Flow and the Play Cycle

A Theoretical Consideration of the Importance of Flow in Established Play Cycles

PETE KING

The author discusses the process of play in terms of six elements in the play cycle first introduced by Sturrock and Else in 1998 and revised by King and Newstead in 2020—precue, play cue, play return, play frame, flow, and annihilation—and their relation to Winnicott's concepts of "potential space" or the "third area," which Sturrock referred to as the "ludic third." Claiming that, although four of the six elements can be observed in actual play, two—flow and precue—cannot, the author focuses on the importance of flow in established play cycles enabling the sharing of children's inner and outer worlds with other children and adults during their play. He also considers the implications of such play cycle flow in both therapeutic and learning contexts. **Key words**: collaborative play; flow; ludic third; play cycle; potential space; third area

Introduction

THE PLAY CYCLE was first introduced to the play and playwork field in 1998 by Sturrock and Else at the International Play Association (IPA) triennial conference in Colorado. The play cycle focuses on the process of play (King and Sturrock 2019; Sturrock and Else 1998) and consists of six elements: precue, play cue, play return, play frame, flow, and annihilation (King and Newstead 2020; King and Sturrock 2019). We now have a method for recording four of the elements of the play cycle (play cue, play return, play frame, and annihilation) called the play cycle observation method (PCOM) (King 2020a, King, Atkins, and Burr 2021). The two elements that are not recordable are the precue and flow because they are not observable. The precue constitutes the internal conscious or unconscious intent (the thought or idea) to play (King and Newstead 2020; King and Sturrock 2019). Flow forms a "dynamic state" (Csikszentmihalyi 1975, 36),

and it is only possible to infer that a child (or group of children) has an intent to play or is in a state of flow.

Although we cannot observe the precue, some play scholars have proposed that the objects (both human and nonhuman) in the environment can simulate in children a conscious or unconscious intent to play, that is, it can stimulate the precue. We call these objects or loose parts (Nicholson 1971) from the environment that may stimulate the precue the "external perceptual cue" (King 2022). We can only infer the precue, however, from the number and quality of loose parts, the opportunities, and the affordances that exist to stimulate it (Gibson 1986). In this instance, affordance refers to the relationship between an organism and the environment—for example, a child and the available play space. (See King [2022] for a more detailed explanation of affordances and play space.) The more objects or loose parts available, the more opportunities the play environment can afford for children to play.

When the precue emits a play cue, the signal to the child's outer world to play, this may provoke a response—the play return. This cue and response will create the play cycle. In such an established play cycle, play cues and play returns continue to take place among those involved in the play, and these cues and returns can be recorded using the PCOM (King 2020a; King, Atkins, and Burr 2021). We term the play cues and returns in the established play cycle "flow." Although flow can only be inferred (as with the precue), we offer a theoretical consideration of the importance of flow for those involved in the established play cycle based on Csikszentmihalyi's (1975) flow theory and Winnicott's (1971) concepts of potential space or third area.

Although in the original "Colorado Paper," flow was termed as "loop and flow" (Sturrock and Else 1998), and Else (2009, 2014) further elaborated the concept by making specific reference to the work of Csikszentmihalyi, my inclusion of flow within the play cycle still requires more justification and some clarification. I provide a theoretical consideration of flow when children play together and when children and adults play together. This theoretical development of flow further burnishes the play cycle concept that currently supports playwork practice (Playwork Principle Scrutiny Group [PPSG] 2005). In addition, it could support practitioners in other play contexts—for example, those concerning both child-led (with or without adults) and collaborative (with adults) activities within play-based learning (Pyle and Danniels 2017) and those in therapeutic settings such as hospitals.

The Established Play Cycle

The play cycle focuses on the process of play (King and Newstead 2020; King and Sturrock 2020) and where the precue (thought or idea to play) lies within a child's subjective inner world and emits a play cue to a child's objective outer world. If the play cue stimulates a play return and if this response reaches the source of the play cue, that is, the child's inner world, the play cycle forms. Within an established play cycle, play cues and play returns continue, and we call this flow (a state in which children appear completely lost or absorbed in their play). The play cycle has a boundary (physical or imagined) that keeps it intact, which we call the play frame. Eventually, the play cycle finishes or gets annihilated. Figure 1 shows how a play cycle has been established when the play cue of one child leads to a play return from another child.

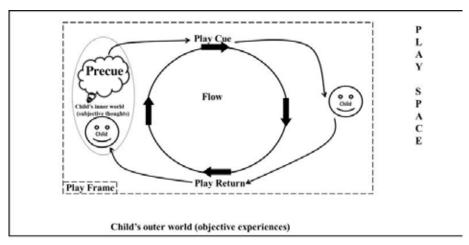


Figure 1

Although we can observe play cues and play returns, we cannot observe the precue or flow. However, flow can be inferred within established play cycles because play cues continue to be issued where they might receive a play return.

Flow

It is worth providing a brief background for the concept of flow based on Csikszentmihalyi (1975). Csikszentmihalyi defines flow as "the holistic sensation that people feel when they act with total involvement," in which "play is the flow experience par excellence" as is "creativity." Further, he sees flow as the "merging of action and awareness" that makes an individual "aware of his (their) actions but not of the awareness itself" and that "seems to occur only when tasks are within one's ability to perform" (36–39).

Essentially, flow is a state that merges an individual's action with awareness that occurs within the individual's ability. This is why flow is both unobservable as a state and important in play. The merging of action with awareness requires focusing on playing in the "here-and-now" (Csikszentmihalyi 1975; King and Temple 2018). A state of flow implies a "loss of self-consciousness" (Csikszentmihalyi 1975, 42) in which the chosen activity has an autotelic quality: "Some people can start a flow episode just by directing their awareness to conform with the requirements of flow, like limiting the stimulus filed to allow the merging of action and awareness. But most people rely on external cues for getting into flow states" (49).

External cues relate to what is available in an environment and the research about it has focused on a "dynamic system composed of person and environment" (Nakamura and Csikszentmihalyi 2002, 90), or what Gibson (1986) termed "affordances." An organism perceives the objects, or loose parts, in an environment, and this offers the "external perceptual cue" (King 2022, 182) that has the potential to initiate a play cycle. The external perceptual cue, based on von Uexküll's (1982) "functional cycle," can stimulate the idea or thought to play we call the precue (King and Newstead 2020; King and Sturrock 2019). The external perceptual cue lies in a child's outer world but gets perceived within his or her inner world.

Flow was first documented during interviews (Csikszentmihalyi 1975), and there now exist questionnaires and scales to measure different aspects of flow (Nakamura and Csikszentmihalyi 2002). Inal and Cagiltay (2007) attempted to observe and measure the flow of children playing computer games. However, once again, because flow is a subjective state (Nakamura and Csikszentmihalyi 2002), it is difficult to observe and can only be inferred. Inal and Cagiltay (2007) used Kiili's (2005) flow scale when they interviewed children who had played computer games, and the study's results suggest that flow occurs more often when children play in groups. However, the study removed three items of Kiili's flow scale—autotelic experience, time distortion, and playability—because Inal and Cagiltay deemed children unable to understand them. This throws into question the reliability and validity of using the scale with children, especially

because autotelic experience is key to flow according to Csikszentmihalyi (1975) and reflects the intrinsic motivation essential to the definition of play used by the Playwork Principles Scrutiny Group (PPSG 2005). Göl-Güven (2017), another study about flow, looked at its role in the interactions between children and adults. The results suggest that the involvement of adults may interrupt flow, by being, for example, overprotective.

Although the subjective state of flow makes it difficult to observe (Nakamura and Csikszentmihalyi 2002), other aspects of the play cycle are observable. As I have mentioned, the play cycle observation method (PCOM) (King 2020a; King, Atkins, and Burr 2021) records the four observable elements of the play cycle. The two elements it does not record are, again, the precue and flow. However, when a play cycle becomes established, play cues are continually issued and, with the play they make possible, indicate children are in a state of flow and lost in their play (although, again, this can only be inferred). The play cycle provides a theoretical basis for how adults can support flow, either as an active partner in play or by facilitating the space for children to play individually or in groups.

Flow and the Play Cycle

The play cycle requires that a play cue be issued and have a response we call the play return. Within flow, and to maintain the established play cycle, play cues (and returns) can still take place. These may be made by the individual who initially provided the play cue or by anyone involved in the play cycle. How can flow be represented in an established play cycle? We can define flow within the play cycle as "where play cues and play returns are continually being processed between the child's 'inner and outer world,' resulting in the child appearing 'lost' in their play" (King and Newstead 2020, 109). Donald W. Winnicott first described the merging of the inner world and outer world through play in relation to the concept of the "potential space" or "third area."

Winnicott and Play

Winnicott (1971) wrote: "Psychotherapy takes place in the overlap of two areas of playing, that of the patient and that of the therapist. Psychotherapy has to do with two people playing together. The corollary of this is that where playing is

not possible then the work done by the therapist is directed towards bringing the patient from a state of not being able to play into a state of being able to play" (38).

The state of not playing and playing requires what Winnicott referred to as the potential space, which "varies a great deal according to the life experiences" (41) and enables the combining of the subjective inner world and subjective outer world (King and Temple 2018; Sturrock 2003a). Sturrock (2003b) referred to this potential space as the "ludic third" concerning the space where, "in the most intimate of play exchanges between the playing child and the playing adult, there appeared to be a sharing of an overlapping, externalized, cohabited space of 'as-if' potentiality" (Sturrock 2003a, 88).

This sharing and overlapping between the playing child and adult have also been considered by others in learning contexts—in, for example, Vygotsky's (1978) concept of the "zone of proximal development," Rogoff's (1990) "guided participation," Siraj-Blatchford's (2007, 2009) "sustained shared thinking," and Lindqvist's (1995) concept of "playworlds."

Siraj-Blatchford (2007) identifies three keys to the concept of sustained shared thinking of creativity, communication, and collaboration that occurs through play. Siraj-Blatchford defined sustained shared thinking as "an effective pedagogic interaction, where two or more individuals 'work together' in an intellectual way to solve a problem, clarify a concept, evaluate activities, or extend a narrative" (11). Sustained shared thinking exists within a learning context.

Lindqvist's (1995) playworlds offer an example of sustained shared thinking through play where a sharing of stories and narratives occurs between adults and preschool children. Two or more individuals can be children or adults whose sustained shared thinking incorporates the concept of scaffolding (Wood 1988). This scaffolding links us to Vygotsky's (1978) zone of proximal development (or ZPD), in which an adult through interaction with children supports their potential to actual development. Vygotsky believed play had an important role in such development.

Two other educational approaches developed from Vygotsky's theory are "dialogic inquiry" (Wells 1999) and "assisted performance" (Tharp and Gallimore 1988). Dialogic inquiry involves thinking together about a shared interest in "a collaborative community in which, with the teacher as leader, all participants learn with and from each other as they engage together in dialogic inquiry" (Wells 1999, xii).

Dialogic inquiry focuses on learning rather than play, but clearly a shared

learning exists between adults and children. This shared learning is also a feature in Tharp and Gallimore's (1988) "assisted performance," which is learning that occurs "through the reciprocal influences of child and social environment" (29–30). The social environment to which Tharp and Gallimore (1988) referred is the school classroom where the teacher plays a role in assisted performance. The adult role in the social environment, particularly within a community context, also relates to Rogoff and her associates' "guided participation." In guided participation "children's development occurs through active participation in cultural systems of practice in which children, together with their caregivers and other companions, learn and extend the skills, values, and knowledge of their community" (Rogoff et al. 1993, 1).

The notions of sustained shared thinking, scaffolding, playworlds, assisted performance, dialogic inquiry, and guided participant all involve a sharing and overlapping of Winnicott's potential space for play and all fall within the learning context of Vygotsky's ZPD. The ZPD has been considered a developmental potential in after-school clubs where children of mixed ages and abilities play and where more experienced peers help scaffold younger children's play (King 2020b). Whether in a learning context or a pure play context, the third area or ludic space will be a shared space.

This overlapping in the potential space, or the ludic third, also applies to two or more children playing together within an externalized cohabited space or the play space in which a play cycle has been established. We defined flow within the play cycle to be where play cues and play returns are processed between the child's inner and outer world (King and Newstead 2020, King and Sturrock, 2019) and held that this process continues to occur when a play cycle has been established.

Flow within an Established Play Cycle

Sturrock (2003b) stated when considering the adult within an established play cycle, "The adult is involved in the flow of play—that most precious of the aspects of the cycle—absorption in the play context is established" (30). This absorption was also considered by Csikszentmihalyi (1975) to be where flow means total involvement, the merging of action and awareness within one's ability to perform for no goals or rewards external to itself. This last idea—that play is freely chosen (intrinsically motivated for no external goal) (PPSG, 2005)—underpins

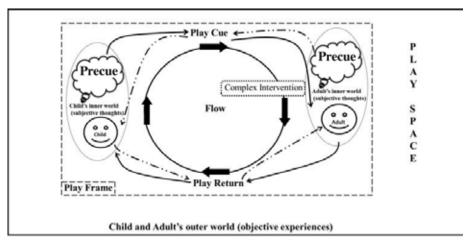


Figure 2

the playwork practice Sturrock (2003a) identifies as a key enabling the playing child and adult to share and overlap their subjective internal worlds and objective outer worlds in Winnicott's potential space or Sturrock's ludic third. We look at how this occurs in figure 2 where an adult supports the play within an established play cycle within complex intervention (Sturrock and Else 1998; Sturrock, Russell, and Else 2004).

Sturrock and Else (1998) and Sturrock, Russell, and Else (2004) describe four ways adults can support the process of play. The first is play maintenance, in which an adult observes and does not actively participate in the play cycle. In the second, simple involvement, an adult may provide resources for the play but, again, does not actively participate in the play cycle. In the third, medial intervention, an adult can simply support the play cycle when issued a play cue or issue a play cue to initiate play and become an active participant in the play cycle. Although an adult frequently waits for play cues to be issued, when in flow, play cues and play returns can come from anyone involved in the already established play cycle. It is the fourth category of complex intervention, in which adults and children are in a deep play, that both actively issue play cues for the play cycle. (See King and Temple [2018] for a descriptive example of this process.)

Figure 2 shows the play space that will become both the children's and the adults' outer world and their objective experiences in which the adults support the process of play within complex intervention. Within the play space, children and adults will have their own subjective experiences in their inner worlds. Play allows the merging of the inner (subjective) and outer (objective) worlds, and

this manifests in the observed play. This could occur in role playing, in something creative like making a collage, or in a physical type of play like a game of chase. Irrespective of the type of play, the play cycle has first to be established and then maintained, with play cues and returns continuing, for the state of flow to form. As a reminder, we define complex intervention as play in which, "there is a direct and extended overlap between playing children and the adult—the adult may need to take on a role in the play, or act as a partner to the playing child" (Sturrock, Russell, and Else 2004, 74).

For example, a role play play cycle may form, say, when a child and an adult adopt characters as the child issues a play cue to the adult, who offers a play return. To maintain the established play cycle in which both the child and adult are actively involved, sharing and overlapping require that both have the potential to issue a play cue. We show this in figure 2 where both the child and the adult may have a thought or idea to continue, develop, and elaborate the established play cycle, which is a precue, but this remains in their respective inner worlds. If a play cue gets issued, whether by child or adult, a play return can occur, but it is not essential because the play cycle has been established. If a play return is provided, this can continue the play cycle—or even develop it.

Sturrock (2003b) outlines the importance for adults within this shared and overlapping play with children to maintain awareness of their role in the play and avoid a situation in which the "play function of the child is overtaken, for a variety of reasons by the wishes, feats, hopes, and aspirations of the adult" (32). This is what Sturrock and Else (1998) refer to "adulteration" and the need for the adult to work within the "witness position" (93). (See King and Temple [2018] on how an adult can work in such a position.)

Flow in Established Play Cycles— Children Playing with No Adult

Often children will play with their peers, and the sharing and overlapping of play also applies to them. Figure 3 shows two children playing in such an established play cycle.

When playing with children, adults actually need to be aware of their roles in the play so as not to adulterate it, but children when they play may also develop such an awareness (King and Temple 2018). The sharing and overlapping of their inner and outer worlds will often result in cooperation and conflict, both

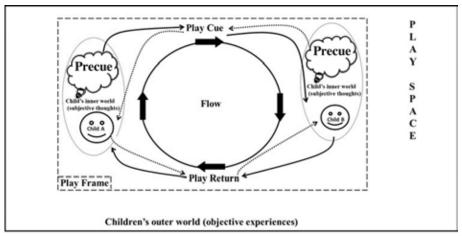


Figure 3

important in social development—for example, in the concept of Theory of Mind (Premack and Woodruff 1978).

Flow, Potential Space, and the Ludic Third in Established Play Cycles

The potential space or ludic third is the sharing and overlapping of two or more people's "inner" and "outer" world when they play. This enables sharing and overlapping of subjective thoughts and ideas with objective experiences, maintained in a state of flow in which play cues and play returns continue to be issued and responded to within established play cycles. As Nakamura and Csikszentmihalyi (2002) noted, "It is the subjective challenges and subjective skills, not objective ones, that influence the quality of a person's experience" (91). This potential space or ludic third is not visible, but we illustrate it in figures 4 and 5 as dotted lines to indicate that, within the established play cycle (bounded by the play frame), it occurs in the outer world and enables the merging or overlapping of the inner worlds of child and adult or child and child.

Figure 4 considers the potential space or ludic third between the playing child and adult. Sturrock (2003b) explains this as an "intersubjectivity," something, through play, child and adult create together. Adults must be aware of their witness position, of both their own subjectivity and of the subjectivity created between them and the children, to prevent taking over the play or adulterating it.

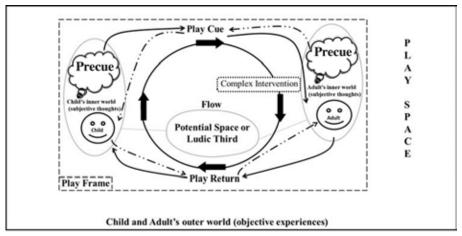


Figure 4

Although we cannot see flow, we can see play cues and play returns and the creation of play cycles. The continual play cues and play returns in established play cycles can provide an indication of flow, where in complex interventions, children and adults share and overlap the content of their subjectivity of play within the objectivity of the play space. We can also infer flow when children play together. Their overlapping inner subjectivity and outer objectivity will have a different meaning compared to a child-adult interaction; however, this is important because the cultural world of children is constructed differently from the cultural world of adults (Corsaro 2017).

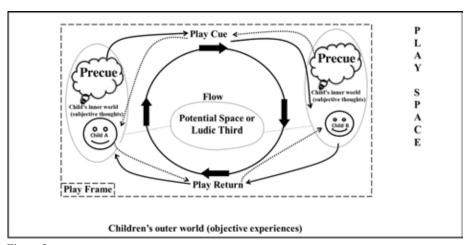


Figure 5

Implications of Flow and the Play Cycle

Sturrock and Else (1998) and Sturrock (2003a, 2003b) base the play cycle on a process of play in which the space that must exist to enable play to happen also constitutes a natural therapeutic healing space for children. The adult within this natural therapeutic healing space can, as Sturrock (2003b) suggests, "make the most telling contribution to the ludic well-being of the child . . . in the shared subjective space" (34). This therapeutic aspect has been considered by King and Temple (2018) in relation to transactional analysis, during which adults may be more active in the play cycle, especially when they support the process of play within complex intervention. Even when not involved in a play cycle, adults still have a role.

When children play in their peer groups in the same natural therapeutic shared subjective space, adults can support the play process through play maintenance (observing play) or simple involvement (providing resources). In addition to the natural therapeutic space, other therapeutic environments in which children and adults play together include hospitals. And, in times of adversity, child friendly spaces (Ardelean 2021) are created to support children therapeutically. Creating play spaces for established play cycles will then enable children to play in a state of flow that could have very important therapeutic benefits.

In addition to flow within a therapeutic context, Csikszentmihalyi and Wolfe (2014) considered flow in a learning context. They noted that people report the most positive experiences and the greatest intrinsic motivation when they "are operating in a situation of high opportunities for action (challenges) and a high capacity to act (skills)" (174). Flow experiences also play a critical role in the development of complex patterns of thought and behavior. Csikszentmihalyi and Wolfe (2014) write that the "flow model also suggests that being able to match challenges with skills... is essential for students to be attracted to learning" (174). The concept of flow and the play cycle can be considered within a play-based learning context such as in guided play (Weisberg, Hirsh-Pasek, and Golinkoff 2013) or collaborative play (Pyle and Danniels 2017).

When a play cycle is established, whether a child is playing alone or with other individuals (children or adults), play cues and play returns continue to be processed between inner and outer worlds. For adults working with children in any play context, our consideration of flow can be applied, including in learning and therapeutic contexts.

Play-based learning offers a teaching approach involving playful, child-

directed elements along with some degree of adult guidance and scaffolded learning objectives (Weisberg, Hirsh-Pasek, and Golinkoff 2013). Play-based learning can be considered as a continuum, and Pyle and Danniels (2017) consider the adult role along this continuum in three areas: child directed, collaborative, and teacher directed. It is the middle ground of collaborative play where the concept of flow between playing children and adults in an established play cycle best supports learning. In collaborative play both children and adults participate, and they thus are sharing both their inner and outer worlds in a learning environment. This involves Siraj-Blatchford's (2009) sustained shared thinking and Winnicott's (1971) potential space or third area. A consideration of flow within established play cycles within play-based learning can be important because "a flow activity not only provides a set of challenges or opportunities for action, but it typically also provides a system of graded challenges, able to accommodate a person's continued and deepening enjoyment as skills grow" (Nakamura and Csikszentmihalyi 2002, 92).

Play is used in many therapeutic contexts—for example, in hospitals where children may stay for short periods of time or longer ones. There, play is used for preoperative preparation, invasive procedures, and recovery (Koukourikos et al. 2015). Hospital play specialists can provide resources for play or be actively involved—for example, when they use puppets to reduce anxiety (Dehghan et al. 2017) and to support preschool children (Oluç and Sarialioğlu 2023). Importantly, play and flow—in which children get lost in their play even within the therapeutic environment—moves the focus for a period away from just being in a hospital to being lost in the here-and-now of play (King and Temple 2018).

Another therapeutic context in which play and flow can be usefully considered involves child friendly spaces (CFS) (Ardelean 2021; Davie et al. 2014). CFS are important as psychological first aid for children and young people who experience major adversity, such as earthquakes. CFS provides places for "integrated play, informal education, and psychosocial support" (Davie et al. 2014, 25–26) and this integrated play can occur between children or between adults and children. The importance of the play cycle is that it provides necessary time and space for children to have a safe environment potentially to enter the flow state, which may enable them to play through their stay and gain an understanding of what they have experienced (Ardelean 2021). This was highlighted, according to Kinoshita and Woolley (2015), when children had experienced the Great East Japan Earthquake in 2011. Playing on an adventure playground (which can be

considered a CFS) enabled recovery by helping them relieve their mental stress. Since the flow state exists in the here-and-now, the use of play in CFS provides the opportunity for children to merge action and awareness (Csikszentmihalyi 1975) as they play through adverse experiences.

The theory of the play cycle enables the adult to focus and support the process of play, whether in a natural, therapeutic, or play-based learning environment. The importance of establishing play cycles, which may or may not include adults, is that it allows children to experience the state of flow, which involves the merging of action and awareness within one's ability to perform for no goals or rewards external to itself, as Csikszentmihalyi noted. This could relate to any context in which children play, whether at home, on the school playground, in the classroom, or in a therapeutic situation such as a hospital.

Conclusion

Flow within play has been considered by Csikszentmihalyi (1975) as "par excellence" (37) and makes up one of the six elements of the play cycle. Although not observable, when play cycles are established, play cues and play returns continue, and the play cycle has provided an important theory of play that supports professional playwork practice (King and Newstead 2021). As one element of the play cycle, flow relates to the issuing of play cues and to the responding play returns within established play cycles. This unobservable flow can be experienced; indeed, we have all been in a state of flow at some point. Flow enables the sharing of inner subjective thoughts and feelings with the objective outer world. It can occur when children play alone or when they play with other people—other children, or adults, or both. When children play with others, an overlap of the inner world and outer world appears through play that can have a therapeutic and learning benefit through Winnicott's potential space or third area or Sturrock's ludic third. Thus, play cues and play returns have an important role within established play cycles, allowing children to enter a state of flow.

REFERENCES

- Ardelean, Ana. 2021. "Play in a Refugee Camp: Disorder from Chaos." *International Journal of Play* 10:355–60. doi: 10.1080/21594937.2021.2005395.
- Corsaro, William A. 2017. The Sociology of Childhood, 5th ed.
- Csikszentmihalyi, Mihaly. 1975. Beyond Boredom and Anxiety: The Experience of Play in Work and Games.
- Csikszentmihalyi, Mihaly, and Rustin Wolfe. 2014. "New Conceptions and Research Approaches to Creativity: Implications of a Systems Perspective for Creativity in Education." In *The Systems Model of Creativity: The Collected Works of Mihaly Csikszentmihalyi*, edited by Mihaly Csikszentmihalyi, 161–84.
- Davie, Susan, Marie Stuart, Fiona Williams, and Elise Erwin. (2014). "Child Friendly Spaces: Protecting and Supporting Children in Emergency Response and Recover. *Australian Journal of Emergency Management* 29: 25–30.
- Dehghan, Zahra, Tayebeh Reyhani, Vahideh Mohammadpour, Seyedah Zahra Aemmi, Reza Shojaeian, and Seyedh Moshen Asghari Nekah. 2017. "The Effectiveness of Dramatic Puppet and Therapeutic Play in Anxiety Reduction in Children Undergoing Surgery: A Randomized Clinical Trial." *Iranian Red Cross Medical Journal* 19:1–8. doi: 10.5812/ircmj.41178:
- Else, Perry. 2009. The Value of Play.
- ——. 2014. Making Sense of Play: Supporting Children in Their Play.
- Gibson, James. J. 1986. The Ecological Approach to Visual Perception.
- Göl-Güven, Mine. 2017. "Play and Flow: Children's Culture and Adults' Role. *Journal of Early Childhood Studies* 1:247–61. doi: 10.24130/eccd-jecs.196720171230.
- Inal, Yavuz, and Kursat Cagiltay. 2007. "Flow Experiences of Children in an Interactive Social Game Environment." *British Journal of Educational Technology* 38:455–64. doi:10.1111/j.1467-8535.2007.00709.x
- Kiili, Kristian. 2005. *On Educational Game Design: Building Blocks of Flow Experience*. King, Pete. 2020a. "The Play Cycle Observation Method (PCOM): A Pilot Study." *International Journal of Playwork Practice* 1:n.p. doi: 10.25035/ijpp.01.01.02.
- ——.2020b. "Adult Memories of Attending After-School Club Provision as a Child between 1990 and 2010," *Child Care in Practice*:1–13. doi: 10.1080/13575279.2020.1792839.
- ——.2022. "A Theoretical Expansion of the Play Cycle: Jakob von Uexküll's Functional Cycle and the Perceptual Cue." *American Journal of Play* 14:173–87.
- King, Pete, and Gordon Sturrock. 2019. *The Play Cycle: Theory, Research, and Application.*——. 2020. *The Play Cycle: Theory, Research, and Application.*
- King, Pete, LaDonna Atkins, and Brendon Burr. 2021. "Piloting the Play Cycle Observation Method (PCOM) in 'Real Time': Recording Children's Play Cycles in Pre-School Provision." *Journal of Early Childhood Research* 19:298–308. doi: 10.1177/1476718X20969851.
- King, Pete, and Shelly Newstead. 2020. "Re-defining the Play Cycle: An Empirical Study of Playworkers' Understanding of Playwork Theory." *Journal of Early Childhood Research* 18: 99–111. doi: 10.1177/1476718X19885991.

- ——. 2021. "Demographic Data and Barriers to Professionalisation in Playwork." *Journal of Vocational Education and Training* 73:591–604. doi: 10.1080/13636820.2020.1744694.
- King, Pete, and Susannah Temple. 2018. "Transactional Analysis and the Ludic Third (TALT): A Model of Functionally Fluent Reflective Play Practice." *Transactional Analysis Journal* 48:258–71. doi: 10.1080/03621537.2018.1471292.
- Kinoshita, Isami, and Helen Woolley. 2015. "Children's Play Environment after a Disaster: The Great East Japan Earthquake. *Children* 2:39–62. doi: 10.3390/children2010039.
- Koukourikos, Konstantinos, Laila Tzeha, Parthenopi Pantelidou, and Areti Taloglidou. 2015. "The Importance of Play during Hospitalization of Children." *Mater Sociomed* 27:438–41.
- Lindqvist, Gunilla. 1995. The Aesthetics of Play: A Didactic Study of Play and Culture in Preschools.
- Nicholson, Simon. 1971. "The Theory of Loose Parts: How NOT to Cheat Children." *Landscape Architecture* 62:30–34.
- Nakamura, Jeanne, and Mihaly Csikszentmihalyi. 2002. "The Concept of Flow." In *Handbook of Positive Psychology*, edited by C. R. Snyder and Shane J. Lopez, 89–105.
- Oluç, Tuğba, and Arzu Sarialioğlu. 2023. "The Effect of a Hand Puppet-Based Therapeutic Play for Preschool Children on the Fear and Pain Associated with Blood Collection Procedure." *Journal of Pediatric Nursing*. doi: 10.1016/j.pedn.2023.06.012.
- Playwork Principles Scrutiny Group. 2005. "Playwork Principles." www.playwales.org.uk/login/uploaded/documents/Playwork%20Principles/playwork%20principles.pdf.
- Premack, David, and Guy Woodruff. 1978. "Does the Chimpanzee Have a Theory of Mind?" *Behavioral and Brain Sciences* 1:515–26. doi: 10.1017/S0140525X00076512.
- Pyle, Angela, and Erica Danniels. 2017. "A Continuum of Play-Based Learning: The Role of the Teacher in Play-Based Pedagogy and the Fear of Hijacking Play." *Early Education and Development* 28:274–89. doi:10.1080/10409289.2016.1220771.
- Rogoff, Barbara. 1990. Apprenticeship in Thinking: Cognitive Development in Social Context
- Rogoff, Barbara, Jayanthi Mistry, Artin Göncü, Christine Mosier, Pablo Chavajay, and Shirly B. Heath. 1993. "Guided Participation in Cultural Activity by Toddlers and Caregivers." *Monographs of the Society for Research in Child Development* 58:1–179.
- Siraj-Blatchford, Iram. 2007. "Creativity, Communication, and Collaboration: The Identification of Pedagogic Progression in Sustained Shared Thinking." *Asia-Pacific Journal of Research in Early Childhood Education* 1:3–23.
- ——.2009. "Conceptualising Progression in the Pedagogy of Play and Sustained Shared Thinking in Early Childhood Education: A Vygotskian Perspective." *Educational* and Child Psychology 26:77–89.
- Sturrock, Gordon. 2003a. "Towards A Psycholudic Definition of Playwork" In *Playwork*: *Theory and Practice*, edited by Fraser Brown, 81–97.
- ——. 2003b. "The Ludic Third." In *Therapeutic Playwork Reader No. 2 2000–2005*, edited by Perry Else and Gordon Sturrock, 28–37.
- Sturrock, Gordon, and Perry Else. 2006. "The Colorado Paper'—The Playground as

Therapeutic Space: Playwork as Healing." In *Therapeutic Playwork Reader No.1*, 1995–2000, edited by Perry Else and Gordon Sturrock, 73–104.

Sturrock, Gordon, Wendy Russell, and Perry Else. 2004. "Towards Ludogogy: Parts I, II, and III." In *Therapeutic Playwork Reader No.2*, 2000–2005, edited by Perry Else and Gordon Sturrock, 60–95.

Tharp, Roland G., and Ronald Gallimore. 1988. Rousing Minds to Life: Teaching, Learning, and Schooling in Social Context.

von Uexküll, Jakob. 1982. The Theory of Meaning.

Vygotsky, Lev S. 1978. Mind in Society. The Development of Higher Psychological Processes. Wells, Gordon. 1999. Dialogic Inquiry: Towards A Sociocultural Practice and Theory of Education.

Weisberg, Deena S., Kathy Hirsh-Pasek, and Roberta M. Golinkoff. 2013. "Guided Play: Where Curricular Goals Meet a Playful Pedagogy." *Mind, Brain, and Education* 7:104–12.

Winnicott, Donald. W. 1971. Playing and Reality.

Wood, David. 1998. How Children Think and Learn, 2nd ed.