An Exploratory Model of Play

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Play is defined as a state of experience in which the actor's ability to act matches the requirements for action in his environment. It differs from anxiety, in which the requirements outnumber the ability, and from boredom, in which the requirements are too few for the ability level of the actor. Games are reviewed with illustrations from a cross-cultural context of traditional and modern societies. It is suggested that games of skill, strategy, and chance all share structural characteristics that allow the player to limit his experiences so as to maximize the play experience as defined. Further theoretical implications are drawn from the model in terms of the relationship of individuals and the social system.

TYPICAL EXPLANATIONS as to why people play usually reach the hardly enlightening conclusion: "because it's fun." Despite the fact that play is a truly universal cultural category, its nature is still far from being understood. It is generally assumed that "I have fun" is a kind of basic protocol-statement which cannot be analyzed further and that the experiences that accompany playing are self-validating and in no need of being explicated. In this paper[1] we will attempt to develop a conceptual model for play, and present illustrations of it through an analysis of actual play-forms.

Play is going. It is what happens after all the decisions are made—when "let's go" is the last thing one remembers. Play is action generating action: a unified experience flowing from one moment to the next in contradistinction to our otherwise disjoint "everyday" experiences.

Play is grounded in the concept of possibility. We assume that in general individuals have the ability to assess what actions are humanly possible within the bounds of a given situation. The point is that in "everyday," non-play situations the number of things that can happen is always more than the one series of events that does happen. Of all the possibilities for action that we perceive, only a few become ongoing projects: we can only do "one thing at a time."

The question becomes one of choice: "which of these possible actions will I attempt to turn into my action?" Our "everyday" lives consist of matching a large stock of projects we know we can actualize with the possibilities that can be seen in the situation at hand. Almost everyone is sure that he can speak or eat or move about. Every day we depend on the control of people over a large assortment of projects—a control which includes the ability to synchronize "starts" and "stops" with their social environment to produce interaction. This operational volition or decision for immediate action will be referred to as the "voluntary fiat" (Schutz 1962).

It is inescapable to the human condition that we act. How those actions resonate in our environment underlies most talk about the state of that condition. For the most part the human condition can be described as the experience of "worry."[2] A multitude of boundaries constrain our projects at every moment, and talking about what to do and how to do it crowds the time for doing it to the extent that a full consideration of the potential frustrations of any project leads to hopeless anxiety. *Worry is experienced when the assessed possibilities in a situation far outnumber the projects available to the actor by voluntary fiat.* The more things we perceive requiring us to act, and the less

compatible these actions are with each other, the more worried we become.

At other times our relationship with the environment tends to produce another kind of experience: boredom. A wearing tedium or dullness can pervade action that has become routinized, making it hard to tell present action from past actions, since monotony lacks change or variety. *Boredom is experienced when the projects available to the actor by voluntary fiat far outnumber the assessed possibilities in a situation.* The fewer opportunities for action we perceive, the more bored we become.

Now we are able to conceptualize the experience of play. When there is a "balanced" state of affairs, when we can make each action by voluntary fiat, but still do not exhaust possible actions, the necessary conditions for play are established. The play experience is invoked when our action "resonates" with the environment; when "feedback" provides sufficient possibilities for an uninterrupted flow of action.[3] *Play is experienced when it is impossible for the actor to differentiate projects available by voluntary fiat from assessed situational possibilities.* Awareness merges with action, and a play episode is begun. A most outstanding quality of this state of ambience or participation with the environment is the actor's lack of an analytic or "outside" viewpoint on his conduct: a lack of self-consciousness. That this state of oneness with one's action precludes anxiety is well illustrated by a statement of Chris Bonington, one of the best-known contemporary British rock-climbers (Unsworth 1969a [our italics]).

> "At the start of any big climb I feel afraid, dread the discomfort and danger I shall have to undergo. It's like standing on the edge of a cold swimming-pool trying to nerve yourself to take the plunge; yet once in, it's not nearly as bad as you have feared; in fact it's enjoyable.
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> *Once I start climbing, all my misgivings are forgotten.* The very harshness of the surroundings, the treacherous layer of verglas covering every hold, even the high-pitched whine of falling stones, all help to build up the tension and excitement that are ingredients of mountaineering."

Later we will investigate this forgetting of the self, and the implications it has for social and cultural theory. For the moment we will make use of this very brief and simplistic theoretical prelude to help us explore various play-forms.

If one accepts the postulate that the essential aspect of the play-experience is a state of merged awareness and action, then the requirement of a good game, that is of an institutionalized play-form, is that it should allow the player to sustain this experience throughout a relatively long span of time. In order to accomplish this, games must limit by convention the realm of stimuli that the player need pay attention to: by establishing a playing field or board, by defining what are the relevant objects of the game. The game also has to limit the choices of action open to the player: by establishing the rules of the game. And finally the game has to limit the time within which the player can act: by clearly setting the starting and finishing times of the process. Within this limited spatio-temporal unit the player can abandon himself to the process, acting without self-consciousness.

It is also true that most play-forms are based on a competitive model and that aggression and violence are not uncommon in games. Yet what seems more remarkable is that competition or violence in play should obey such strict limits. A chess-player might sometimes get carried away and identify his own pieces with the principle of goodness, regarding his opponent's pieces as minions of the forces of darkness. But the cosmic duel on the board does not carry over to "real" life; rarely does the competitive tension outlive the game. This is basically true also of body-contact games such as football or hockey, and it was apparently true of games played in the past, such as duels and tournaments, in which violence was expected to be bloody. In "real" life where we maintain the dualistic self-other awareness, we compete for advantages we think will be beneficial to us in the

long run, and we tend not to recognize either rules or limitations in our quest for self-aggrandizement. In games, however, the rules are relatively few and clear; within their boundaries we can abandon ourselves to competition and forget, at least intermittently and for a short spell, the nagging needs of our individual selves.

It follows from what has been said that play as here defined can occur under a great variety of situations—some of which would be classified as work by the observer unaware of the player's experiential state. But cultures conveniently provide pre-packaged sets of possibilities that allow the individual to experience play: games. Therefore we now briefly analyze institutionalized play-forms in light of the present theory—always keeping in mind that formal games are but one of the forms in which play can be, but is not necessarily, experienced.

A sound classification of games is still to be constructed. One possible form of ordering might be based on the kind of stimuli that the game selects out of the environment or on the kind of projects that are relevant to it. An important consideration in classifying games is the ceiling of competence it allows to the player, i.e., the number of possibilities the structure of the game admits without overwhelming the player's skill. At present, however, the basic work required to attempt such classifications has not yet been done; hence we use the three traditional categories of games of chance, games of strategy, and games of skill (Roberts et al. 1959, Murdock 1967).

GAMES OF CHANCE

At first sight it would appear that games of chance pose few problems, since their function is quite clear and uncomplicated. A person plays poker, roulette, dice, etc., for the simple reason of winning money; his motivation is primarily an economic one. The rituals that grow up around games of chance—shaking the dice in a particular way, muttering good luck phrases, etc.—are similarly seen as attempts to bring about the wished-for result of financial gain.

The development of games of chance suggests, however, a much more complex function for such activities. It seems clear from ethnological evidence that games of chance, like other games, were first played in a context of religious ceremonial activities, i.e., they served to relate the players with supernatural forces postulated to exist in the environment. Games of chance specifically seem to have emerged from the divinatory aspect of religious ceremonials (Culin 1906:32, 37, 43; Huizinga 1950; David 1962). The purpose of divination is to secure guidance from the unpredictable powers that rule over the destiny of man and fill him with anxiety over the future. It is performed in order to discover the probable course of natural events and the outcome of human efforts such as war, hunt, planting, and fertility. The man who engages in divination as a consequence feels that his available projects are more nearly able to cope with the possibilities impinging on his everyday life and as a result his experience is closer to play than to worry. Thus divination is play before it becomes a game. It is impossible to know when exactly the sacred ceremony of quizzing the supernatural became a mere game of chance. There are intermediate links in the record, like the Micmac bone dice game which was played in a ceremonial bowl also used for divination, or the Zuni gaming implements that were adaptations of the weapons of the Twin War Gods (Cushing 1896; Culin 1906). What is clear in most reports of North American games of chance is that the activity, even when it had crossed the line and become a pastime, was still heavily related to genuine forms of divination. In the late eighteenth century Laskiel writing about the Conestoga, and Charlevoix about the Huron, report intensive ceremonial activities before dice games: fasting, sexual continence, etc. (Culin 1906:105); great attention was paid to propitious dreams and other omens of good luck (Culin

1906:109); incantations and exorcisms preceeded the game. Games of dice between Iroquois were known to last eight days (Culin 1906:83), and men were often reported to leave the game having lost everything they owned including their mocassins, walking home in three foot deep snow (Carver 1796:238; Culin 1906:108). An observer of the Tarahumare in Mexico reported that "he . . . may go on playing [stick-dice] for a fortnight or a month, until he has lost everything he has in the world except his wife and children; he draws the line at that" (Lumholtz 1902:278).

Of course once the ritual of divination becomes a game, a powerful motivation is added to it: the desire to win the stakes placed on the outcome of the throw of dice. Yet it seems that the bet is more of a secondary reinforcement giving concreteness to the player's control over chance rather than the primary goal of the activity. The winnings are proof that the player has in fact successfully coped with the mysterious possibilities of the environment. In other words, the real stake is the player's ability to outwit chance.

It is perhaps not too far-fetched to propose that a similar motivation is at work in those who play the contemporary secularized version of such games. The monetary incentive inherent in the possibility of winning can sometimes be the main reason for starting a game of poker, roulette, or craps. But even when money is the main motive, once the game is started a good player usually forgets his financial status and places his bets according to the pattern intrinsic to the game without heeding extraneous considerations. Those who play the stock market often seem to consider their assets as counters whose only function is to measure the accuracy of their predictions. Among the initiated one may hear that one cannot play the market well as long as one thinks of money as "real" money: the game has to be played according to its own rules and for its own sake, although the financial gain is important as a universally recognized index of successful control over chance—and even useful in its own right.

In any case, a "good" game of chance (one that is so structured as to provide a large but manageable number of possibilities) can easily involve the player to the extent that he loses awareness of anything else around him. Kohl (1860:82) vividly describes how one night he tried unsuccessfully to attract the attention of a Chippewa playing the dice game known as *jeu de plat*; when finally he got through, the Indian cursed him up and down for the interruption. The Iroquois games that lasted for days riveted the players' attention in a state described by observers as close to frenzy; dozens of people in great agitation followed with distorted features the roll of dice for hours, amidst shouts, songs, and ritual incantations (Carver 1796:238; Culin 1906:105). The scene reminds one of a more grandiose version of a back-lot craps game or of the Chicago Commodities Market.

It is interesting to note that the great majority of North American Indian games of chance were played with a number of "dice" (actually chips of wood, arrow-shafts, buffalo ribs, plum-stones, woodchuck teeth, walnut shells) varying anywhere between four and eight in number, but most often five or six. Since each die had two faces, the total possible faces that could turn up varied most often between ten and twelve. Of course the total number of faces in a throw with two Old World dice—which developed completely independently of the North American dice—is also twelve. Apparently in chance games there is an advantage in having as the lower threshold a number of possibilities of this order of magnitude. The upper ceiling is nevertheless quite high: if one decides to take into consideration all the possibilities, the simple game can grow quite complex: R. I. Dodge (1882:330) describing an eight-dice game played by Cheyenne women claims that "every possible combination of the [faces] gives a different count." If this account is true the Cheyenne must have remembered the values of 256 different arbitrary combinations, which is by no

means impossible considering similar evidence from other cultures. Other popular games of chance among North American Indians were "stick-games," which were played with anywhere between ten to over a hundred sticks; the Sauk of Iowa for instance used fifty-two (Culin 1906:233). Early observers likened these to Old World card games. The ceremonial origin, and the deep involvement in stick-games parallel the same features of the "dice."

The point is that like all effective play forms, games of chance successfully delimit, by means of both physical implements and rules, a slice of reality with which the player can cope in a predictable way, thereby losing himself in a pleasurable state of activity and consciousness, free of either worry or boredom. It is inherent in the basic structure of the games of chance that they drastically delimit possibilities. A die can only turn up on one of six faces; we need never worry that it might turn up a seven, a cancer, or a shrewish wife. By being enabled to foresee the possibilities of the game, the player achieves a measure of control over the environment, a balanced state between chaotic worry and stultifying boredom—a tenuous area within which he experiences play. Even if he misses his forecast, he is never that far off; he can always prove his foresight at the next turn, and if his losses are continuous, well, it's only a game, after all.

GAMES OF STRATEGY

The second traditional category of games includes those based on abstract intellectual skills—the games of strategy such as chess, championship bridge, or the African *kalah*. This classification presents certain problems. For instance Roberts et al. (1959) and Murdock (1967) include poker with games of strategy, despite the fact that the game includes a considerable element of chance. A more important problem is that by using the categories as defined one comes to the conclusion reached by Culin (1906:8, 31) that "[among American Indians] games of pure skill and calculation, such as chess, are entirely absent." Similarly, the Human Relations Area Files contain no entry in games of strategy for any of the North American Indian cultures (Murdock 1967). This finding, however, appears to be more a product of our way of defining games than a reflection of reality. If poker is defined as a game of strategy because it involves non-chance elements, most American Indian dice or stick games should be considered games of strategy as well. In ancient Eygpt, the first board games involving strategy were apparently played with the help of chance throws of "dice" made of the heel bones of animals (David 1962; Touny and Wenig 1969). Also, it is enough to read some of the descriptions of the Pueblo dice games to realize that very complex social and psychological maneuvers are involved; in fact their games rely heavily on a "mastery of interpersonal relations" which Roberts et al. (1959) postulate as the original motivation for games of strategy.

As far as the experience of the player is concerned, there is even less differentiation between games of "strategy" and "chance." A man who plays dice is usually as deeply confident in his ability to control the situation as a man who is playing chess. Phenomenologically both activities consist in trying to match one's projects with a set of possibilities. And although in the first case objectively the set consists of a probability pattern for certain random events, the player does not see it as such: he tends to personify chance and plays against it, hoping to prevail.

At a very basic level, both types of games were, and still are, inherently divinatory. The player who begins a game, whether of chance, strategy, or skill, is in essence asking: if I put myself in this situation, will I be able to cope with the requirements for action that this situation presents? And the structure of the game provides a clear answer to the question. These points illustrate some of the problems raised by our theory of play as soon as it is applied to concrete data. Here we focus on the game of strategy *par excellence*, the one that is most nearly universal in its diffusion: chess.

The thrall in which the game of chess can keep the player is deservedly legendary. Vladimir Nabokov's novella, *The Luchin Defense*, and scores of other works of fiction describe chess players who have identified the boundaries of the game with those of the "real" world, and who consequently go through life as through a gigantic chess game (Purdy 1969). This romantic exaggeration contains more than a grain of truth; it is probable that of all the board games chess is able to create the most absorbing play experience. The fascination of chess is well expressed by Yossarian, the protagonist of Joseph Heller's *Catch 22*. Yossarian's most important trait is that in a world in which everyone else is taken in by appearances, he tries desparately to face reality as it is. Therefore the following item is perfectly in character:

> Across the aisle from Yossarian. . . was the artillery captain with whom Yossarian had stopped playing chess. The captain was a good chess player, and the games were always interesting. Yossarian had stopped playing chess with him because the games were so interesting they were foolish [Heller 1961:9].

However, for all those who lack Yossarian's unremitting dedication to face the complexities of "real" life, chess offers a neatly bounded world where action is logical and predictable in principle.

The experience of playing a good chess game can best be described as one in which the awareness of the player is merged in a field of forces whose parameters are the pieces and their location on the board. The potential of each piece to move and to take interacts with that of all other pieces and creates an abstract energy system that changes with each move. The player ceases to be aware of the normal physical features in his environment—the setting, the opponent, the board, the pieces; he tends to be aware only of the complex energy field of which the pieces are the points, each with its peculiar and changing potential. Instead of concentrating on taking the opponent's pieces, the good player endeavors to actualize the potential of his field of force by controlling the central squares of the board, the long diagonals, and so on. In the words of an expert,

> [the chess player's] efforts, when he is applying his mind to the chess task, are not controlled by any factors other than the complexity of the position before him and the limits of his own capacity. . .once the mind is harnessed to the task, then it performs freely, unaffected by the outside world. If, then, there is mental or volitional freedom to be found in human activity, here it is in chess; and the chess player comes as near as any human being to demonstrate its reality [Abrahams 1960:9].

There are several reasons why chess is able to limit the perceptual field so dramatically and so advantageously in terms of producing the play experience. In the first place, with a relatively simple material apparatus of sixty-four squares and thirty-two pieces the rules allow for an almost infinite variety of situations to develop. The game has an extremely high ceiling of skill: it can be as challenging to two novices barely familiar with the rules as to two professional masters who have played several hours each day for forty years. Only when the partners are mismatched does the play experience disappear: the less practiced player being overwhelmed by the variety of unmanageable choices that confront him, while the better player is bored by the predictability of each move and of the final outcome. In such a situation there are two ways to prevent such creeping dualistic awareness from taking hold of the players: either the first player increases his skill to the point that he can cope with the process in a mood of play; or the second player handicaps himself by spotting some of his pieces so that for both players the process can again flow in the mid-range between anxiety and boredom.

The change that has overtaken the way chess is played reflects the broader changes occurring in society at large. While the basic rules have remained essentially stable during the last thirteen centuries, the relationship of the world of chess to the real world has undergone profound alterations. In its beginnings, chess was a game played only at

courts and clerical establishments; later it became a fixture of aristocratic houses and the living rooms of the pashas of the Ottoman Empire. By the time of the French Revolution, the game was solidly entrenched among the bourgeoisie; nowadays it is most often played by Soviet workers. The first modern champions were French of noble birth: Philidor, Deschappelles, de la Bourdonnais. For the past twenty years, however, the world champions have been engineers from the USSR: Botvinnik, Smyslov, Tal. Actually, in the past thirty years or so the professional vocation of a chess master has become irrelevant, since a star player reveals himself by the time he is sixteen, and if he is to become a master from there on he has little time to devote to anything else but the game. This trend is related to an over-all professionalization which can be dated to the first international chess tournament of 1851 held in London. (It is interesting to note that most games already in existence became codified and organized in the second half of the nineteenth century: baseball around 1858, hockey in the 1870's, rugby in 1871, football in 1873, cricket in 1877, bowling in 1895, etc. Usually professionalization rapidly followed.)

Until the present century, the activating cues in the environment that helped the chess player enter the play experience were few and rather subtle. The player could get in the mood whenever the interpersonal atmosphere was friendly and a willing partner of about equal skill was present. A special corner of the drawing room or library, a cup of coffee or a snifter of brandy, and the aesthetic spell of a handmade set were enough to conjure up the special world of chess in which the players were now ready to live for the next few hours. It appears that in our days different cues are needed to establish boundaries that will isolate the play experience from the rest of potential experience. Although it is still possible to achieve the chess mood through the same process that was used in the sixth century, the more usual way nowadays is to surround the players with a mechanized, rationalized set of stimuli that help the transition from the normal state to the play state. These include timers, buzzers, and pads to record moves; the epitome of the modern game are the tournaments where hundreds of matches take place simultaneously in a hushed, tense atmosphere full of clocks and numbers: game-point averages that advance the player's standing in the rational ballet of the tournament. It would seem that for many people it has become impossible to shift into play consciousness unless they are primed to do so by obvious mechanical signals. This is not only true of chess, but of many other games in which in order to achieve the play experience an increasing emphasis has been placed on equipment, technique, scoring, and competitive standing (Csikszentmihalyi 1969a). It is possible that this shift in emphasis has also affected the content of the play-experience, although no hard evidence on this question is available. What seems clear is that the cues which allow people to achieve play consciousness vary in space and time, even when the specific rules of the game remain the same.

GAMES OF PHYSICAL SKILL

Games of physical skill or dexterity are without doubt the most universally widespread institutionalized play-forms. At first sight, the origin and function of such games appears to be relatively simple: in the past they were obviously performed to maintain the high level of physical skill necessary to cope with the natural environment, and they are performed now to keep one's control over the health and efficiency of the body; this is the view to which Roberts et al. subscribe (1959). Yet in examining the context in which games of skill were played even recently, it becomes obvious that physical dexterity alone was rarely the issue. Among the Iroquois, for instance, the game of lacrosse was played in a variety of ways, depending on whether it was part of a seasonal ritual, an inter-tribal feud, an intra-tribal status struggle, or whether it was used as a remedy for a man's sickness (Culin

1906:566). The long training, the food taboos, the sexual continence that Cherokee athletes had to observe before engaging in games of lacrosse, clearly show the complexity of ritual meanings that this "athletic" event had for the people (Mooney 1890). Early ethnographers have commented on the fact that no festivity among the Apache could take place without a game of hoop and pole, preceded and followed by charms and invocations (Culin 1906:451-454). The religious, political, and social repercussions of athletic games can be still seen in a pale semblance of their past complexity during the Palio week in Siena, Italy, when the town's neighborhoods compete, under their ancient heraldic devices, against each other in a series of equestrian and archery events. The Palio is one remaining developmental link between the ritual games of antiquity and the secular ritual of contemporary matches like the World Series in baseball, the Stanley Cup in hockey, the Rose Bowl in football, the World Cup in soccer, the Olympic games, etc. More specifically, there is reason to believe that games of physical skill also had divinatory origins. For instance, Jones (1861) reports the finding of a miniature lacrosse racket "used by conjurers to look into futurity." In classical history, the association between the Panhellenic games and oracular rituals seems well established (Menke 1947; Schöbel 1969), while the mystical battle among the three Horatii and three Curatii brothers in ancient Rome was used as a supernatural sign for assigning the victory to one of the two armies (Livius I, 23). In ancient Iran, Rome, Medieval Europe, ritual tournaments based on the ordeal served the same purpose (Funkhanel 1847; Patetta 1890). The Hopi ceremonial hoops—woven like giant spider webs with many partitions, and astonishingly similar to the dart games one finds in contemporary London pubs—also appear to have been used for divination. Thus Culin could conclude his work with the sentence: "in part they [all games played by North American Indians]. . .in what appear to be their oldest and most primitive manifestations, are almost exclusively divinatory" (1906:809).

Even at present, despite secularization and specialization, the divinatory aspect is still perceptible in this category of games. A match between two teams, or two individuals, is the answer to the implied question: which will win? For the runner who tries to beat the clock the question is: will I succeed in bettering the time? It is precisely for this reason that games of dexterity, like games of chance, allow stakes to be placed on the outcome with the difference that in the former class of games the players themselves are, as a rule, banned from betting on their own play. In our theoretical model, the process by which the player opens up new possibilities in a given situation so that he can act on them, is in some important respects analogous to the essential components of the process of divination. When the high-jumper at the Olympic games raises the bar a few inches above the height of his last jump, he increases the level of situational possibilities he decides to cope with. To remain in play, his skill will have to match the new possibilities. The tension that the athlete and the spectators experience as the ceremony of the latest jump begins is due to the same source that causes the tension one feels before a dramatic draw at cards or throw of dice: which of the two possible outcomes is going to be realized? Games of physical skill are so many and so diverse that no attempt at a comprehensive analysis could be attempted in this space. Accordingly, we will take up only one type and explore its characteristics from the point of view of our model.

Of any single material object used to achieve the state of play, spherical objects—made of glass, wood, bamboo-roots, feathers, stone, leather, rubber, steel, etc.—are in all probability the most numerous. A ball by itself is enough to restructure the environment and allow play to take place. The reason for this is intrinsic in the geometric features of the sphere. A ball can move in any direction with equal ease; any

point on its surface can be a center or fulcrum; its trajectory on a surface or through the air is smooth and potentially predictable. These characteristics make it possible for us to use balls in a great variety of ways: the ball is flexible, lawful and unpredictable at the same time.

The frequent prohibitions against the use of hands results in the adoption of some striking rules in ball games, as in the case of Pok-ta-pok, the ceremonial Mayan ballgame, in which the ball had to be thrown through a stone loop or "basket" placed some twenty-eight feet above the playing field (Gilpin 1948). Here is the description of the game by Father Diego Duran, an early Spanish missionary:

> "It was a game of much recreation to them and enjoyment among which were some who played it with such dexterity and skill that they during one hour succeeded in not stopping the flight of the ball from one end to the other without missing a single hit with their buttocks, not being allowed to reach it with hands nor feet, nor with the calf of their legs, nor with their arms. They were so clever both those of one side and those of the other in not allowing the ball to stop that it was marvelous—for if to see those of our country [Spain] play ball with their hands gives us such pleasure and surprise—how much more must we praise those who with such skill and dexterity and elegance play it with buttocks or with knees counting it a foul to touch the ball with hands or any other part of the body save the two mentioned—and at the ends of the court they had a quantity of players on guard and to defend against the ball entering there with the principal players in the middle to face the ball and the opponents—He who hit the ball through said hole in the stone was surrounded by all and they honored him and sang songs of praise—and they gave him a certain prize of feathers or loinclouts, though the honor was what he appreciated most—A great multitude of nobles and gentlemen took part and they played with such content and joy, changing now some and later others, from time to time, in order all to enjoy the pleasure and so content that the sun would go down before they knew it!—Some were carried dead out of the place and the reason was that they ran, tired and out of breath, after the ball from one end to the other, they would see the ball come in the air and in order to reach it first before others it would rebound on the pit of the stomach or in the hollow, so that they fell to the ground out of breath and some of them died instantly because of their ambition to reach the ball before anybody else. . ."[Blom 1932].

That such games sometimes ended with human sacrifices is asserted by some authors (Piña Chan 1969).

The simplest employment of a ball in a play-form is rolling it; this is what infants love to do in their cribs. At this stage, it is probable that the play-element consists in the ratio of predictable to unpredictable movements of the ball after it is moved. The baby rolls the ball and expects it to continue in a given direction for a given distance; on the whole his expectation will be confirmed by the actual trajectory, but with significant exceptions that make this primitive "game" worth repeating over and over again. Later on when this becomes too predictable and the skills of the infant have matured, the ball is thrown in the air, the game consists in catching it; soon this also becomes boring to the young child whose growing skill makes the behavior of the ball too predictable. To allow the experience of fun to persist, the child has to introduce new rules in the throwing-and-catching game, rules that make new stimuli relevant and new actions possible: for instance he might bounce the ball against a wall and catch it on the rebound, or he might clap his hands behind his back while the ball is in the air, or stand on one foot while doing all this. In any case, as the player's skill increases new stimuli have to be included within the boundaries of the game, or the activity will not produce the state of awareness we have called play.

The really interesting forms of ball play begin when the spherical object is combined with a set of commonly accepted rules. The number of such games is too large to list: among the best known ones in Western cultures are marbles, pool, golf, tennis, basketball, polo, soccer, roulette, bowling, pelote,

baseball, and their numerous variants and derivations. In these more complex play-forms the material equipment is more or less a constant: as children who grew up in Europe during the war know from experience, a tennis ball can be used as the only equipment needed for more than half the games listed above. What does change from game to game are the rules which define the spatial-behavioral environment within which the players are to live for the duration of the game. Through the intervention of the rules the same play-object becomes instrumental in creating very different play-processes. But varied as the rules are, a few indispensable parameters are always present in each game. The playing field is marked out so as to contain the movements of the ball and the players within manageable bounds. There is a clear procedure for winning, and it usually consists in repeatedly placing the ball in an agreed upon place within certain established time limits. The players' access to the ball is clearly limited: in soccer one cannot touch it with the hands, in basketball the feet are excluded, in pool the balls can only be touched with the cue, in tennis only with the racket. The permitted form of interaction with the ball and the size of the field set the tone for the game. The number of players, the restrictions placed on their actions in respect to each other, add the other relevant parameters. At a deeper level, what is common to all of these play-forms is that by setting manageable tasks and perceptual boundaries they allow people to act with complete concentration and abandon: the player is allowed to forget himself, the world, and the distinction between the two as he tries to increase his skill or his luck in the scaled-down world of the play-form.

To reach the peculiar awareness of the play experience it becomes important to set the game as clearly apart as possible from everyday activities. The playing field should be uniquely marked to help the player accomplish the shift from the boundless stimulus field of everyday life to the magically sheltered field of the game. The green felt top of a gaming table, the rolling green layout of a golf course reminiscent of a sacred grove—these and similar physical cues are important in establishing the distinction between normal life and play. It is important that the spectators drifting into the ballpark should also be enabled to shed the preoccupations of their full-size lives, and concentrate for a few hours on the finite possibilities that the game allows for. Thus a special atmosphere develops around gaming places or sport arenas, an atmosphere supported by a great variety of architectural and design cues, to help the spectator adjust to the change. Colorful uniforms and special equipment—directly functional as these might be—are also important to set apart the two activities. Preparatory activities before the game and cooling-off periods afterwards are essential to accomplish the transition: the interaction of players in the locker room, the banter around the corrals of polo ponies, are a prerequisite for reaching the mood in which the play experience becomes possible. The latter is also facilitated by a period of expectant tension before the official starting of the game: a few simple rituals are usually performed, such as singing anthems, exchanging gifts, etc.: these ceremonies add solemnity to the event and further help in setting its process apart from the matrix of everyday life. By the time the referee's fateful whistle blows, the players and spectators have successfully forgotten the existence of places other than the field, of possibilities other than those the ball can accomplish—and the involvement leads to a state of blissful unity of experience where action becomes easy and unproblematic. The extreme to which such preparatory activities can lead is well illustrated by the ritual training, continence, food taboos, dances, etc. that among North American Indians were used to introduce the participants to the play experience (Culin 1906:563-600; Mooney 1890.)

Of all the games performed with a ball, at the present time soccer is supposedly the most widespread across the world both in terms of its practice and in terms of number

of spectators attracted. Any attempt to explain the popularity of this game would obviously be *ad hoc* and therefore of dubious value. Still, it is possible to look at the formal characteristics of soccer from the vantage point of our model and suggest some of the reasons why it might be such a good game. In the first place, the basic rule that the ball must be moved only with the player's foot (and occasionally the head) sets the game apart from all the games where hands *can* be used (volleyball, water polo, basketball, baseball, etc.), and from those games where the ball is moved with an extension of the hands (polo, field hockey, pool, tennis, etc.) Properly to control and propel the ball with the feet is intrinsically more difficult than to do so by hand; yet everybody can kick a ball. Thus soccer has a very high "ceiling" of skill: it can be played with equal satisfaction by clumsy beginners who play it for the first time and by incredibly sophisticated professionals who have perfected the game to levels that appear to be beyond the possibilities of the human physique. Secondly, the rules of the game are very simple, and they allow for a continuous, very fast action on the field: the ball is constantly moving in every direction; it can be at one end of the field one moment and at the other end the next. The player or the spectator cannot relax his attention, because either team can score at any time, and one score is often enough to decide the outcome of the game. This uninterrupted action (for two 45-minute periods) allows both players and spectators to immerse themselves in a continuous stream of participation. In this respect soccer (and ice hockey) differ from other popular games like football and baseball, where the frequent structural lulls in the game let the spectators relax and drift out of the play awareness. Basketball also has this uninterrupted flow, but the frequent scoring in this game dilutes somewhat the climactic quality of any single basket (unless it is a tie-breaking shot toward the end of the game); thus the spectator does not have to watch the action too closely at all times because even if he misses a few points, they would probably not be decisive ones. Finally, the dimensions of the soccer field, similar to those of football, allow an open, unpredictable sequence of events to take place. As opposed to the basketball "rush" which often seems a replay of the previous one, or the relatively limited options of a football "play," the soccer action can very quickly spread—within the clear limits of the game—to quite unpredictable patterns. Sometimes the virtuosity of an individual player's improvisation carries the day; sometimes it is the clock-work precision of team effort that triumphs. It is possible in soccer for one player to start with the ball in center field, dribble it through the opposing defense, and score the only point of a ninety minute game; in practice, of course, victory is usually achieved through cooperation between players. The point is that soccer allows a very wide range of initiative.

This analysis of soccer is not intended to be an invidious comparison with other ball games; its play-forms were emphasized only to reveal more clearly parameters which are present, to a lesser or a greater extent, in all other games. The ball—whether it is propelled by hand, by foot, by bats, or by clubs—becomes in a ball game an extension of the human body, a projection of the player's intentions. The ball travels within a predictable range of trajectories, but each particular trajectory is unpredictable. The player projects his will and his physical energy through the moving ball, and from the interplay of these individual projections there arises the process which involves the player to the point that he can forget everything else including, paradoxically, his own self.

This rapid review of ball games barely skims the surface of the complex subject of the games involving physical skill. More than the other play-forms, such games vary with the geographical location, the technology, and the history of the culture. A whole subclass that includes play which might result in the death of the player could not even be mentioned in this context; it was

explored elsewhere (Csikszentmihalyi 1969b), but it still awaits a more thorough treatment. Our impression is, however, that the model can account fruitfully for the specific features of games of skill in general. This impression, of course, needs to be confirmed by further work.

CONCLUSIONS

It is time to inspect some of the social and cultural implications of the ideas and the examples presented. We have been most concerned with the concept of "self": of how it is forgotten when action is plentiful, and perhaps of what the experience of "selflessness" is like. In addition we have, for this brief introduction to the play concept, attempted to define play without developing a complicated set of theoretical underpinnings and special terms, but relying heavily on examples of activities people engage in as play. It is our contention that the full theoretical significance of the "self" concept does not unfold until the possibility of playing is considered.

Any concept of "self" relies on the ability of an actor to share perspectives of "others" who see him. Interaction is grounded in the "self" as integrator of one person's actions with another, and therefore as the continual negotiator of social reality.[4] As long as a person is playing, his selfless attention to only "his" actions transcends his referential (i.e., social) identity, and the ability for further negotiating breaks down. The question might be raised, how can any activity proceed without a functioning self to act as a "negotiator" between the environmental demands and the person's *voluntary fiat*? In everyday life this would indeed be impossible. But in the play situation social reality is not up for negotiation: the actors are absolutely bound to a limited set of actions and to identical accounts of those actions; play is a social system with no deviance. Given a manageable number of options for action and an unambiguous symbol system, no viewpoint other than the player's viewpoint is necessary—the social self becomes superfluous, and the player can merge with the process in a state of monistic awareness. This is our explanation of the play experience—with one added feature: play stops when it becomes boredom.

The episodic nature of play is now revealed: play emerges out of the context of everyday life whenever the latter becomes too worrisome, and slips back into everyday life whenever the play experience becomes boring. The play experience is constructed by means of negotiation involving awareness of the dualistic social skills of language, categorization, and roles. Once this construction is successfully completed (according to the parameters explored in the examples provided above), the monistic play experience may be invoked at will. We have the ability to flip back and forth from worry to play to boredom, and sometimes these changes are very swift. Monistic interludes (from the Latin *inter ludes*: "plays between") are always transitory and vulnerable at any moment to intrusion from the "big world" which presents incongruent possibilities that cannot be played with. What is important here for social theory is that a negotiable reality which is subject to varying interpretations and requires a "self" (everyday life) *coexists* with a voluntarily structured reality with no referential requirements (play). In other words, the traditional theoretical conflict between individual and society (or monism and dualism) is irrelevant for a man at play. As a pitcher steps up to the plate, it is useless to ask him for an opinion on the Vietnam war. His world at this point is limited to the batting box, and the whole network of social pressures and expectations has fallen away.

Western social and cultural thought from Plato to Parsons is permeated with the problem of *order*: the fear that "each individual's unregulated attempts to gain his ends would, through individuals' mutual attempts to subsume or destroy one another, result in the war of all against all."[5] At the same time it is recognized that the order which social organization imposes severely constrains freedom of individual action and therefore

curtails creative and innovative behavior. This paradox has been more than any theory has been able to resolve. What seems to be a theoretical impossibility is, however, a familiar experience to a player. What is logically incompatible is nevertheless part of ongoing experience. To understand play is important precisely because it combines in an experiential unity both social constraints and spontaneous behavior. We have here, then, a rare opportunity for integrating the unilaterally accurate perceptions of the sociologistic and psychologistic views of man.[6] It is not surprising that many thinkers of the past should have perceived the importance of play; from Plato to Sartre, play has been seen as a most "human" activity.[7] Despite such insights, however, we still lack any real knowledge of the phenomenon of play. We do not know how much people play—whether in games, in their occupations, in their personal relations; we do not know whether life in pre-literate societies contains more or less play than life in technological society; we ignore at what point play-forms cease to provide play-experience, and what is the point at which some patterns of "normal" experience begin to produce a play-experience in those who engage in it.

These are not just idle questions stimulated by a vague if fashionable concern with leisure and recreation. They are questions of the utmost seriousness in that they deal with one of the most rewarding and creative experiences that man is capable of feeling. Quite apart from socio-cultural considerations, we owe it to the self-actualizing potential in each man to study and further understand this activity and its effects on us. Whether the direction attempted in this paper is a fruitful one remains to be seen; what is important is to begin the exploration. Play is coming.

NOTES

[1] The major theoretical impetus for the position presented in this paper came from the work of Huizinga (1950). Other influential sources were Piaget (1965), Lowenfeld (1967), Arendt (1958). Many of the basic concepts used in this study emerged from a seminar on play conducted at Lake Forest College in the Spring 1968.

[2] *Worry* derives from a Middle English word meaning *to strangle*.

[3] In this sense our definition of "play" closely parallels de Charms' description of people's behavior in the "origin" as opposed to the "pawn" state. A person acting in the "origin" state experiences a total involvement of the self in what he is doing and lacks threat or anxiety; in the "pawn" state man acts for the end rather than the process and is open to anxiety (de Charms 1968:323 ff). It is also clear that "play" in this sense is an integral component of the creative process (see M. Csikszentmihalyi [in press]; M. Csikszentmihalyi and J. W. Getzels [1970]. See also Maslow (1963).

[4] For the concept of the self as the negotiator of interaction, see for instance P. Berger and T. Luckman (1967).

[5] This is Talcott Parsons formulation of the "Hobbesian Problem of Order" taken from his introduction to *Theories of Society* (1961).

[6] This aspect of play has attracted the attention of many writers, at least tangentially. See for instance: L. Frobenius (1932), G. H. Mead (1934), H. S. Sullivan (1953), J. Huizinga (1950), H. S. Kariel (1969).

[7] See: C. F. Schiller (1884), J. P. Sartre (1956:580 ff), N. O. Brown (1959:30 ff).

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