A study investigated the nature of the social construction of play events by a group of twelve 4- and 5-year-old children and the ways in which these play constructions are maintained over an extended period of time. The 5-month study was conducted in a nursery school classroom during the children's self-selected playtime. Data collection included field notes, audio tapes, video tapes, interviews with children, parents, and staff, and a survey on play at home. Analysis of the data took into account the simultaneous, multi-layered, metacommunicative nature of this child phenomenon while at the same time investigating the relationships between the key components of the play events constructed: players, actions, setting, time, objects, and language. Results revealed that young children's social play construction is consistent, ordered, and interconnected. The study demonstrated that through shared knowledge of the six components of play event enactment, the group of young children communicated and maintained stability in their play together. (TJQ)
Disappearing Pegs in the Road:
Discovering Meaning in Young Children’s Social Play

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ABSTRACT

The purpose of this paper is to investigate the nature of the social construction of play events by a group of 4 and 5 year old children and the ways in which these play constructions are maintained over an extended period of time. A five month research study from an ethnographic perspective was conducted in a nursery school classroom during the children's self-selected playtime. The class was composed of 12 four- and five-year old children, 6 boys and 6 girls. The data collection included field notes; audio tapes; video tapes; interviews with children, parents, and staff; survey on play at home; and other documents. Analysis of data took into account the simultaneous, multi-layered, metacommunicative nature of this child phenomenon while at the same time investigating the relationships between the key components of the play events constructed: players, actions, setting, time, objects, and language. Several play events involving "disappearing pegs" are discussed by following players, action sequences, and objects through time and within settings of the children's social play construction. Results reveal that young children's social play construction is consistent, ordered and interconnected. This study demonstrates that through shared knowledge of the six components of play event enactment, this group of young children communicated and maintained stability in their play together.
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INTRODUCTION

Noah arrives to the worksite and begins to construct the road with large rectangular slabs, carefully checking to make sure the joints are flush and the road is straight. Also checking Noah's work is the foreman, Jason, who is standing nearby and occasionally saying, "you are doing good work." Jason gets a can of pegs and brings them to the site. He runs his fingers through the pegs and declares, "it's almost time for the pegs." Climbing onto an elevated platform, the foreman carefully inspects the building of the road still holding the can and stirring the pegs. At the appropriate time a signal is given; Jason steps down from his platform and walks firmly to the road stating, "now to put in the disappearing pegs." Noah and another worker, Peter, join Jason as he directs them; "you must put them in the little cracks." The workers pour all the pegs from the can into the cracks; they then move the road pieces to search for the pegs and pick them up. While they are doing these tasks, Jason leaves to marry Rachel in a nearby house. After the wedding reception, which involves dancing and laughter, Jason gets the peg can from the workstation then returns alone to the work site. He builds a tower by stacking large hollow cylinders one on top of the other. When the tower is complete, Peter arrives at the site. Jason and Peter pour all the pegs into the center of the tower. Jason takes apart the tower to look for the pegs. Noah has left the work site.
Meckley
during Jason’s marriage and is nearby constructing with nuts and bolts (session 5).

These events were enacted by 4 and 5 year old children while I was observing and collecting data in a nursery classroom during a five month study on the nature of young children’s social play. I have reported them to you using the stated roles, language, and actions of the children so you can be part of the transformation they constructed. In fact, the role was made of large wooden blocks and the elevated platform was a chair. The signal given was a TV soundtrack hummed by Jason in which the sound crescendos as something is about to happen. The can contained one inch plastic pegs normally used with a pegboard. Rachel had just finished dressing up in the housekeeping area in a satin, rose-colored, floor-length dress and a curly blond wig when Jason looked up from the block building and stated, "what lovely hair! I’ll have to marry her."

This play vignette stands quite well on its own as an example of complex sociodramatic play in a group of preschool children. I have just used it as such. In fact, these play events are located within an observed 34 consecutive sessions of many play events. Not only are they part of a chronological series of play events important to this group of children, but also they are integrally linked to other events which occur before, after and concurrent to these enactments.

The social construction of young children’s play is not simply a series of play events but the complex intertwining of events many happening simultaneously. Not only are many play events happening
simultaneously, but also the children in these play groups are continually interacting with and influencing one another. A familiar group of children establish individual and collective routines of preferred play with objects, with play events, and with each other. The play world is being interactionally constructed. Within this social context of play there is shared meaning displayed in the actions and reactions of the participant players as they continue to function in a manner which contributes to the continuation of the play.

By examining "disappearing peg" play events, one discovers that children's social play construction is consistent, ordered, interconnected, and creatively structured to share knowledge with or communicate meaning to all the players in the classroom. This reflects both the nature of the social organization of young children's play world and the manner in which this social organization is maintained.

To understand children's social play construction, the researcher must study children not first as individuals, as is often done in children's play research, but as a group of individuals collectively establishing cultural patterns as they play. This perspective on children's play broadens the research focus beyond a single discipline, like psychology or sociology, to an interdisciplinary approach encompassing additional research on social organization in anthropology and folklore.

To understand children's social play construction, the researcher must study play as it is enacted over time in the simultaneous, multi-occurring fashion that is its nature. Most research on young children's
naturally occurring social play has studied a single play group at a single point in time, however in a nursery school setting at any given moment there are often several areas of play activity happening concurrently. The children in that particular setting have social knowledge of and may be involved in various play enactments. The flow of play events and their action sequences continues not only between players and groups but also over the days, weeks, and months these children are together. It is thus essential to gather the data on children's play over an extended period of time to fully understand its social organization.

Only a few play researchers have collected data and studied a group of young children at play together over an extended period, such as anthropologists Corsaro (1985) and Schwartzman (1973) and teachers as documenters of a specific group of play (Paley, 1984, 1986, 1988, 1990; Griffin, 1982; Isaacs, 1933). And of those researchers who have done longitudinal studies on a group of young children enacting play, none have examined the nature of the entire group's social construction.

The primary purpose of this research is to document the continuous flow of collective, interactive, simultaneous play within and between familiar players and play groups over a long period of time. As such, this study accepted Gregory Bateson's challenge (1972) that "to truly understand play, one must try to assess the multiple patterns of meaning occurring simultaneously over time."
THE STUDY

This research study was conducted over a five month period in a nursery school classroom. The nursery school is located in a suburban neighborhood in eastern Pennsylvania. The nursery school’s program philosophy follows a developmental learning model based on integrated curriculum and a partnership between home and school states the Information Book. This classroom has spacious, well-equipped rooms.

This nursery school class was composed of 12 four- and five-year-old children, 6 boys and 6 girls. Mean age was 4 years 9 months; 83% were white caucasian. A Vietnamese boy and an Indian girl are representative of minority ethnic groups in the community. The occupational backgrounds of the children’s employed parents were 50% clerks and technicians and 50% professionals. The majority of the children came from middle-class families.

This particular class was chosen because of: 1) the children’s age; 2) the teacher’s commitment to the value of play; and 3) the amount of play time the children were given each session which averaged 70 minutes over the entire study. These factors are important to the quality of young children’s social pretend play as documented by Bretherton (1984), Christie & Wardle (1992), and Fein & Schwartz (1986).

DATA COLLECTION

The author observed this group’s social play on 34 consecutive class sessions; this class met for two and one-half hours on Tuesday and Thursday each week. The study was conducted over a five month period.
Meckley

from January to May. Since the children had been playing together as a class since September, this time frame guaranteed a group of familiar players. The study was undertaken from an ethnographic perspective; the author's research role was observer as participant (see Hammersley & Atkinson, 1983; Chapter 4, for complete description of this role in fieldwork). The researcher took notes and interacted with the children in a minimal way. Children were regularly informed at gathering times that the researcher was interested in their play and that any comments at any time were encouraged. One girl, taking the role of informant, periodically commented to the researcher on the ongoing play.

Data was collected through field notes, audio and video taping, interviews, surveys and meetings with parents and teachers, and comments of children and teachers as they watched their taped play.

DATA ANALYSIS

The data collection unit was an event (both play or other daily event) occurring during playtime. The components of these events involved participants, setting, time, objects, action sequence, and language.

An event was defined through the actions and language of the participants. Participants signalled to the researcher that an event was occurring through their body posture and gaze as they were focussed on an activity or through the labeling of an activity, e.g. "make a road so we can put in the disappearing pegs." (session 5) As much as possible, all participants were located in setting and time throughout each session's play time. As many as six concurrent activities were
documented at any given time. Actions, words, and objects were added to
activity descriptions as noted. Audio and video taping with the use of
two cameras and six suspended microphones, recording events in different
settings of the room simultaneously, yielded a significant amount of
information concerning the events occurring at play time.

A detailed chronological mapping of the events at play time was
done for each of the 34 days. Play events and daily events were listed
in order of occurrence and coded across the following dimensions: event
order throughout day; duration; setting; participants and absentees;
objects used in play; actions of players and play groups during events;
and words stated during play.

Analysis of this chronological mapping resulted in the
documentation of sixty-five (65) distinct play events totaling 5446
minutes (over 90 hours).

DISCUSSION

This discussion will focus on two play events, Disappearing Pegs
in Road and Tower for Pegs, which are particularly illustrative of the
consistent, ordered, interconnected structure of young children's play.
The play events involving "disappearing pegs" also reveal the ways in
which these children share knowledge to maintain their play
constructions together.

Consistency and Order in Play Event Structure

Disappearing Pegs in Road was enacted 12 times over 10 days in a
three month period (sessions 1-17). When this play event occurred, it
Meckley

followed one of two sets of action sequences which identified it to both children, teachers, and researcher as Disappearing Pegs in Road:

SET 1 (occurred 5 times)

I.A Building a block structure referred to as "road" using large wooden blocks (Noah 5/5)
I.B Getting the peg can from manipulatives shelf and carrying can to block area (Jason 5/5)

II.A Pouring pegs over the block road
   (Jason 5/5, Noah 4/5, Peter 2/5, Shawn 2/5)
II.B Directing the pouring of the pegs (Jason 5/5)

III.A Moving the blocks to find the pegs (Jason 5/5)
III.B Picking up the pegs
   (Jason 2/5, Peter 4/5, Noah 1/5, Shawn 1/5)
III.C Transporting the pegs to another area
   (Jason, Peter, and Noah 5/5).

SET 2 (occurred 7 times)

I.A Getting the peg can and carrying to blocks (Jason 7/7)
I.B Building a "road" using large wooden blocks
   (Jason and Peter 2/7; Peter 3/7; Jason 1/7; Lou, Shawn and Noah 1/7)
I.C Directing the building of the road while holding the peg can
   (Jason 7/7)

II.A Putting pegs into cracks in the blocks
   (Jason and Peter 2/7; Peter 2/7; Jason 2/7; Jason, Noah, Shawn, and Peter 1/7)
II.B Directing the putting of pegs into cracks (Jason 7/7)
II.C Watching the pegs fall through the cracks
   (Jason 2/7; Shawn and Peter 1/7; Jason and Lou 1/7)

III. Picking up the pegs (Jason and Peter 7/7)

In examining these two set of action sequences it seems that there is a direct link between the child who builds the road, when the road is built, and that particular set of actions. As seen from the notations after each action, a consistent group of players enact this event and these players are all boys. All the boys in this class but one, Carl,
were part of Disappearing Pegs in the Road. Jason was the inventor and
director of Disappearing Pegs in Road.

The play event Disappearing Pegs in Road has a duration of time
averaging 16 minutes with the longest time enacted of 32 minutes and the
shortest time of 6 minutes. Pegs in Road occurs 9 times out of a total
12 times during the first 20 minutes of the daily session as the
children are arriving and beginning to play; Pegs in Road occurs 3 times
out of a total 12 times during the 20 minutes after the first circle
when children are returning to previously started play or beginning new
play events. This Pegs in Road event has a rate of 100% consistency in
setting (block area) and objects (large wooden blocks, peg can, and
pegs).

Tower for Pegs event is enacted 12 times over 8 days in the first
two months of the study (sessions 2-15). A single set of actions
consistently occurs in a sequential manner when this event is enacted.
Certain actions did not occur every time Tower for Pegs is enacted so
the ratio of occurrence times/ total times is noted for each action.
The Tower for Pegs action sequence is:

12/12 I. Building a tower using hollow cardboard cylinders
12/12 II. Dropping pegs down the middle of the tower
6/12 III. Dropping a solid wood block cylinder down the tower
6/12 IV. Taking apart the tower
4/12 V. Finding the pile of pegs in the middle of the tower bottom
     and picking up these pegs

The number of children involved at some time in Tower for Pegs
play event is 10 children of the 12 children enrolled in this class. The
two children not involved are Noah and Carl. All of the six girls in
the class are involved in this event even if for only a few minutes as
is the case for Katrina and Vicki. Heada, Autumn, and Ellen built
towers and dropped pegs and wooden cylinders while Rachel picked up pegs
and directed the actions. The tower play was both invented and usuall-y
directed by Jason (9/12 times). Peter was the next most involved
player, always enacting tower play cojointly with Jason.

Tower for Pegs has a 100% consistency rate for setting (block
area); this play event was always built in the same physical location
within the block area regardless of players building the tower. Some
objects are always (100%) included in Tower for Pegs e.g. cardboard
cylinders and pegs. Some objects are sometimes included in the tower
play e.g. a flat block for a tower cover, a large solid wood block for
dropping down the middle of the tower, and large blocks placed around
the tower to form a "disappearing house" (session 8)

Tower for Pegs had an average duration for each occurrence of 8
minutes with the highest duration of 14 minutes and the lowest duration
of 1 minute. Tower for Pegs occurs at various times throughout the play
period. The highest rate of clock occurrence is in the 20 minutes
following circle (5/12 times).

More important to this discussion is how integrally linked in
their enactment are these two play events.
Interconnectedness in Enactment

Disappearing Pegs in Road and Tower for Pegs are integrally linked together as play events by several play components: time of occurrence; players; setting; objects; and words.

In the 12 times that Tower for Pegs occurs it is linked to Disappearing Pegs in Road 10 times as noted: 8 times Tower for Pegs immediately follows Disappearing Pegs in Road; and 2 times Disappearing Pegs in Road immediately follows Tower for Pegs. In these 10 times of linked play construction of these two events, taking part in both play events are the following players with the rates of joint concurrence: Jason 9/10; Peter 4/10; Lou 2/10; Shawn 2/10. Noted again is that Noah takes an active role in pegs in road play but always left the block area when tower play occurs. Also girls are never involved in pegs in road play but twice became actively involved in tower play.

These block events are linked by setting and objects as noted above but also show patterns in words and phrases used during enactment. The following examples demonstrate this connection.

To begin the play events:

Jason: "Make a road, Lou so we can put in the disappearing pegs." (session 5)
Nick: "Let's make a building and road." (session 12)
Jason: "Let's build a tower." (session 8)

During the action sequence in directing the peg pouring (Disappearing Pegs in Road and Tower for Pegs), the following occurs,

Jason: "Now put in the pegs." (5/10)
A conversation during Tower for Pegs between Rachel, Heada, and Jason:

Heada: Now there is more. (seeing Rachel's can)
Rachel: More disappearing pegs!
Jason: You know the names of the pegs?
Rachel: Yeah, Jason. That's what we call them the whole hour.

During this last conversation on session 10, there are several salient points: 1) this is the first and only time the words "disappearing pegs" are used during tower play. Jason uses this term only during Pegs in Road play and never during tower play when he simply says, "pegs"; 2) while this conversation is occurring, Jason is sitting on the block road built for Disappearing Pegs in Road play watching the girls build towers. Previous to this incident, Jason always chased away the girls when they walked close to the play event involving pegs in road.

In summary, even though there are definite links to these play events, there are also many distinct differences.

**Shared Knowledge Revealed**

All groups of children who regularly play together have play themes that they repeatedly enact. Often these play themes and the forms of their enactment are unique to a specific class or child culture (Paley, 1988). Also, the more familiar this particular play becomes to the players the less explicit are the signals and other metacommunicative cues needed to play it (Giffin, 1984). Often a newcomer to this particular facet of the culture notices a flow or type of play speech and action that may be hard to understand or be misinterpreted. This difficulty is magnified by the manner adopted by the children when an adult outsider becomes too interested or involved.
in their play; they often abruptly stop the play or change its theme or character. A child outsider (from a different child culture or class) or newcomer is informed of the common play themes through explicit language and action (Florio, 1978). In this class, a new child, Vicki, arrived on session 9. The rules of the block corner were first communicated to her during Tower for Pegs play on session 10 when Rachel said, "do not knock that tower down, because Jason will ()." Also Rachel encouraged Vicki to build a "disappearing house" around the tower rather than in the vicinity of Disappearing Pegs in Road play.

Certain metacommunicative cues used to share knowledge and maintain the play in this classroom discovered through the analysis of the disappearing peg events are:

* Signaling of others to join in this play is done by getting the peg can and taking it into the block area.

* Handing the peg can to a child immediately instills leadership to the peg can holder for the ensuing play.

* Changing voice by Jason, the disappearing pegs play events' inventor and director always signals a change in the play, usually that Jason is about to wreck the blocks. When other children in the area hear this voice change, they usually move away from the Jason and/or exit the block area. Jason uses a specific singsong voice that always signals that destruction will follow. The teacher once commented on this "song" and Jason immediately stated that it was not a song but the sound of the blocks moving. Since this statement, I
have termed this song a "soundtrack", because it sounds just like a TV suspense-building soundtrack.

Searching for players often occurs during these play events. Disappearing pegs in Road, once started, is a continual play event that may span 30 minutes or more. During this time, other happenings in the room attract the players away and only one may remain. When this player realizes he is alone, he searches for the others to come back to the play or may briefly join them in their new activity.

The children's use of their knowledge about the common play events or play events of particular players in the class is varied and effective for maintaining the stability of the play, entering the play of others, or identifying with others through the elicitation of certain aspects of the common play event. One example of such a technique is the acceptance of Jason's dictatorial style in these block area events when his bossiness is not accepted in other classroom activities such as at teacher-directed group time. I surmise that this is the case because Jason is such a "very good player" as one child told me. His creative ideas and their incorporation into the play frame seem appreciated by other players.

SUMMARY

To summarize, in play, children actively communicate and interpret their individual and collective social realities through the play frame. This frame is a shared context that makes behavior comprehensible and prescribes appropriate responses (Goffman, 1974). This study
demonstrates that through shared knowledge of play event enactments, this group of young children maintained a stability and consistency in their play together. This finding substantiates Corsaro’s results (1985) in which he discovered that young children are more concerned with maintaining the stability of the interaction together than in the control of territory or play materials. Additionally, these children created new play events to manage changes occurring in the social order of their culture.

This study found as Garvey (1977) did that children have a repertoire of procedures and techniques for negotiating roles, plans, actions and objects in play. These children’s knowledge of how to do the play confirms the discovery of a rule system inherent in children’s sociodramatic play uncovered by Giffin’s research (1984).

Disappearing Pegs in the Road and Tower for Pegs play events demonstrate a consistency in form like the other 65 play events in this study. Each play event in this study has distinct, consistent, and predictable patterns of actions, objects, setting, and players... the elements of social play described by Garvey. There is always a set sequence of actions for each play event. Each play event, like these two, has a ordinal place of occurrence, consistent within any given day in which that play event occurs.

The play events of this group of children are not only consistent in sequence of actions and within time but also show an evolution and interconnectedness with one other within a given day and over the entire
study. These two play events proved excellent examples demonstrating integral links in this group's social construction.

No play event stands alone; each is embedded in the socio-cultural framework of this group. All events are enacted and have meaning within the context of this group of children.

Disappearing Pegs in the Road and Tower for Pegs play demonstrates that children's social play construction is consistent, ordered, and interconnected in structure. Within these events are found metacommunicative cues and techniques for communicating shared knowledge among all players in the classroom. This is revealing to the nature and meaning of the social organization of young children's play world.
References


