed from their ‘normal’ context into a new one, where they have different rules and effects. Actual combat could also be performative, theatrical and rule-bound. He suggests that one reasonable conception of a game is “a voluntary attempt to overcome unnecessary obstacles”, and that when physical exertion (often to exhaustion) is added, it becomes not just a ‘game’, but a ‘sport’. Further, he posits, situating such activities in sanctuaries adds ingredients that make the activities ritual too. In the case of conceptions of ‘game’ and ‘sport’, it is notable that these definitions could be said to encompass various types of animal and child play, including rough-and-tumble and object play. Spivey goes on to look at what the games were *for* – what their perceived origin was, what were the motivations behind carrying them out, and how they related to the concept of worshipful, immortal heroism.

Taube

Continuing the theme of ritual games, but returning to Mesoamerica, Karl Taube analyses the evidence

for ritual blood sports, including the Olmec and Maya ballgame and previously underexplored ritual boxing. Both were not only formalised sources of entertainment, but had intensely religious significance too. He discusses how the ballgame and its associated human sacrifice were related directly to ritual practices concerning rainfall, fertility and abundance and, similarly, how the ritual boxing (with stone gloves) was related to fertile rainfall and the god of rain. He discusses the iconographic and architectural evidence for both competitive ‘sporting’ elements to these activities and their important ritual components, highlighting how “public sport and sacred ritual overlap in profound ways”. He discusses the representations and role of ritual boxing, as well as architectural features of the ballcourts designed to allow their ritual flooding, mixing the symbolically highly fertile blood that was the aftermath of the games with the water that was the blood of the Earth. In contemporary (and probably ancient) examples of ritual boxing, masked costumes provide transformations of identity, marking the activity as distinct from prosaic life, and incorporating “other-worldly fun” alongside excitement and fear.

Kyriakidis

Evangelos Kyriakidis begins his theoretical discussion of similarities and differences between games and rituals with the observation that the two can be very difficult to distinguish archaeologically. But whilst they have much in common with each other, he argues that they are distinct in a significant respect – that whilst participants in games are engaged actively throughout, those in rituals have a passive ‘intention-in-action’. According to Kyriakidis, both rituals and games can be defined as institutionalised “set activities with a special (not-normal) intention-in-action, and which are specific to a group of people” (and this “special (not-normal) intention-in-action” is also a defining characteristic of play behaviours). Furthermore, he highlights some significant structural similarities between rituals and games: both feature rules that separate them from the ‘normal’, or quotidian world; the means by which their ends are achieved are often through following

non-contiguous processes within the framework of the specific rules that apply in their non-quotidian circumstances. However, he initially argues that they also differ in that the outcomes of rituals are fixed, while those of games are not, and that participants in rituals are followers of prescribed practice whilst those in games are agentive players. It becomes clear over the course of the discussion that this distinction applies to some rituals and not others. He goes on to discuss how in both rituals and games, their departure from the rules of the quotidian world leads to participants entering a ‘new’ world, undergoing new experiences and impacting learning as a consequence.

PART IV FROM PLAY TO FAITH? DISCUSSION

Malafouris

Bringing together themes developed in the preceding chapters, Lambros Malafouris discusses these relationships between ritual, play and games from the perspective of material culture. Each has to be enacted – performed – through the use of material things and/or bodies before they can be thought about or conceptualised. He discusses how play might be defined, in light of the preceding discussions, and the questions this raises about its recognition in past contexts, and goes on to posit that a powerful linking theme between play and ritual (and the realisation of belief through ritual) is *performance*. He discusses also how this manifests in the various archaeological evidence mentioned in the latter chapters, before turning to the cognitive and evolutionary implications of the approaches to the evidence taken in the earlier chapters. He concludes with discussion of the role of material culture in scaffolding the development of play and ritual.

Osborne

In reviewing the foregoing chapters, Robin Osborne asks to what extent the initial ideas that ritual and play are related have been confirmed or refuted.

Is ritual indeed involved in play and games? Can performative ('ritual') behaviours amongst animals serve a purpose without being meaningful? Is make-believe play related to the ability to create beliefs? He first of all highlights some distinctions between ritual and play that he sees as emergent from the preceding evidence. These include the extent to which they have fixed, or anticipated outcomes, the extent to which chance factors (including errors) are encouraged or minimised in the proceedings. But at the same time, both play and ritual define themselves in opposition to the 'normal', are purposive and social. In both ritual and play, performance of roles distinct from the 'normal' is important, and these take place in their own world where specific rules and consequences apply. Osborne goes on to propose that in the context of this 'difference from normality' shared by both play and ritual there is nevertheless a significant distinction: play signals that in its contrast to 'normal' events, less is happening than you might think, whereas ritual signals that in its contrast to 'normal' events, more is happening than you might think. They are similar, parallel, but pulling in different directions. He concludes that the experience of play was indeed crucial for preparing humans for not only ritual, but for engagement with the supernatural world of belief, effected through ritual.

Morley

The concluding chapter of this volume seeks to draw out core intellectual themes developed by the contributors, and in light of these proposes a framework

for understanding the origins and effective structures of ritual – and other forms of performance – in the cognitive structures which make possible and are developed in the context of play behaviours.

REFERENCES

- Burghardt, G. M. 2005. *The Genesis of Animal Play: Testing the Limits*. Cambridge, MA: MIT Press.
- Huizinga, J. 1955. *Homo Ludens: A Study of the Play Element in Culture*. Boston, MA: Beacon.
- Malafouris, L. & Renfrew, C. 2010. *The Cognitive Life of Things: Recasting the Boundaries of the Mind*. Cambridge: McDonald Institute Monographs.
- Morley, I. 2013. *The Prehistory of Music: Human Evolution, Archaeology, and the Origins of Musicality*. Oxford: Oxford University Press.
- Morley, I. 2009. Ritual and music – parallels and practice, and the Palaeolithic, in *Becoming Human: Innovation in Prehistoric Material and Spiritual Culture*, eds. C. Renfrew & I. Morley. Cambridge: Cambridge University Press, 159–75.
- Morley, I. & Renfrew, C. 2010. *The Archaeology of Measurement: Comprehending Heaven, Earth and Time in Ancient Societies*. Cambridge: Cambridge University Press.
- Renfrew, C., Boyd, M. & Morley, I. 2015. *Death Rituals, Social Order and the Archaeology of Immortality in the Ancient World: Death Shall Have No Dominion*. Cambridge: Cambridge University Press.
- Renfrew, C., Frith, C. & Malafouris, L. 2009. *The Sapient Mind: Archaeology Meets Neuroscience*. Oxford: Oxford University Press.
- Renfrew, C. & Morley, I. 2009. *Becoming Human: Innovation in Prehistoric Material and Spiritual Culture*. Cambridge: Cambridge University Press.
- Renfrew, C. & Morley, I. 2007. *Image and Imagination: A Global Prehistory of Figurative Representation*. Cambridge: McDonald Institute Monographs.

2

INTRODUCTION: PLAY AS THE PRECURSOR OF RITUAL IN EARLY HUMAN SOCIETIES



COLIN RENFREW

The role of play as a precursor of ritual in human societies has been widely recognised. And in order to understand the possible relations between play and ritual it is necessary to have some understanding of what is meant by both terms. Each has been used in widely different ways. In defining play Pellegrini (2009), writing from the perspective of human child development, establishes four domains of play: social play (involving interaction with peers), locomotor play (sometimes involving exaggerated movement), object-directed play, and pretend play (or ‘as-if’ play). In his discussion of animal play, Burghardt (2005, 70–82) distinguishes five criteria, leading to a concise definition: ‘Play is repeated, incompletely functional behaviour, differing from more serious versions structurally, contextually or ontogenetically, and initiated where the animal is in a relaxed or low-stress setting’. Ritual has been variously defined by several scholars. Bell (1997, 138–69) has six basic ritual attributes: 1) formalism; 2) traditionalism; 3) disciplined invariance; 4) rule governance; 5) sacral symbolism; and 6) performance. But her emphasis on sacred symbolism seems to contradict the existence of secular rituals, and Rappaport in his discussion (1999) does not use sacral symbolism as a defining feature of ritual. Aspects of play and ritual are compared, and consideration is then given to the problems of detecting or recognising each in the archaeological record. In practice both are most clearly recognised when places of congregation or of assembly can be identified, while

ritual may sometimes be recognised also in the accompanying paraphernalia of symbolic or ceremonial artefacts. The formal similarities between play and ritual are then briefly considered. One feature which emerges is that ritual behaviour among humans frequently involves the gathering of assemblies or congregations, while play among animals is more often dyadic (or solo) in character rather than collective. But perhaps this is partly a definitional feature, since gatherings in herds, flocks and shoals are often excluded from considerations of play on a priori grounds which may themselves merit further consideration.

“Ritual is the primordial form of serious play in human evolutionary history” (Bellah 2011, 92).

INTRODUCTION

The systematic study of early human societies and of their development has, in recent years, sometimes avoided the range of behaviours that might be described as ‘non-functional’. So while studies of early subsistence and early technology have developed rapidly, it was an early criticism of processual archaeology (as the ‘New Archaeology’ of the 1960s and 1970s came to be called) that it often overlooked the ideational sphere, and that indications of early ritual or early religion were not as intensively studied as they had been a generation earlier.

Archaeologists have more recently turned to a systematic analysis of ritual and cult (Renfrew 1985; Barrowclough & Malone 2007; Kyriakidis 2007; Insoll 2011), but the subject of play has not been so systematically explored in the archaeological context. This is surprising, since that subject has been very coherently studied in the field of child development (Piaget 1962; Pellegrini 2009; Smith 2010). And animal play has been the subject of careful study for many years (Bateson 1956; Thorpe 1966; Burghardt 2005). A consideration of the role of play in the course of the early development of human societies may therefore now be timely.

The sometimes rather restrictive functionalism of early processual archaeology has now broadened in its scope and been followed, among other developments, by a cognitive archaeology (Preucel 2006) in which a systematic attempt can be made to study the ways of thought which were developed and followed in earlier times. Precisely because play is non-functional, and not purposefully directed towards a well-defined and practically attainable goal, it has a place beside ritual (and religion) among those human activities to which considerable resources of time and energy may be directed. This is not to say that ritual is non-purposeful, but as with play, its rewards are not always immediate or direct. As Gordon Burghardt (2005, 3) indicated using as an epigraph the words of Johan Huizinga (1955, 5) from his pioneering work *Homo ludens*: “Now in myth and ritual the great instinctive forces of civilised life have their origin: law and order, commerce and profit, craft and art, poetry, wisdom and science. All are rooted in the primeval soil of play.”

BACKGROUND

There is much to learn about human behaviour from some understanding of animal behaviour, of ethology. This is particularly so when one is thinking in an evolutionary sense about the early development of those aspects of human behaviour which were novel 5 to 10 or 12,000 years ago, although sometimes apparently prefigured in the behaviour of some other animal species. This may certainly be the case when we look at aspects of ritual, which in many

areas of the world can first be clearly documented in the archaeological record over about that time span. That is when the first enduring monuments were erected. Ritual behaviour is indeed documented earlier, in the Upper Palaeolithic period, and perhaps earlier still, but the evidence then for ritual practice, apart from the existence of human burials being performed in conventionalised ways, is sparse.

The material evidence for play is less abundant, since many kinds of play involve actions or activities that are less highly structured than are those of ritual. The formalism of ritual is often lacking: play is often characterised by “behavioural plasticity” (Pellegrini 2009, 47). The informality of play makes its documentation in the archaeological record less easy. Certainly the ballcourts of Mesoamerica, where the ballgame was performed, abundantly document the practice of the game. Yet if we take account of the various kinds of behaviour which may be described as ‘performances’, the scope for the material documentation of play becomes much wider. The theatres of ancient Greece are one well-known case where performances were organised. The ‘plazas’ in Mesoamerica and in pre-Columbian coastal Peru were undoubtedly used for processions and other performances, as were the central courts of the ‘palaces’ of Bronze Age Crete. Such ceremonies may fall into the rather ill-defined classificatory area lying somewhere between play and ritual, as arguably do many civic ceremonies the world over, including inaugurations, coronations and investitures. Most of the monuments in the world have, since the time of their inception, been used as the venue for public performative ceremonies. Some of these ceremonies, especially those instituted in a religious context, may have involved the fulfilment of supposed obligations, including the offering of sacrifice. But other monuments, such as the Coliseum of Rome or the Olympic stadia constructed in the world’s great cities over the past century and more, have had the more secular purpose of entertainment.

In order to understand the possible relations between play and ritual in early societies, it is necessary to have some understanding of what is meant by both terms. Each has been used in widely different ways, and each has been defined in many different ways.

DEFINING PLAY

To give a satisfactory definition of play, as most commentators have indicated, is no easy task. When considering primarily play in humans, for Huizinga (1955), play was seen as voluntary, distinct from ordinary life, disinterested (not goal-directed) and dependent on some order or rules. But, as Burghardt (2005, 69) shows, this definition is hard to apply directly to animal play. It would be helpful to have some further definition which would make some of the distinctions clearer. The *Shorter Oxford English Dictionary* (Onions 1978, 1604) offers four principal meanings for the verb ‘to play’: to exercise oneself in the way of diversion or amusement; to engage in a game; to perform instrumental music; to perform dramatically. These certainly catch some of the distinctions made by Pellegrini (2009), writing from the perspective of human child development. He establishes four domains of play: social play (involving interaction with peers); locomotor play (involving exaggerated movement); object-directed play (e.g. playing with a ball, or with building-bricks or a top); and pretend play (or ‘as-if’ play). On reflection, however, three of his domains – social, object-directed and pretend – can be subsumed under the Oxford Dictionary’s ‘to engage in a game’, which reveals itself as a catch-all category.

Pellegrini’s four domains have relevance for animal play also. Burghardt (2005, 70–82) devotes three chapters of his *The Genesis of Animal Play* to problems of definition, distinguishing five criteria for recognising play:

1. That the performance of the behaviour is not fully functional in the form or context in which it is expressed;
2. That the behaviour is spontaneous, intentional, pleasurable, rewarding, reinforcing or autotelic (‘done for its own sake’);
3. That it differs from the ‘serious’ performance of ethotypic behaviour structurally in at least one respect: it is incomplete (generally through inhibited or dropped final elements), exaggerated, awkward or precocious;
4. That the behaviour is performed repeatedly in a similar, but not rigidly stereotyped form during at least a portion of the animal’s ontogeny;
5. That the behaviour is initiated when an animal is adequately fed, healthy and free from stress or intense competing systems (e.g. feeding, mating, predator avoidance). In other words, the animal is in a ‘relaxed field’.

These allow him to formulate a one-sentence definition: “Play is repeated, incompletely functional behaviour differing from more serious versions structurally, contextually or ontogenetically, and initiated where the animal is in a relaxed or low-stress setting.”

It is easy to see that some forms of play among humans involve behaviours not encountered among animals. Among these are both the use of developed linguistic expression (e.g. words) and the use of various functionally specific artefacts (including musical instruments). Yet the careful discussion of animal play clarifies some aspects of human play also. Such consideration makes clear that play should be distinguished from exploration and curiosity. Also that repetitive stereotypical behaviour, as found among captive animals, should fall into a special category and be distinguished from play. Indeed the behaviour of ‘head banging’, seen in some cases of human imprisonment and obsessive-compulsive disorders, seems a closely comparable behaviour and should also be distinguished from play.

The four main categories of play among human as distinguished for instance by Pellegrini, (locomotor, social, object and pretend) are sometimes reduced to three when animal play is discussed. The fourth, pretend play (sometimes termed ‘as-if’ play), is often omitted, perhaps because it is felt to involve symbolic representation, since a capacity to use symbols is not generally accepted as a feature of non-human animals. Yet at times the definitional categories become strained. For instance, in social play, whether among animals or humans, when an ‘attacker’ and a ‘defender’ are engaged in a play fight, the two roles may be reversed, and the defender now takes the role of attacker. It is here that there seems little distinction to be made between social and pretend play, although the ‘as-if’ feature used as a defining criterion of pretend play implies a symbolic relationship. As Burghardt (2005, 105) remarks: “In animals with elaborate and prolonged play fighting bouts, there

do seem to be rules (e.g. inhibitions) that must be honoured for play to continue.” For animals to be able to switch between well-defined roles in this way must imply some capacity to recognise that there do exist alternative roles and when they are appropriate.

Another feature of interest is the practice of self-handicapping in the course of locomotor play, where the stronger animal may use less advantageous strategies to keep his ‘opponent’ as an active participant in the game. And the phenomenon of ‘metacommunication’, for instance the ‘play bow’ in dogs, a signal by which it is mutually understood that what follows is play, seems a notably sophisticated behaviour. Construction play is common enough among children, and may be compared with building behaviour among animals (including nest building) in those cases where there is not a clear functional outcome.

Ritual play is a much-discussed category which is clearly of interest in the present consideration, although different commentators use different implied definitions for both terms. Some rituals are considered play by Sutton-Smith (1997), including sporting events and festivals. And ritualised performances occurring on significant social occasions, such as Trooping the Colour (Renfrew 2007a) or Degree Day (Huizinga 1955; Dissanayake 1992), would seem to fall within the criteria for play discussed previously.

Whether one may appropriately speak of ritual behaviour among animals must partly be a matter of definition. So it is to the topic of ritual and its definition that we should now turn.

DEFINING RITUAL

Ritual in human societies has been variously defined (Verhoeven 2011). That it can be defined at all has been called into question (Humphrey & Laidlaw 1994, 70). Bell (1997, 138–69) in her monograph distinguished six basic attributes of ritual (see also Bell 2007) which can certainly further the discussion:

1. Formalism of expression and gesture,
2. Traditionalism, with conformity with earlier cultural practices,
3. Disciplined invariance, involving repetition and physical control,
4. Rule governance, restricting human action and interaction,
5. Sacral symbolism, with the use of sacred symbols,
6. Performance, involving actions undertaken in public.

But the emphasis here on sacral symbolism need not contradict the existence of secular rituals, for instance many of those performed on civic occasions which need not have a religious undertone. Indeed national symbols – the Union Jack, the American eagle – are often elevated almost to sacred status, and the blessing of the deity invoked upon them. Kyriakidis (2007, 294) escapes this pitfall with his definition: “Ritual is an etic category that refers to set activities with a special (not normal) intention-in-action, and which are specific to a group of people.” Another recent definition (Renfrew 2007a, 109) makes a related point: “Ritual employs practices that are time-structured and involve performance, with the repetition of words and actions in formalised ways.” Certainly Roy Rappaport in his influential discussion offers a concise definition which does not make explicit reference to sacral symbolism: “I take the term ‘ritual’ to denote *the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performers*” (1999, 24).

He goes on to list several features or elements whose conjunction is unique to ritual, for no single feature of ritual is peculiar to it. These are:

1. Encoding by other than performer
2. Formality (as decorum)
3. Invariance (more or less)
4. Performance (although not all performances are rituals)
5. Formality (vs. physical or functional efficacy).

Rappaport’s features equate to a considerable extent with the attributes identified by Bell, with the exclusion of sacral symbolism. But he assimilates rule governance to formalism and invariance, and introduces the notion of formality as contrasted with physical efficacy.

“That ritual is ‘in earnest’ does not mean that the formal action of ritual is instrumental in any ordinary sense. It is not” (Rappaport 1999, 46). It is

notable that this feature of ritual equates precisely with Burghardt's first criterion for play. The observation that ritual should be 'in earnest' is, however, certainly not a conditional criterion for play.

Joyce Marcus (2007, 48) writing from an archaeological perspective and with reference to Mesoamerica, lists eight components of ritual:

1. One or more performers
2. An audience (humans, deities, ancestors)
3. A location (temple, field, patio, cave, top of an altar)
4. A purpose (to communicate with ancestors, to sanctify a new temple)
5. Meaning, subject matter and content
6. Temporal span (hour, day, week)
7. Actions (chanting, singing, playing music, dancing, wearing masks, and costumes, burning incense, bloodletting, sacrificing humans or animals, smoking, making pilgrimages to caves or mountain tops)
8. Food and paraphernalia (stingray spines, obsidian blades, cones and spheres of opal incense, balls of rubber, paper streamers, beverages, meats, tamales) used in the performance of rites.

Whether one may appropriately speak of ritual among non-human animals is no doubt partly a matter of definition. Certainly it is common to speak of rituals of courtship, for instance among birds and fish. The repetitious and formalised behaviours employed in courtship are sometimes referred to as play, but with the more rigorous definitions for play more recently employed, mating behaviours are likely to fall foul of Burghardt's first criterion (since they are functional, at least in their intention), and also his fifth criterion, since they are intensely competitive (see Burghardt 2005, 257). That they have a serious purpose may preclude courtship behaviours from being regarded as play, but that certainly does not exclude them from being regarded as rituals. That they have meaning may be thought obvious: in every case the active partner in the ritual is conveying the message: 'I want to mate with you.' Indeed they would seem to fulfil all of Bell's criteria (except the fifth, which we have already excluded in secular contexts), and most of those set out by Marcus.

In the light of these definitions, it is interesting to consider here to what extent ritual, as understood here, would fall within the category of play, or within the special subcategory of play termed 'games'. Conversely we should ask in what circumstances play, whether among animals or humans, may validly be described as ritual.

ASPECTS OF PLAY AND RITUAL

The performative behaviours involved both in play and in ritual may sometimes leave traces in the archaeological record. But both are notoriously difficult to identify, and for very much the same reason: neither is devoted to immediately functional purposes. This point emerges clearly from most definitions of play, but is notably lacking in some of the definitions of ritual discussed earlier, although clearly noted by Rappaport. Yet a clue is given in the emphasis in those definitions upon the element of *performance*. The actions of ritual are performative, which may imply that they are intended to be viewed by others: they are declarative and are usually expressive. What sometimes goes unsaid in those definitions is that the performative actions of ritual are usually not in themselves directly productive. That is not to deny that the performer or spectator may consider them appropriate or efficacious. But they rarely have an immediate end-product beyond the beliefs of those involved: as Rappaport observes (1999, 46), the formal action of ritual is not instrumental in any ordinary sense.

This gives the important clue about the undertakings which involve ritual or are accompanied by ritual: that they are not in themselves immediately and functionally productive in the material world. Many rituals are periodic, in that their timing is calendrically determined. The timing and occurrence of others is determined by social factors or by the realities of life. Many rituals accompany rites of passage, whether of private individuals or of rulers. Others are of an institutional nature. Indeed some of the most significant rituals among humans are used in the solemnification (and hence validation) of what may be called 'institutional facts' (Searle 1995; Renfrew 2007b, 102). These are facts, like the

declaration of peace or war, or the solemnisation of marriage, which are based on the common understanding of the society that the proposition in question ('war is declared'; 'Smith is elected president') is valid. These are the powerful rituals which are in themselves transformative in social terms. They have a direct effect upon human relations, but not upon the material world.

It is here that the similarities between play and ritual are at their strongest. Play is not functionally productive: in the primary sense it is not functional. Ritual likewise does not directly transform the material world. Its transformative power lies in introducing humans to a new social reality: that A and B are married, that Parliament is dissolved. Note that we are speaking mainly of secular rituals. Religious rituals can rarely be expected to produce immediate and demonstrable material results. (The miracle of the loaves and fishes is not often repeated.)

DETECTING PLAY AND RITUAL IN THE ARCHAEOLOGICAL RECORD

Precisely because many of the actions undertaken in play and in ritual are based on, or are modified versions of, actions undertaken in the course of everyday life, they are often difficult to isolate or identify in the archaeological record. In general there are three sets of circumstance which facilitate their observation. These are: the production of special artefacts used in play or ritual; the designation or construction of special places for the performance of play or ritual; and the depiction of such performances.

The formal similarities noted previously between the actions of play and of ritual also mean that the archaeological traces of the special behaviours involved are often not conclusive as to whether it is play or ritual that is involved. Indeed the ambiguities involved pose interesting questions as to whether play and ritual can always be distinguished. Like the paintings of Paula Rego (McEwen 1992), they may conjure up an ambiguous world where ritual and sometimes sexuality overlap play.

The artefacts of play and of ritual are often very similar. Toys often take human or animal form,

as do the effigies or idols of many rituals. The toy drum of the boy 'soldier' is but a miniature version of the drum used in more serious processions. The 'as-if' role of pretend play often requires that the toy resembles the object from real life that is simulated (the toy airplane for the airliner, the doll for the glamorous adult). The role of artefacts used in ritual has much the same symbolic relationship where X (the symbol) represents Y (the thing signified) in context C (the ritual).

Board games perhaps represent a special case. Early versions of chess and of snakes-and-ladders are known from the ancient world. And counters are found that were used in the course of board games. But counters were also used, with serious purpose, in keeping track of the ownership and management of livestock (Schmandt-Besserat 2010). In such a case the use of the counter is indeed symbolic, but its directly functional purpose disqualifies it from the realm of play.

The places where play occurs, when specific provision is made for it, often resemble places set aside for ritual. There must be space for action, whether in the stadium, the dance floor or the stage. The nature of the action determines the shape of the space. The race track, like the *spina* of the hippodrome, or the *cursus* of a Neolithic monument, is linear in form. The *theatron* (place for viewing) is semi-circular. The amphitheatre or *circus* for gladiatorial combat or for boxing is round. The stadium for football is oval.

The special places designated for play, like many of those prepared for ritual performance, make ample provision for spectators. In a ritual performance all those present are in a sense participants, not mere spectators, but it is often easy to identify the main protagonists in ritual, and distinguish them from more passive participants. When play is institutionalised, therefore, the place set aside for the *agones*, the games, may be obvious enough to the archaeologist. Such is the case for the stadia and theatres of ancient Greece and Rome. And so it is for the ballcourts of Mesoamerica. But while the requirements for spectators may dictate the form of places set aside for public play, the requirements for public ritual may be more demanding. Deities can be very demanding in their special requirements with respect to place.

Shrines and monuments are often located with more respect for the sacred landscape than for the public requirements of easy access.

The depiction of play and of ritual again often offers room for ambiguity. And it is not difficult to see why. Ritual is usually performative, and often playful. It is frequently accompanied with musical instruments, which are often used on joyful occasions. In the Western world, a brass band is used more often to accompany a celebration than a funeral. So when musical performances are depicted, they may be in a context of pleasure and play, or of ritual, or indeed of both. When games are depicted, they may be playful competition, or they may be depicted in a ritual context. The Mesoamerican ballgame was clearly a serious matter taking place in a ritual context and following carefully prescribed rules. Indeed the ballgame had a significant role within the Mesoamerican ritual economy (Wells & Davis-Salazar 2007, 13 and 271), accompanied by gambling on a considerable scale, which however confirms its status as a form of play, whose outcome could not be confidently predicted. The Panhellenic games of ancient Greece were played at the greatest sanctuaries of the gods: at Olympia and Nemea (sacred to Zeus), at Delphi (to Apollo), at Isthmia (to Poseidon). The ambiguity is particularly clear with the funeral games of ancient Greece, described by Homer, when games were held in honour of the deceased. The winner was awarded a valuable prize.

PLAY AND RITUAL AT PLACES OF CONGREGATION AND ASSEMBLY

The theme of assembly and congregation is an important one in the study of animal behaviour, and it may not be unconnected, in some cases, with the phenomenon of play (if not, perhaps, of ritual). Shoals of fish, schools of porpoises, herds of ungulate mammals and flocks of birds congregate together. Insects swarm. The formal properties of flocking and of swarming have been systematically studied. I am uncertain, however, whether it has been argued that the aesthetic qualities so obvious to the human observer in the behaviour of flocking among birds have been regarded as 'pleasurable' among the birds

themselves, in the way sometimes argued for play behaviour among animals. It may be that the leaping of porpoises can be described as locomotor play.

The related theme of collective play has perhaps been less systematically addressed: most examples of play among animals discussed in detail in the ethological literature seem to deal with dyadic relationships. Nor have I yet, in a rather brief survey of the relevant literature, found reference to the role of conspecific spectators in play behaviour.

This is puzzling, since among humans, although much play is dyadic (two-participant) in character, play is also quite frequently organised in collective groups. Many games are played by teams of participants. It is similarly the case that most human rituals have more than two participants, and many have also large numbers of observers. The role of the spectator is an important one. Many rituals are designed to be performed in public.

Certainly, if we turn again to the early archaeological record, it is the presence of spectators which sometimes makes the practice of play and ritual visible. Places of assembly are increasingly well documented in the early archaeological record. But their role in the early development of ritual and of religion has not yet been coherently assessed.

The evidence for a place of congregation or assembly may take several forms. In the first place, there may be provision for large numbers of people. Spectators are amply provided for in the theatres and stadia of ancient Greece, in the plazas of pre-Columbian Peru and Mesoamerica and in the great courts of the Minoan palaces. In some cases, for instance in Crete, wall paintings depict large numbers of people participating in assemblies at these locations.

A second useful indicator is the presence of a major monument. The paradigm case is the Neolithic monument of Stonehenge in south England, around 2500 BC, where the transportation and erection of the stones is thought to have required 30 million work-hours. Its circular form and conspicuous character certainly make it a viable focus as a place of assembly. It has been seen as the apex of a hierarchy of monuments in Neolithic south Britain used for the public practice of ritual (Renfrew 1973). The labour invested in the construction of a monument

does not, however, guarantee that it was a place of regular assembly. It has sometimes, for instance, been argued that the ditch and bank which surrounds the circle of stones in a henge monument had the purpose of excluding those persons who were not entitled to enter. Yet the 'attractive' power of Stonehenge is attested by the frequent finds there and nearby of artefacts, notably stone axes, which can be shown to have been brought from afar.

The earliest major monument yet known, or rather ensemble of monuments, is at the site of Göbekli Tepe in eastern Turkey, dating to around 9000 BC (Schmidt 2006). There an impressive circle of large stone slabs or stelae, many of them carved in low relief with depictions of animals, encloses two larger slabs, three metres tall, in a configuration that seems to have been repeated several times on the site. The prodigious feat of quarrying, carving and erecting these stones, many of which still stand today, seems to have been undertaken by hunter-gatherers who did not yet live in permanent village settlements. Although there is little direct evidence for the ritual use of the 'temple' or 'sanctuary' at Göbekli Tepe, it is clear that large groups of hunter-gatherers from the area must have come together to create these monuments. This was, by definition, an assembly or congregation of people. These collective acts may themselves have led to the formation of social units which may not previously have existed, as has been argued for the megalithic burial monuments of Neolithic Britain (Renfrew 2001). It is from the collective engagement in creative work in this way that new social relationships are forged, and given symbolic expression in the monument which is created. The organisation needed to bring together the labour force needed to undertake such constructions will have involved many social occasions, with the provision of food and drink, used no doubt to consolidate the intention and willingness to complete the building work. Such occasions of socially determined eating and drinking are often termed *feasting*. They can involve a range of ritual behaviours (Dietler 2011).

The behaviour at such major places of congregation or assembly is of its nature periodic. The people participating can do so only on an occasional basis.

Even with the development of larger centres of population, for instance with the development of cities, great gatherings at monuments, or in plazas and places of assembly, are time-structured. They cannot be an everyday occurrence. Communal play and ritual are both time-structured, often in rather similar ways.

So it is that attendance on these periodic occasions involves travel by the participants, often over long distances. In a ritual context, the journey may be regarded as a pilgrimage and the travellers as pilgrims. There are some interesting points of similarity, in the field of animal behaviour, with the breeding migrations of a wide range of animal species. Of course that enterprise is too serious to be regarded as play and the notion of ritual can hardly apply. But in terms of congregation and dispersal, at well-determined periodic intervals (annual among most animal species), there are clearly formal similarities. Among humans pilgrimage, like childbirth, may usually have a less than annual frequency. But the prodigious distances travelled for a major pilgrimage such as the Haj seem less astonishing in the context of the distances of up to 10,000 miles covered annually by sea turtles between their foraging and breeding grounds.

FROM PLAY TO RITUAL

Play

There are many intriguing formal similarities among behaviours designated play among animals and humans, as the review of the definitions set out earlier will suggest. In particular many forms of animal play and play among human children (or between mother and child) are effectively isomorphic. Locomotor and social play are both closely comparable between animals and children. Object play, for instance with a ball, is comparable also. Even pretend play, although more developed among children, can be claimed in cases of role reversals among animals, as noted previously.

It is directly from these that many of the games played by human adults clearly develop. Many sports are simply systematised locomotor and social play (e.g. athletics) or object play (e.g. golf).

Much human play is more explicitly structured in a competitive or agonistic format, yet the roots of a 100-metre race are easy to discern in the animal world. Indeed racing uses animals effectively, albeit in more structured form, with greyhound racing or horse racing or indeed chariot racing, so popular in Byzantium. Boxing and wrestling clearly emerge from the ‘rough-and-tumble’ play of animals and children.

Team games involve a feature which may have no close parallel in the animal world: the within-group cooperation of two or more conspecific groups which are working competitively between groups. This is of course the configuration among humans in warfare, when the first principle of play (non-serious, not-for-real) is suppressed. There may be parallels to this configuration (in a non-play context) among social animals which are organised in packs (e.g. wolves) or communities (e.g. chimpanzees), when two such packs or communities are in conflict.

Team games often fall also within the category of object play, since they frequently involve a ball and other equipment (goal, net, bat). All these games are forms of play which are governed by rules, but they can be described effectively without much emphasis upon their rules. In this they differ from games like chess, which are entirely established and constituted by the rules. This is perhaps true of most board games.

In reviewing play, mention should be made of three other categories. The first is musical performance, which can certainly be compared with song in birds, where the elaboration sometimes exceeds the requirements of functionality. The use of musical instruments is an elaboration seen already in the Palaeolithic period (see, for example, Morley 2013).

Dance also has early origins, perhaps in the Palaeolithic, although it is not well documented until the representational art of the Neolithic (Garfinkel 2003).

Theatrical performance is of course usually heavily dependent upon language, but it has its roots also in mime. And mimicry has its roots, or at least its antecedents, in the animal world. The aural and indeed verbal mimicry of the parrot is not always included in discussions of play, yet may well fall within the criteria listed earlier.

Ritual

The similarities between play and ritual in humans are evident, but they have not yet been systematically addressed. That may partly follow from the emphasis upon religious ritual which is a feature of so many discussions, including those of Bell and Marcus. Bell’s fifth attribute of ritual is ‘sacral symbolism’, and in the discussion of Marcus’ components, four and five refer to ‘purpose’ and ‘meaning’. But recent discussions of ritual have emphasised the significant role of secular ritual (e.g. Kyriakidis 2007), so that even a Minoan ‘peak sanctuary’ can be viewed in terms of the institutionalised rituals performed there, which can be viewed in secular rather than religious terms (Kyriakidis 2005).

The important point that rituals have a well-defined meaning and purpose, as indicated by Marcus and implied by Bell, is called into question by the detailed study by Humphrey and Laidlaw (1994). There they consider the Jain rite of worship, in which the principal ceremony is the *puja* ritual. And they reach the conclusion that “anthropologists have been mistaken in thinking that the communication of meanings is distinctive or definitional of ritual” (2).

“As we have tried to show in some detail for the *puja*, elaborate models, coherent meanings, and consistent interpretations of the rite are things which people *may come to have*, through and as a reaction to, performing it. These models do not underlie it. ... It is better to see the discursive models and meanings of rituals as one of the possible responses to ritual, rather than as underlying its constitution” (Humphrey & Laidlaw 1994, 265).

This is an important point in itself. And it has significant implications for the evolution of religious thought and practice. For in discussing the very early origins of some forms of ritual, it should no longer be assumed that the belief systems in more recent times which were associated with that ritual form were similarly associated in much earlier days.

The six basic attributes of ritual identified by Bell may perhaps be reduced to five (with the elimination of sacral symbols, seen as pertaining to religious but not to secular ritual). The distinction between play and very serious or even solemn activity is not

always easy to maintain: several devotees of football have arranged that, following their demise, their cremated ashes be interred or scattered near the goalposts on the pitch of the football club of their allegiance. These attributes, of formalism, traditionalism, disciplined invariance, rule governance and performance, can certainly be applied to games among adult humans, and in many cases among children also. Many are also features of forms of play that are not usually described as ‘games’. Rappaport (1999, 45), in his discussion of games, cites the interesting comments of Lévi-Strauss (1962, 31–2) on ‘treating a game as a ritual’.

Interestingly, many of these features are also, at least to some extent, features of animal play, bearing in mind some of the distinctions that have been considered.

AN EVOLUTIONARY VIEW OF RITUAL AND CONGREGATION

The background of animal behaviour, primarily in the field of play, but also in that of collective behaviour and of migration, makes a promising introduction to a consideration of the origins of ritual and of religion. As many have noted, play among humans, especially children, shares many of its features with play among animals. And as we have seen, many of the features of ritual are prefigured in those of play. This is particularly the case when we include secular rituals in the discussion, and note the view of Humphrey and Laidlaw (1994, 2), contra Bell (1997) and Marcus (2007, 48), that the communication of meanings is not a defining feature of ritual.

To recognise that play among animals and humans has many features which are later seen in human rituals and religions does not however mean that an evolutionary path has been established. That traditionalism is a feature of ritual (Bell’s first attribute) does not necessarily imply continuity with earlier human societies, let alone earlier animal species, in some long-term evolutionary pattern of descent. The thread of continuity is not often easy to discern.

It is important first to consider which of the perceived similarities between animal play and human rituals are simply homologous forms which have

arisen independently. Humans, like most of the animals we are considering, each have two parents, and are separate beings reared by one or two of these parents, independent beings which move freely through the world. They lead social lives, as indeed they are constrained to do, among other things for the purposes of mating. Their social life can involve games and rituals. These are general features which they share with many other species. A number of structural analogies can arise simply from the general shared features.

Ritual behaviour among humans frequently involves assemblies and congregations, which can necessitate travel over great distances (e.g. pilgrimage). It is tempting here to make a comparison with the congregation of other species in large groups (e.g. herds, flocks, shoals), often involving migration over large distances. But before the analogy should become too tempting, note that play behaviour among animals is not usually invoked in discussions of flocking behaviour or of migrations. This is partly a feature of the definitional constraints imposed by ethologist students of play, but partly also because play behaviours are contrasted with those manifested in the more stressed conditions of mating or feeding. So it must be accepted that some of the similarities arise simply from the analogous conditions which pertain when independent individuals interact together socially in large numbers. Remember that most play among animals is dyadic in nature.

Nonetheless, enough similarities and suggestive indications remain to suggest that the study of the origins of religion and of ritual behaviour in early human societies may be enriched by the careful consideration of play among animals and humans. It is clear from the present discussion that the term *performance* is a key concept. It is a suitably ambiguous term on which to end. For many performances are solo performances. But, whether by accident or intention, they often have large audiences.

REFERENCES

- Barrowclough, D. & Malone, C., 2007. *Cult in Context: Reconsidering Ritual in Archaeology*. Oxford: Oxford University Press.

- Bateson, G., 1956. The message 'this is play'. In B. Schiffer (ed.), *Group Processes*. New York: Josiah Macy Jr. Foundation, 145–242.
- Bell, C., 1997. *Ritual: Perspectives and Dimensions*. Oxford: Oxford University Press.
- Bell, C., 2007. Response: defining the need for a definition. In E. Kyriakidis (ed.), *The Archaeology of Ritual*. Los Angeles: Cotsen Institute of Archaeology, University of California, 276–88.
- Bellah, R. N., 2011. *Religion in Human Evolution*. Cambridge, MA: Harvard University Press.
- Burghardt, G. M., 2005. *The Genesis of Animal Play*. Cambridge, MA: MIT Press.
- Dietler, M., 2011. Feasting and fasting. In T. Insoll (ed.), *The Oxford Handbook of the Archaeology of Ritual and Religion*. Oxford: Oxford University Press, 179–94.
- Dissanayake, E., 1992. *Homo aestheticus. Where Art Comes from and Why*. New York: Free Press.
- Garfinkel, Y., 2003. *Dance at the Dawn of Agriculture*. Austin: University of Texas Press.
- Huizinga, J., 1955. *Homo ludens. A Study of the Play Element in Culture*. Boston, MA: Bacon.
- Humphrey, C. & Laidlaw, J., 1994. *The Archetypal Actions of Ritual*. Oxford: Clarendon Press.
- Insoll, T. (ed.), 2011. *The Oxford Handbook of the Archaeology of Ritual and Religion*. Oxford: Oxford University Press.
- Kertzner, M., 1988. *Ritual, Politics and Power*. New Haven, CT: Yale University Press.
- Kyriakidis, E., 2005. *Ritual in the Bronze Age Aegean: the Minoan Peak Sanctuaries*. London: Duckworth.
- Kyriakidis, E., (ed.), 2007. *The Archaeology of Ritual*. Los Angeles: Cotsen Institute of Archaeology, University of California.
- Lévi-Strauss, C., 1962. *The Savage Mind*. London: Weidenfeld and Nicolson.
- Marcus, J., 2007. Rethinking ritual. In E. Kyriakidis (ed.), *The Archaeology of Ritual*. Los Angeles: Cotsen Institute of Archaeology, University of California. 43–76.
- McEwen, J., 1992. *Paula Rego*. Oxford: Phaidon.
- Morley, I., 2013. *The Prehistory of Music: Human Evolution, Archaeology, and the Origins of Musicality*. Oxford: Oxford University Press.
- Onions, C. T., 1978. *The Shorter Oxford Dictionary*. Oxford: Clarendon Press.
- Pellegrini, A. D., 2009. *The Role of Play in Human Development*. Oxford: Oxford University Press.
- Piaget, J., 1962. *Play, Dreams and Imitation in Childhood*. New York: W.W. Norton.
- Preucel, R. W., 2006. *The Archaeology of Semiotics*. Oxford: Blackwell.
- Rappaport, R. A., 1999. *Ritual and Religion in the Making of Humanity*. Cambridge: Cambridge University Press.
- Renfrew, C., 1973. Monuments, mobilisation and social organisation in Neolithic Wessex. In C. Renfrew (ed.), *The Explanation of Culture Change, Models in Prehistory*. London: Duckworth, 539–58.
- Renfrew, C., 1985. *The Archaeology of Cult: The Sanctuary at Phylakopi*. London: British School at Athens.
- Renfrew, C., 2001. Commodification and institution in group-oriented and individualising societies. In G. Runciman (ed.), *The Origin of Human Social Institutions*. London: British Academy, 93–118.
- Renfrew, C., 2007a. The archaeology of ritual, of cult, and of religion. In E. Kyriakidis (ed.), *The Archaeology of Ritual*. Los Angeles: Cotsen Institute of Archaeology, University of California, 109–22.
- Renfrew, C., 2007b. *Prehistory: The Making of the Human Mind*. London: Weidenfeld & Nicolson.
- Schmandt-Besserat, D., 2010. The token system of the ancient Near East: its role in counting, writing, the economy and cognition, in I. Morley & C. Renfrew (eds.), *The Archaeology of Measurement, Comprehending Heaven, Earth and Time in Ancient Societies*. Cambridge: Cambridge University Press, 27–34.
- Schmidt, K., 2006. *Sie bauten de ersten Tempel*. Munich: C.H. Beck.
- Searle, J., 1995. *The Construction of Social Reality*. Harmondsworth, Penguin.
- Smith, P., 2010. *Children and Play*. Oxford: Wiley-Blackwell.
- Sutton-Smith, B., 1997. *The Ambiguity of Play*. Cambridge, MA: Harvard University Press.
- Thorpe, W. H. 1966. Ritualization in ontogeny: I. Animal play. *Philosophical Transactions of the Royal Society of London, Series B* 251, 311–19.
- Verhoeven, M., 2011. The many dimensions of ritual. In T. Insoll (ed.), *The Oxford Handbook of the Archaeology of Ritual and Religion*. Oxford: Oxford University Press, 115–32.
- Wells, E. C. & Davis-Salazar, K. (eds.), 2007. *Mesoamerican Ritual Economy*. Boulder: University Press of Colorado.