

Roger Caillois



*Man,
Play
and
Games*

*Translated by
Meyer Barash*

Man, Play and Games

ESSAYS BY ROGER CAILLOIS

TRANSLATED FROM THE FRENCH BY
Meyer Barash

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❧ Caillois' dedication, *Secundum Secundatum*, is a tribute to Charles de Secondat, Baron de la Brède et de Montesquieu, and means, roughly, “according to the rules of Montesquieu.” Montesquieu was part of an inherited title, and the man himself was referred to in Latin discussions and scholarly works as “Secondatur.” Caillois edited a definitive French edition of Montesquieu’s *Oeuvres Complètes*, Librairie Gallimard, Paris, 1949–1951. ☙

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TRANSLATOR'S INTRODUCTION

In an appendix to *Man and the Sacred* (Free Press, 1959), Roger Caillois included a brilliant critique of Johan Huizinga's theory of play. In the course of the essay, he paid tribute to the originality of Huizinga's conception of play as free activity, delimited within a "sacred" area and thus separated from ordinary life. At the same time, he pointed out that Huizinga seemed to ignore or minimize the diversified forms of play and the many needs served by play activity in various cultural contexts. Between 1946, when this essay was originally written, and the publication of *Les jeux et les hommes* (Gallimard, 1958) Caillois expanded and systematized his analysis, so that *Man, Play, and Games* is probably the only work on the subject that attempts a typology of play on the basis of which the characteristic games of a culture can be classified and its basic patterns better understood.

Caillois defines play as free, separate, uncertain, and unproductive, yet regulated and make-believe. The various kinds of play and games are subsumed under four cate-

gories, *agôn* (competition), *alea* (chance), *mimicry* (simulation), and *ilinx* (vertigo). Under certain conditions these rubrics are paired. For example, many Australian, American Indian, and African cultures illustrate the *mimicry-ilinx* complex in their emphasis upon masks and states of possession. Ancient China and Rome, on the other hand, reflect the opposing principles of *agôn-alea* in stressing order, hierarchy, codification, and other evidence of the interaction between competitive merit and the accident or "chance" of birth. Furthermore, games in each of the four categories may be placed upon a continuum representing an evolution from *paidia*, which is active, tumultuous, exuberant, and spontaneous, to *ludus*, representing calculation, contrivance, and subordination to rules. (As the derivation of the term *paidia* implies, children's games would predominate in this category.)

The typology established, Caillois devotes the major portion of his study to describing, in fascinating detail, the games, gambling, and betting practices characteristic of primitive societies as well as the historic cultures of West and East. The contributions of ethnographers, historians, and contemporary observers and informants are skillfully interwoven in order to provide comprehensive documentation for his typology. And yet what many readers will find most challenging is the author's trenchant analysis of the social functions performed by gambling in contemporary Euro-American society. In this respect, his description of fluctuating attitudes toward lotteries in Soviet Russia provides a timely and sardonic note. However, the sociological importance of this work far transcends the value inherent in the empirical description of games in various cultures. Caillois has not been content merely to write a critique of the literature, evolve a typology of play that is method-

ologically rewarding, or describe a great variety of games within a cross-cultural context. The abiding value of this work, in the translator's judgment, lies in the fact that Caillois has not hesitated to use play and games as a culture clue, even if at the risk of possible oversimplification. The patterns or basic themes of culture should be deducible from the study of play and games no less than from the study of economic, political, religious, or familial institutions.

The publication of a book always involves the good will and cooperation of so many that individual acknowledgments must of necessity be highly arbitrary and selective. Nevertheless, the translator would be most remiss if he did not once again express his gratitude to Jeremiah Kaplan and his associates at The Free Press of Glencoe for their invaluable support, without which the sociological contributions of Roger Caillois could not be disseminated as widely as they deserve, and to his colleagues at Hofstra College and Wayne State University for their interest and encouragement. Special thanks must be accorded to Josephine Vacchio for typing the draft of the translation and Miriam E. York, secretary of the Hofstra Sociology and Anthropology Department, for her invaluable assistance with the voluminous and detailed correspondence that is the inevitable accompaniment of the process of translation and editorial revision. Last but far from least, Roger Caillois himself is to be commended for his assistance in elucidating obscure references and suggesting equivalents for French games that are obsolete or that would otherwise be difficult for an American audience to comprehend.

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Man, Play and Games



P A R T O N E

Play and Games: Theme



The Definition of Play

In 1933, the rector of the University of Leyden, J. Huizinga, chose as the theme of an important oration, "The Cultural Limits of Play and the Serious." He took up and developed this topic in an original and powerful work published in 1938, *Homo Ludens*. This work, although most of its premises are debatable, is nonetheless capable of opening extremely fruitful avenues to research and reflection. In any case, it is permanently to J. Huizinga's credit that he has masterfully analyzed several of the fundamental characteristics of play and has demonstrated the importance of its role in the very development of civilization. First, he sought an exact definition of the essence of play; second, he tried to clarify the role of play present in or animating the essential aspects of all culture: in the arts as in philosophy, in poetry as well as in juridical institutions and even in the etiquette of war.

Huizinga acquitted himself brilliantly in this task, but even if he discovers play in areas where no one before him had done so,

he deliberately omits, as obvious, the description and classification of games themselves, since they all respond to the same needs and reflect, without qualification, the same psychological attitude. His work is not a study of games, but an inquiry into the creative quality of the play principle in the domain of culture, and more precisely, of the spirit that rules certain kinds of games —those which are competitive. The examination of the criteria used by Huizinga to demarcate his universe of discourse is helpful in understanding the strange gaps in a study which is in every other way remarkable. Huizinga defines play as follows:

Summing up the formal characteristics of play we might call it a free activity standing quite consciously outside "ordinary" life as being "not serious," but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means.¹

Such a definition, in which all the words are important and meaningful, is at the same time too broad and too narrow. It is meritorious and fruitful to have grasped the affinity which exists between play and the secret or mysterious, but this relationship cannot be part of the definition of play, which is nearly always spectacular or ostentatious. Without doubt, secrecy, mystery, and even travesty can be transformed into play activity, but it must be immediately pointed out that this transformation is necessarily to the detriment of the secret and mysterious, which play exposes, publishes, and somehow *expends*. In a word, play tends to remove the very nature of the mysterious. On the other hand, when the secret, the mask, or the costume fulfills a sacramental function one can be sure that not play, but an institution is involved. All that is mysterious or make-believe by nature approaches play: moreover, it must be that the function of fiction or diversion is to remove the mystery; i.e. the mystery may no

longer be awesome, and the counterfeit may not be a beginning or symptom of metamorphosis and possession.

In the second place, the part of Huizinga's definition which views play as action denuded of all material interest, simply excludes bets and games of chance—for example, gambling houses, casinos, racetracks, and lotteries—which, for better or worse, occupy an important part in the economy and daily life of various cultures. It is true that the kinds of games are almost infinitely varied, but the constant relationship between chance and profit is very striking. Games of chance played for money have practically no place in Huizinga's work. Such an omission is not without consequence.

It is certainly much more difficult to establish the cultural functions of games of chance than of competitive games. However, the influence of games of chance is no less considerable, even if deemed unfortunate, and not to consider them leads to a definition of play which affirms or implies the absence of economic interest. Therefore a distinction must be made.

In certain of its manifestations, play is designed to be extremely lucrative or ruinous. This does not preclude the fact that playing for money remains completely unproductive. The sum of the winnings at best would only equal the losses of the other players. Nearly always the winnings are less, because of large overhead, taxes, and the profits of the entrepreneur. He alone does not play, or if he plays he is protected against loss by the law of averages. In effect, he is the only one who cannot take pleasure in gambling.

Property is exchanged, but no goods are produced. What is more, this exchange affects only the players, and only to the degree that they accept, through a free decision remade at each game, the probability of such transfer. A characteristic of play, in fact, is that it creates no wealth or goods, thus differing from work or art. At the end of the game, all can and must start over again at the same point. Nothing has been harvested or manufactured, no masterpiece has been created, no capital has accrued. Play is an occasion of pure waste: waste of time, energy,

ingenuity, skill, and often of money for the purchase of gambling equipment or eventually to pay for the establishment. As for the professionals—the boxers, cyclists, jockeys, or actors who earn their living in the ring, track, or hippodrome or on the stage, and who must think in terms of prize, salary, or title—it is clear that they are not players but workers. When they play, it is at some other game.

There is also no doubt that play must be defined as a free and voluntary activity, a source of joy and amusement. A game which one would be forced to play would at once cease being play. It would become constraint, drudgery from which one would strive to be freed. As an obligation or simply an order, it would lose one of its basic characteristics: the fact that the player devotes himself spontaneously to the game, of his free will and for his pleasure, each time completely free to choose retreat, silence, meditation, idle solitude, or creative activity. From this is derived Valéry's proposed definition of play: it occurs when "*l'ennui peut délier ce que l'entrain avait lié.*"² It happens only when the players have a desire to play, and play the most absorbing, exhausting game in order to find diversion, escape from responsibility and routine. Finally and above all, it is necessary that they be free to leave whenever they please, by saying: "I am not playing any more."

In effect, play is essentially a separate occupation, carefully isolated from the rest of life, and generally is engaged in with precise limits of time and place. There is place for play: as needs dictate, the space for hopscotch, the board for checkers or chess, the stadium, the racetrack, the list, the ring, the stage, the arena, etc. Nothing that takes place outside this ideal frontier is relevant. To leave the enclosure by mistake, accident, or necessity, to send the ball out of bounds, may disqualify or entail a penalty.

The game must be taken back within the agreed boundaries. The same is true for time: the game starts and ends at a given signal. Its duration is often fixed in advance. It is improper to abandon or interrupt the game without a major reason (in children's games, crying "I give up," for example). If there is

occasion to do so, the game is prolonged, by agreement between the contestants or by decision of an umpire. In every case, the game's domain is therefore a restricted, closed, protected universe: a pure space.

The confused and intricate laws of ordinary life are replaced, in this fixed space and for this given time, by precise, arbitrary, unexceptionable rules that must be accepted as such and that govern the correct playing of the game. If the cheat violates the rules, he at least pretends to respect them. He does not discuss them: he takes advantage of the other players' loyalty to the rules. From this point of view, one must agree with the writers who have stressed the fact that the cheat's dishonesty does not destroy the game. The game is ruined by the nihilist who denounces the rules as absurd and conventional, who refuses to play because the game is meaningless. His arguments are irrefutable. The game has no other but an intrinsic meaning. That is why its rules are imperative and absolute, beyond discussion. There is no reason for their being as they are, rather than otherwise. Whoever does not accept them as such must deem them manifest folly.

One plays only if and when one wishes to. In this sense, play is free activity. It is also uncertain activity. Doubt must remain until the end, and hinges upon the denouement. In a card game, when the outcome is no longer in doubt, play stops and the players lay down their hands. In a lottery or in roulette, money is placed on a number which may or may not win. In a sports contest, the powers of the contestants must be equated, so that each may have a chance until the end. Every game of skill, by definition, involves the risk for the player of missing his stroke, and the threat of defeat, without which the game would no longer be pleasing. In fact, the game is no longer pleasing to one who, because he is too well trained or skillful, wins effortlessly and infallibly.

An outcome known in advance, with no possibility of error or surprise, clearly leading to an inescapable result, is incompatible with the nature of play. Constant and unpredictable definitions

of the situation are necessary, such as are produced by each attack or counterattack in fencing or football, in each return of the tennis ball, or in chess, each time one of the players moves a piece. The game consists of the need to find or continue at once a response *which is free within the limits set by the rules*. This latitude of the player, this margin accorded to his action is essential to the game and partly explains the pleasure which it excites. It is equally accountable for the remarkable and meaningful uses of the term "play," such as are reflected in such expressions as the *playing* of a performer or the *play* of a gear, to designate in the one case the personal style of an interpreter, in the other the range of movement of the parts of a machine.

Many games do not imply rules. No fixed or rigid rules exist for playing with dolls, for playing soldiers, cops and robbers, horses, locomotives, and airplanes—games, in general, which presuppose free improvisation, and the chief attraction of which lies in the pleasure of playing a role, of acting *as if* one were someone or something else, a machine for example. Despite the assertion's paradoxical character, I will state that in this instance the fiction, the sentiment of *as if* replaces and performs the same function as do rules. Rules themselves create fictions. The one who plays chess, prisoner's base, polo, or baccara, by the very fact of complying with their respective rules, is separated from real life where there is no activity that literally corresponds to any of these games. That is why chess, prisoner's base, polo, and baccara are played *for real*. *As if* is not necessary. On the contrary, each time that play consists in imitating life, the player on the one hand lacks knowledge of how to invent and follow rules that do not exist in reality, and on the other hand the game is accompanied by the knowledge that the required behavior is pretense, or simple mimicry. This awareness of the basic unreality of the assumed behavior is separate from real life and from the arbitrary legislation that defines other games. The equivalence is so precise that the one who breaks up a game, the one who denounces the absurdity of the rules, now becomes the one who breaks the spell, who brutally refuses to acquiesce

in the proposed illusion, who reminds the boy that he is not really a detective, pirate, horse, or submarine, or reminds the little girl that she is not rocking a real baby or serving a real meal to real ladies on her miniature dishes.

Thus games are not ruled and make-believe. Rather, they are ruled *or* make-believe. It is to the point that if a game with rules seems in certain circumstances like a serious activity and is beyond one unfamiliar with the rules, i.e. if it seems to him like real life, this game can at once provide the framework for a diverting make-believe for the confused and curious layman. One easily can conceive of children, in order to imitate adults, blindly manipulating real or imaginary pieces on an imaginary chessboard, and by pleasant example, playing at "playing chess."

This discussion, intended to define the nature and the largest common denominator of all games, has at the same time the advantage of placing their diversity in relief and enlarging very meaningfully the universe ordinarily explored when games are studied. In particular, these remarks tend to add two new domains to this universe: that of wagers and games of chance, and that of mimicry and interpretation. Yet there remain a number of games and entertainments that still have imperfectly defined characteristics—for example, kite-flying and top-spinning, puzzles such as crossword puzzles, the game of patience, horsemanship, seesaws, and certain carnival attractions. It will be necessary to return to this problem. But for the present, the preceding analysis permits play to be defined as an activity which is essentially:

1. *Free*: in which playing is not obligatory; if it were, it would at once lose its attractive and joyous quality as diversion;
2. *Separate*: circumscribed within limits of space and time, defined and fixed in advance;
3. *Uncertain*: the course of which cannot be determined, nor the result attained beforehand, and some latitude for innovations being left to the player's initiative;

4. *Unproductive*: creating neither goods, nor wealth, nor new elements of any kind; and, except for the exchange of property among the players, ending in a situation identical to that prevailing at the beginning of the game;
5. *Governed by rules*: under conventions that suspend ordinary laws, and for the moment establish new legislation, which alone counts;
6. *Make-believe*: accompanied by a special awareness of a second reality or of a free unreality, as against real life.

These diverse qualities are purely formal. They do not pre-judge the content of games. Also, the fact that the two last qualities—rules and make-believe—may be related, shows that the intimate nature of the facts that they seek to define implies, perhaps requires, that the latter in their turn be subdivided. This would attempt to take account not of the qualities that are opposed to reality, but of those that are clustered in groups of games with unique, irreducible characteristics.

The Classification of Games

The multitude and infinite variety of games at first causes one to despair of discovering a principle of classification capable of subsuming them under a small number of well-defined categories. Games also possess so many different characteristics that many approaches are possible. Current usage sufficiently demonstrates the degree of hesitance and uncertainty: indeed, several classifications are employed concurrently. To oppose card games to games of skill, or to oppose parlor games to those played in a stadium is meaningless. In effect, the implement used in the game is chosen as a classificatory instrument in the one case; in the other, the qualifications required; in a third the number of players and the atmosphere of the game, and lastly the place in which the contest is waged. An additional over-all complication is that the same game can be played alone or with others. A particular game may require several skills simultaneously, or none.

Very different games can be played in the same place. Merry-

go-rounds and the diabolo are both open-air amusements. But the child who passively enjoys the pleasure of riding by means of the movement of the carousel is not in the same state of mind as the one who tries as best he can to correctly whirl his diabolo. On the other hand, many games are played without implements or accessories. Also, the same implement can fulfill different functions, depending on the game played. Marbles are generally the equipment for a game of skill, but one of the players can try to guess whether the marbles held in his opponent's hand are an odd or even number. They thus become part of a game of chance.

This last expression must be clarified. For one thing, it alludes to the fundamental characteristic of a very special kind of game. Whether it be a bet, lottery, roulette, or baccara, it is clear that the player's attitude is the same. He does nothing, he merely awaits the outcome. The boxer, the runner, and the player of chess or hopscotch, on the contrary, work as hard as they can to win. It matters little that some games are athletic and others intellectual. The player's attitude is the same: he tries to vanquish a rival operating under the same conditions as himself. It would thus appear justified to contrast games of chance with competitive games. Above all, it becomes tempting to investigate the possibility of discovering other attitudes, no less fundamental, so that the categories for a systematic classification of games can eventually be provided.



After examining different possibilities, I am proposing a division into four main rubrics, depending upon whether, in the games under consideration, the role of competition, chance, simulation, or vertigo is dominant. I call these *agôn*, *alea*, *mimicry*, and *ilinx*, respectively. All four indeed belong to the domain of play. One *plays* football, billiards, or chess (*agôn*); roulette or a lottery (*alea*); pirate, Nero, or Hamlet (*mimicry*); or one produces in oneself, by a rapid whirling or falling movement, a state of dizziness and disorder (*ilinx*). Even these designations do not

cover the entire universe of play. It is divided into quadrants, each governed by an original principle. Each section contains games of the same kind. But inside each section, the different games are arranged in a rank order of progression. They can also be placed on a continuum between two opposite poles. At one extreme an almost indivisible principle, common to diversion, turbulence, free improvisation, and carefree gaiety is dominant. It manifests a kind of uncontrolled fantasy that can be designated by the term *paidia*. At the opposite extreme, this frolicsome and impulsive exuberance is almost entirely absorbed or disciplined by a complementary, and in some respects inverse, tendency to its anarchic and capricious nature: there is a growing tendency to bind it with arbitrary, imperative, and purposely tedious conventions, to oppose it still more by ceaselessly practicing the most embarrassing chicanery upon it, in order to make it more uncertain of attaining its desired effect. This latter principle is completely impractical, even though it requires an ever greater amount of effort, patience, skill, or ingenuity. I call this second component *ludus*.

I do not intend, in resorting to these strange concepts, to set up some kind of pedantic, totally meaningless mythology. However, obligated as I am to classify diverse games under the same general category, it seemed to me that the most economical means of doing so was to borrow, from one language or another, the most meaningful and comprehensive term possible, so that each category examined should avoid the possibility of lacking the particular quality on the basis of which the unifying concept was chosen. Also, to the degree that I will try to establish the classification to which I am committed, each concept chosen will not relate too directly to concrete experience, which in turn is to be divided according to an as yet untested principle.

In the same spirit, I am compelled to subsume the games most varied in appearance under the same rubric, in order to better demonstrate their fundamental kinship. I have mixed physical and mental games, those dependent upon force with those requiring skill or reasoning. Within each class, I have not dis-

tinguished between children's and adults' games, and wherever possible I have sought instances of homologous behavior in the animal world. The point in doing this was to stress the very principle of the proposed classification. It would be less burdensome if it were perceived that the divisions set up correspond to essential and irreducible impulses.

1. *Fundamental Categories*

Agôn. A whole group of games would seem to be competitive, that is to say, like a combat in which equality of chances is artificially created, in order that the adversaries should confront each other under ideal conditions, susceptible of giving precise and incontestable value to the winner's triumph. It is therefore always a question of a rivalry which hinges on a single quality (speed, endurance, strength, memory, skill, ingenuity, etc.), exercised, within defined limits and without outside assistance, in such a way that the winner appears to be better than the loser in a certain category of exploits. Such is the case with sports contests and the reason for their very many subdivisions. Two individuals or two teams are in opposition (polo, tennis, football, boxing, fencing, etc.), or there may be a varying number of contestants (courses of every kind, shooting matches, golf, athletics, etc.). In the same class belong the games in which, at the outset, the adversaries divide the elements into equal parts and value. The games of checkers, chess, and billiards are perfect examples. The search for equality is so obviously essential to the rivalry that it is re-established by a handicap for players of different classes; that is, within the equality of chances originally established, a secondary inequality, proportionate to the relative powers of the participants, is dealt with. It is significant that such a usage exists in the *agôn* of a physical character (sports) just as in the more cerebral type (chess games for example, in which the weaker player is given the advantage of a pawn, knight, castle, etc.).

As carefully as one tries to bring it about, absolute equality does not seem to be realizable. Sometimes, as in checkers or chess, the fact of moving first is an advantage, for this priority permits the favored player to occupy key positions or to impose a special strategy. Conversely, in bidding games, such as bridge, the last bidder profits from the clues afforded by the bids of his opponents. Again, at croquet, to be last multiplies the player's resources. In sports contests, the exposure, the fact of having the sun in front or in back; the wind which aids or hinders one or the other side; the fact, in disputing for positions on a circular track, of finding oneself in the inside or outside lane constitutes a crucial test, a trump or disadvantage whose influence may be considerable. These inevitable imbalances are negated or modified by drawing lots at the beginning, then by strict alternation of favored positions.

The point of the game is for each player to have his superiority in a given area recognized. That is why the practice of *agôn* presupposes sustained attention, appropriate training, assiduous application, and the desire to win. It implies discipline and perseverance. It leaves the champion to his own devices, to evoke the best possible game of which he is capable, and it obliges him to play the game within the fixed limits, and according to the rules applied equally to all, so that in return the victor's superiority will be beyond dispute.

In addition to games, the spirit of *agôn* is found in other cultural phenomena conforming to the game code: in the duel, in the tournament, and in certain constant and noteworthy aspects of so-called courtly war.

In principle, it would seem that *agôn* is unknown among animals, which have no conception of limits or rules, only seeking a brutal victory in merciless combat. It is clear that horse races and cock fights are an exception, for these are conflicts in which men make animals compete in terms of norms that the former alone have set up. Yet, in considering certain facts, it seems that animals already have the competitive urge during encounters where limits are at least implicitly accepted and spontaneously

respected, even if rules are lacking. This is notably the case in kittens, puppies, and bear cubs, which take pleasure in knocking each other down yet not hurting each other.

Still more convincing are the habits of bovines, which, standing face to face with heads lowered, try to force each other back. Horses engage in the same kind of friendly dueling: to test their strength, they rear up on their hind legs and press down upon each other with all their vigor and weight, in order to throw their adversaries off balance. In addition, observers have noted numerous games of pursuit that result from a challenge or invitation. The animal that is overtaken has nothing to fear from the victor. The most impressive example is without doubt that of the little ferocious "fighting" willow wrens. "A moist elevation covered with short grass and about two meters in diameter is chosen for the arena," says Karl Groos.³ The males gather there daily. The first to arrive waits for an adversary, and then the fight begins. The contenders tremble and bow their heads several times. Their feathers bristle. They hurl themselves at each other, beaks advanced, and striking at one another. *Never is there any pursuit or conflict outside the space delimited for the journey.* That is why it seems legitimate for me to use the term *agôn* for these cases, for the goal of the encounters is not for the antagonist to cause serious injury to his rival, but rather to demonstrate his own superiority. Man merely adds refinement and precision by devising rules.

In children, as soon as the personality begins to assert itself, and before the emergence of regulated competition, unusual challenges are frequent, in which the adversaries try to prove their greater endurance. They are observed competing to see which can stare at the sun, endure tickling, stop breathing, not wink his eye, etc., the longest. Sometimes the stakes are more serious, where it is a question of enduring hunger or else pain in the form of whipping, pinching, stinging, or burning. Then these ascetic games, as they have been called, involve severe ordeals. They anticipate the cruelty and hazing which adolescents must undergo during their initiation. This is a departure

from *agôn*, which soon finds its perfect form, be it in legitimately competitive games and sports, or in those involving feats of prowess (hunting, mountain climbing, crossword puzzles, chess problems, etc.) in which champions, without directly confronting each other, are involved in ceaseless and diffuse competition.

Alea. This is the Latin name for the game of dice. I have borrowed it to designate, in contrast to *agôn*, all games that are based on a decision independent of the player, an outcome over which he has no control, and in which winning is the result of fate rather than triumphing over an adversary. More properly, destiny is the sole artisan of victory, and where there is rivalry, what is meant is that the winner has been more favored by fortune than the loser. Perfect examples of this type are provided by the games of dice, roulette, heads or tails, baccara, lotteries, etc. Here, not only does one refrain from trying to eliminate the injustice of chance, but rather it is the very capriciousness of chance that constitutes the unique appeal of the game.

Alea signifies and reveals the favor of destiny. The player is entirely passive; he does not deploy his resources, skill, muscles, or intelligence. All he need do is await, in hope and trembling, the cast of the die. He risks his stake. Fair play, also sought but now taking place under ideal conditions, lies in being compensated exactly in proportion to the risk involved. Every device intended to equalize the competitors' chances is here employed to scrupulously equate risk and profit:

In contrast to *agôn*, *alea* negates work, patience, experience, and qualifications. Professionalization, application, and training are eliminated. In one instant, winnings may be wiped out. *Alea* is total disgrace or absolute favor. It grants the lucky player infinitely more than he could procure by a lifetime of labor, discipline, and fatigue. It seems an insolent and sovereign insult to merit. It supposes on the player's part an attitude exactly opposite to that reflected in *agôn*. In the latter, his only reliance is upon himself; in the former, he counts on everything, even the vaguest sign, the slightest outside occurrence, which he immedi-

ately takes to be an omen or token—in short, he depends on everything except himself.

Agôn is a vindication of personal responsibility; *alea* is a negation of the will, a surrender to destiny. Some games, such as dominoes, backgammon, and most card games, combine the two. Chance determines the distribution of the hands dealt to each player, and the players then play the hands that blind luck has assigned to them as best they can. In a game like bridge, it is knowledge and reasoning that constitute the player's defense, permitting him to play a better game with the cards that he has been given. In games such as poker, it is the qualities of psychological acumen and character that count.

The role of money is also generally more impressive than the role of chance, and therefore is the recourse of the weaker player. The reason for this is clear: *Alea* does not have the function of causing the more intelligent to win money, but tends rather to abolish natural or acquired individual differences, so that all can be placed on an absolutely equal footing to await the blind verdict of chance.

Since the result of *agôn* is necessarily uncertain and paradoxically must approximate the effect of pure chance, assuming that the chances of the competitors are as equal as possible, it follows that every encounter with competitive characteristics and ideal rules can become the object of betting, or *alea*, e.g. horse or greyhound races, football, basketball, and cock fights. It even happens that table stakes vary unceasingly during the game, according to the vicissitudes of *agôn*.⁴

Games of chance would seem to be peculiarly human. Animals play games involving competition, stimulation, and excess. K. Groos, especially, offers striking examples of these. In sum, animals, which are very much involved in the immediate and enslaved by their impulses, cannot conceive of an abstract and inanimate power, to whose verdict they would passively submit in advance of the game. To await the decision of destiny passively and deliberately, to risk upon it wealth proportionate to the risk of losing, is an attitude that requires the possibility of

foresight, vision, and speculation, for which objective and calculating reflection is needed. Perhaps it is in the degree to which a child approximates an animal that games of chance are not as important to children as to adults. For the child, play is active. In addition, the child is immune to the main attraction of games of chance, deprived as he is of economic independence, since he has no money of his own. Games of chance have no power to thrill him. To be sure, marbles are money to him. However, he counts on his skill rather than on chance to win them.

Agôn and *alea* imply opposite and somewhat complementary attitudes, but they both obey the same law—the creation for the players of conditions of pure equality denied them in real life. For nothing in life is clear, since everything is confused from the very beginning, luck and merit too. Play, whether *agôn* or *alea*, is thus an attempt to substitute perfect situations for the normal confusion of contemporary life. In games, the role of merit or chance is clear and indisputable. It is also implied that all must play with exactly the same possibility of proving their superiority or, on another scale, exactly the same chances of winning. In one way or another, one escapes the real world and creates another. One can also escape himself and become another. This is *mimicry*.

Mimicry. All play presupposes the temporary acceptance, if not of an illusion (indeed this last word means nothing less than beginning a game: *in-lusio*), then at least of a closed, conventional, and, in certain respects, imaginary universe. Play can consist not only of deploying actions or submitting to one's fate in an imaginary milieu, but of becoming an illusory character oneself, and of so behaving. One is thus confronted with a diverse series of manifestations, the common element of which is that the subject makes believe or makes others believe that he is someone other than himself. He forgets, disguises, or temporarily sheds his personality in order to feign another. I prefer to designate these phenomena by the term *mimicry*, the English word

for mimetism, notably of insects, so that the fundamental, elementary, and quasi-organic nature of the impulse that stimulates it can be stressed.

The insect world, compared to the human world, seems like the most divergent of solutions provided by nature. This world is in contrast in all respects to that of man, but it is no less elaborate, complex, and surprising. Also, it seems legitimate to me at this point to take account of mimetic phenomena of which insects provide most perplexing examples. In fact, corresponding to the free, versatile, arbitrary, imperfect, and extremely diversified behavior of man, there is in animals, especially in insects, the organic, fixed, and absolute adaptation which characterizes the species and is infinitely and exactly reproduced from generation to generation in billions of individuals: e.g. the caste system of ants and termites as against class conflict, and the designs on butterflies' wings as compared to the history of painting. Reluctant as one may be to accept this hypothesis, the temerity of which I recognize, the inexplicable mimetism of insects immediately affords an extraordinary parallel to man's penchant for disguising himself, wearing a mask, or *playing a part*—except that in the insect's case the mask or guise becomes part of the body instead of a contrived accessory. But it serves the same purposes in both cases, viz. to change the wearer's appearance and to inspire fear in others.⁵

Among vertebrates, the tendency to imitate first appears as an entirely physical, quasi-irresistible contagion, analogous to the contagion of yawning, running, limping, smiling, or almost any movement. Hudson seems to have proved that a young animal "follows any object that is going away, and flees any approaching object." Just as a lamb is startled and runs if its mother turns around and moves toward the lamb without warning, the lamb trails the man, dog, or horse that it sees moving away. Contagion and imitation are not the same as simulation, but they make possible and give rise to the idea or the taste for mimicry. In birds, this tendency leads to nuptial parades, ceremonies, and exhibitions of vanity in which males or females, as the case may

be, indulge with rare application and evident pleasure. As for the oxyrhinous crabs, which plant upon their carapaces any alga or polyp that they can catch, their aptitude for disguise leaves no room for doubt, whatever explanation for the phenomenon may be advanced.

Mimicry and travesty are therefore complementary acts in this kind of play. For children, the aim is to imitate adults. This explains the success of the toy weapons and miniatures which copy the tools, engines, arms, and machines used by adults. The little girl plays her mother's role as cook, laundress, and ironer. The boy makes believe he is a soldier, musketeer, policeman, pirate, cowboy, Martian,⁶ etc. An airplane is made by waving his arms and making the noise of a motor. However, acts of mimicry tend to cross the border between childhood and adulthood. They cover to the same degree any distraction, mask, or travesty, in which one participates, and which stresses the very fact that the play is masked or otherwise disguised, and such consequences as ensue. Lastly it is clear that theatrical presentations and dramatic interpretations rightly belong in this category.

The pleasure lies in being or passing for another. But in games the basic intention is not that of deceiving the spectators. The child who is playing train may well refuse to kiss his father while saying to him that one does not embrace locomotives, but he is not trying to persuade his father that he is a real locomotive. At a carnival, the masquerader does not try to make one believe that he is really a marquis, toreador, or Indian, but rather tries to inspire fear and take advantage of the surrounding license, a result of the fact that the mask disguises the conventional self and liberates the true personality. The actor does not try to make believe that he is "really" King Lear or Charles V. It is only the spy and the fugitive who disguise themselves to really deceive because they are not playing.

Activity, imagination, interpretation, and *mimicry* have hardly any relationship to *alea*, which requires immobility and the thrill of expectation from the player, but *agôn* is not excluded. I am not thinking of the masqueraders' competition, in which the

relationship is obvious. A much more subtle complicity is revealed. For nonparticipants, every *agôn* is a spectacle. Only it is a spectacle which, to be valid, excludes simulation. Great sports events are nevertheless special occasions for *mimicry*, but it must be recalled that the simulation is now transferred from the participants to the audience. It is not the athletes who mimic, but the spectators. Identification with the champion in itself constitutes *mimicry* related to that of the reader with the hero of the novel and that of the moviegoer with the film star. To be convinced of this, it is merely necessary to consider the perfectly symmetrical functions of the champion and the stage or screen star. Champions, winners at *agôn*, are the stars of sports contests. Conversely, stars are winners in a more diffuse competition in which the stakes are popular favor. Both receive a large fan-mail, give interviews to an avid press, and sign autographs.

In fact, bicycle races, boxing or wrestling matches, football, tennis, or polo games are intrinsic spectacles, with costumes, solemn overture, appropriate liturgy, and regulated procedures. In a word, these are dramas whose vicissitudes keep the public breathless, and lead to denouements which exalt some and depress others. The nature of these spectacles remains that of an *agôn*, but their outward aspect is that of an exhibition. The audience are not content to encourage the efforts of the athletes or horses of their choice merely by voice and gesture. A physical contagion leads them to assume the position of the men or animals in order to help them, just as the bowler is known to unconsciously incline his body in the direction that he would like the bowling ball to take at the end of its course. Under these conditions, paralleling the spectacle, a competitive *mimicry* is born in the public, which doubles the true *agôn* of the field or track.

With one exception, *mimicry* exhibits all the characteristics of play: liberty, convention, suspension of reality, and delimitation of space and time. However, the continuous submission to imperative and precise rules cannot be observed—rules for the dissimulation of reality and the substitution of a second reality.

Mimicry is incessant invention. The rule of the game is unique: it consists in the actor's fascinating the spectator, while avoiding an error that might lead the spectator to break the spell. The spectator must lend himself to the illusion without first challenging the décor, mask, or artifice which for a given time he is asked to believe in as more real than reality itself.

Ilinx. The last kind of game includes those which are based on the pursuit of vertigo and which consist of an attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic upon an otherwise lucid mind. In all cases, it is a question of surrendering to a kind of spasm, seizure, or shock which destroys reality with sovereign brusqueness.

The disturbance that provokes vertigo is commonly sought for its own sake. I need only cite as examples the actions of whirling dervishes and the Mexican *voladores*. I choose these purposely, for the former, in technique employed, can be related to certain children's games, while the latter rather recall the elaborate maneuvers of high-wire acrobatics. They thus touch the two poles of games of vertigo. Dervishes seek ecstasy by whirling about with movements accelerating as the drumbeats become ever more precipitate. Panic and hypnosis are attained by the paroxysm of frenetic, contagious, and shared rotation.⁷ In Mexico, the *voladores*—Huastec or Totonac—climb to the top of a mast sixty-five to one hundred feet high. They are disguised as eagles with false wings hanging from their wrists. The end of a rope is attached to their waists. The rope then passes between their toes in such a way that they can manage their entire descent with head down and arms outstretched. Before reaching the ground, they make many complete turns, thirty according to Torquemada, describing an ever-widening spiral in their downward flight. The ceremony, comprising several flights and beginning at noon, is readily interpreted as a dance of the setting sun, associated with birds, the deified dead. The frequency of accidents has led the Mexican authorities to ban this dangerous exercise.⁸

It is scarcely necessary to invoke these rare and fascinating examples. Every child very well knows that by whirling rapidly he reaches a centrifugal state of flight from which he regains bodily stability and clarity of perception only with difficulty. The child engages in this activity playfully and finds pleasure thereby. An example is the game of teetotum⁹ in which the player pivots on one foot as quickly as he is able. Analogously, in the Haitian game of *maïs d'or* two children hold hands, face to face, their arms extended. With their bodies stiffened and bent backward, and with their feet joined, they turn until they are breathless, so that they will have the pleasure of staggering about after they stop. Comparable sensations are provided by screaming as loud as one can, racing downhill, and tobogganing; in horsemanship, provided that one turns quickly; and in swinging.

Various physical activities also provoke these sensations, such as the tightrope, falling or being projected into space, rapid rotation, sliding, speeding, and acceleration of vertilinear movement, separately or in combination with gyrating movement. In parallel fashion, there is a vertigo of a moral order, a transport that suddenly seizes the individual. This vertigo is readily linked to the desire for disorder and destruction, a drive which is normally repressed. It is reflected in crude and brutal forms of personality expression. In children, it is especially observed in the games of hot cockles, "winner-take-all," and leapfrog in which they rush and spin pell-mell. In adults, nothing is more revealing of vertigo than the strange excitement that is felt in cutting down the tall prairie flowers with a switch, or in creating an avalanche of the snow on a rooftop, or, better, the intoxication that is experienced in military barracks—for example, in noisily banging garbage cans.

To cover the many varieties of such transport, for a disorder that may take organic or psychological form, I propose using the term *ilinx*, the Greek term for whirlpool, from which is also derived the Greek word for vertigo (*ilingos*).

This pleasure is not unique to man. To begin with, it is appropriate to recall the gyrations of certain mammals, sheep in par-

ticular. Even if these are pathological manifestations, they are too significant to be passed over in silence. In addition, examples in which the play element is certain are not lacking. In order to catch their tails dogs will spin around until they fall down. At other times they are seized by a fever for running until they are exhausted. Antelopes, gazelles, and wild horses are often panic-stricken when there is no real danger in the slightest degree to account for it; the impression is of an overbearing contagion to which they surrender in instant compliance.¹⁰

Water rats divert themselves by spinning as if they were being drawn by an eddy in a stream. The case of the chamois is even more remarkable. According to Karl Groos, they ascend the glaciers, and with a leap, each in turn slides down a steep slope, while the other chamois watch.

The gibbon chooses a flexible branch and weighs it down until it unbends, thus projecting him into the air. He lands catch as catch can, and he endlessly repeats this useless exercise, inexplicable except in terms of its seductive quality. Birds especially love games of vertigo. They let themselves fall like stones from a great height, then open their wings when they are only a few feet from the ground, thus giving the impression that they are going to be crushed. In the mating season they utilize this heroic flight in order to attract the female. The American nighthawk, described by Audubon, is a virtuoso at these impressive acrobatics.¹¹

Following the teetotum, *maïs d'or*, sliding, horsemanship, and swinging of their childhood, men surrender to the intoxication of many kinds of dance, from the common but insidious giddiness of the waltz to the many mad, tremendous, and convulsive movements of other dances. They derive the same kind of pleasure from the intoxication stimulated by high speed on skis, motorcycles, or in driving sports cars. In order to give this kind of sensation the intensity and brutality capable of shocking adults, powerful machines have had to be invented. Thus it is not surprising that the Industrial Revolution had to take place before vertigo could really become a kind of game. It is now provided

for the avid masses by thousands of stimulating contraptions installed at fairs and amusement parks.

These machines would obviously surpass their goals if it were only a question of assaulting the organs of the inner ear, upon which the sense of equilibrium is dependent. But it is the whole body which must submit to such treatment as anyone would fear undergoing, were it not that everybody else was seen struggling to do the same. In fact, it is worth watching people leaving these vertigo-inducing machines. The contraptions turn people pale and dizzy to the point of nausea. They shriek with fright, gasp for breath, and have the terrifying impression of visceral fear and shrinking as if to escape a horrible attack. Moreover the majority of them, before even recovering, are already hastening to the ticket booth in order to buy the right to again experience the same pleasurable torture.

It is necessary to use the word "pleasure," because one hesitates to call such a transport a mere distraction, corresponding as it does more to a spasm than to an entertainment. In addition, it is important to note that the violence of the shock felt is such that the concessionaires try, in extreme cases, to lure the naive by offering free rides. They deceitfully announce that "this time only" the ride is free, when this is the usual practice. To compensate, the spectators are made to pay for the privilege of calmly observing from a high balcony the terrors of the co-operating or surprised victims, exposed to fearful forces or strange caprices.

It would be rash to draw very precise conclusions on the subject of this curious and cruel assignment of roles. This last is not characteristic of a kind of game, such as is found in boxing, wrestling, and in gladiatorial combat. Essential is the pursuit of this special disorder or sudden panic, which defines the term vertigo, and in the true characteristics of the games associated with it: viz. the freedom to accept or refuse the experience, strict and fixed limits, and separation from the rest of reality. What the experience adds to the spectacle does not diminish but reinforces its character as play.

2. *From Turbulence to Rules*

Rules are inseparable from play as soon as the latter becomes institutionalized. From this moment on they become part of its nature. They transform it into an instrument of fecund and decisive culture. But a basic freedom is central to play in order to stimulate distraction and fantasy. This liberty is its indispensable motive power and is basic to the most complex and carefully organized forms of play. Such a primary power of improvisation and joy, which I call *paidia*, is allied to the taste for gratuituous difficulty that I propose to call *ludus*, in order to encompass the various games to which, without exaggeration, a civilizing quality can be attributed. In fact, they reflect the moral and intellectual values of a culture, as well as contribute to their refinement and development.

I have chosen the term *paidia* because its root is the word for child, and also because of a desire not to needlessly disconcert the reader by resorting to a term borrowed from an antipodal language. However, the Sanskrit *kredati* and the Chinese *wan* seem both richer and more expressive through the variety and nature of their connotations. It is true that they also present the disadvantages of overabundance—a certain danger of confusion, for one. *Kredati* designates the play of adults, children, and animals. It applies more specifically to gamboling, i.e. to the sudden and capricious movements provoked by a superabundance of gaiety and vitality. It applies equally to illicit sex relationships, the rise and fall of waves, and anything that undulates with the wind. The word *wan* is even more explicit, as much for what it defines as for what it avoids defining, i.e. specifying games of skill, competition, simulation, and chance. It manifests many refinements of meaning to which I will have occasion to return.

In view of these relationships and semantic qualifications, what can be the connotations and denotations of the term *paidia*? I shall define it, for my purposes, as a word covering the

spontaneous manifestations of the play instinct: a cat entangled in a ball of wool, a dog sniffing, and an infant laughing at his rattle represent the first identifiable examples of this type of activity. It intervenes in every happy exuberance which effects an immediate and disordered agitation, an impulsive and easy recreation, but readily carried to excess, whose impromptu and unruly character remains its essential if not unique reason for being. From somersaults to scribbling, from squabble to uproar, perfectly clear illustrations are not lacking of the comparable symptoms of movements, colors, or noises.

This elementary need for disturbance and tumult first appears as an impulse to touch, grasp, taste, smell, and then drop any accessible object. It readily can become a taste for destruction and breaking things. It explains the pleasure in endlessly cutting up paper with a pair of scissors, pulling cloth into thread, breaking up a gathering, holding up a queue, disturbing the play or work of others, etc. Soon comes the desire to mystify or to defy by sticking out the tongue or grimacing while seeming to touch or throw the forbidden object. For the child it is a question of expressing himself, of feeling he is the *cause*, of forcing others to pay attention to him. In this manner, K. Groos recalls the case of a monkey which took pleasure in pulling the tail of a dog that lived with it, each time that the dog seemed to be going to sleep. The primitive joy in destruction and upset has been notably observed by the sister of G. J. Romanes in precise and most meaningful detail.¹²

The child does not stop at that. He loves to play with his own pain, for example by probing a toothache with his tongue. He also likes to be frightened. He thus looks for a physical illness, limited and controlled, of which he is the cause, or sometimes he seeks an anxiety that he, being the cause, can stop at will. At various points, the fundamental aspects of play are already recognizable, i.e. voluntary, agreed upon, isolated, and regulated activity.

Soon there is born the desire to invent rules, and to abide by them whatever the cost. The child then makes all kinds of bets—

which, as has been seen, are the elementary forms of *agôn*—with himself or his friends. He hops, walks backwards with his eyes closed, plays at who can look longest at the sun, and will suffer pain or stand in a painful position.

In general, the first manifestations of *paidia* have no name and could not have any, precisely because they are not part of any order, distinctive symbolism, or clearly differentiated life that would permit a vocabulary to consecrate their autonomy with a specific term. But as soon as conventions, techniques, and utensils emerge, the first games as such arise with them: e.g. leapfrog, hide and seek, kite-flying, teetotum, sliding, blindman's buff, and doll-play. At this point the contradictory roads of *agôn*, *alea*, *mimicry*, and *ilinx* begin to bifurcate. At the same time, the pleasure experienced in solving a problem arbitrarily designed for this purpose also intervenes, so that reaching a solution has no other goal than personal satisfaction for its own sake.

This condition, which is *ludus* proper, is also reflected in different kinds of games, except for those which wholly depend upon the cast of a die. It is complementary to and a refinement of *paidia*, which it disciplines and enriches. It provides an occasion for training and normally leads to the acquisition of a special skill, a particular mastery of the operation of one or another contraption or the discovery of a satisfactory solution to problems of a more conventional type.

The difference from *agôn* is that in *ludus* the tension and skill of the player are not related to any explicit feeling of emulation or rivalry: the conflict is with the obstacle, not with one or several competitors. On the level of manual dexterity there can be cited games such as cup-and-ball, diabolo, and yo-yo. These simple instruments merely utilize basic natural laws, e.g. gravity and rotation in the case of the yo-yo, where the point is to transform a rectilinear alternating motion into a continuous circular movement. Kite-flying, on the contrary, relies on the exploitation of a specific atmospheric condition. Thanks to this, the player accomplishes a kind of auscultation upon the sky from

afar. He projects his presence beyond the limits of his body. Again, the game of blindman's buff offers an opportunity to experience the quality of perception in the absence of sight.¹³ It is readily seen that the possibilities of *ludus* are almost infinite.

Games such as solitaire or the ring puzzle, although part of the same species, already belong to another group of games, since they constantly appeal to a spirit of calculation and contrivance. And lastly, crossword puzzles, mathematical recreations, anagrams, olorhymes¹⁴ and obscure poetry, addiction to detective stories (trying to identify the culprit), and chess or bridge problems constitute, even in the absence of gadgets, many varieties of the most prevalent and pure forms of *ludus*.

It is common knowledge that what to begin with seems to be a situation susceptible to indefinite repetition turns out to be capable of producing ever new combinations. Thus the player is stimulated to emulate himself, permitting him to take pride in his accomplishment, as against those who share his taste. There is a manifest relationship between *ludus* and *agôn*. In addition, it can happen that the same game may possess both, e.g. chess or bridge.

The combination of *ludus* and *alea* is no less frequent: it is especially recognizable in games of patience, in which ingenious maneuvers have little influence upon the result, and in playing slot machines in which the player can very crudely calculate the impulsion given to the ball at various points in directing its course. In both these examples, chance is still the deciding factor. Moreover, the fact that the player is not completely helpless and that he can at least minimally count on his skill or talent is sufficient reason to link *ludus* with *alea*.¹⁵

Ludus is also readily compatible with *mimicry*. In the simplest cases, it lends aspects of illusion to construction games such as the animals made out of millet stalks by Dogon children, the cranes or automobiles constructed by fitting together perforated steel parts and pulleys from an Erector set, or the scale-model planes or ships that even adults do not disdain meticulously constructing. However, it is the theater which provides the basic

connection between the two, by disciplining mimicry until it becomes an art rich in a thousand diverse routines, refined techniques, and subtly complex resources. By means of this fortunate development, the cultural fecundity of play is amply demonstrated.

In contrast, just as there could be no relationship between *paidia*, which is tumultuous and exuberant, and *alea*, which is passive anticipation of and mute immobility pending the outcome of the game, there also can be no connection between *ludus*, which is calculation and contrivance, and *ilinx*, which is a pure state of transport. The desire to overcome an obstacle can only emerge to combat vertigo and prevent it from becoming transformed into disorder or panic. It is, therefore, training in self-control, an arduous effort to preserve calm and equilibrium. Far from being compatible with *ilinx*, it provides the discipline needed to neutralize the dangerous effects of *ilinx*, as in mountain climbing or tightrope walking.

Ludus, in itself, seems incomplete, a kind of makeshift device intended to allay boredom. One becomes resigned to it while awaiting something preferable, such as the arrival of partners that makes possible the substitution of a contest for this solitary pleasure. Moreover, even in games of skill or contrivance (e.g. patience, crossword and other puzzles) which exclude or regard as undesirable the intervention of another person, *ludus* no less inspires in the player the hope of succeeding the next time when he may obtain a higher score. In this way, the influence of *agôn* is again manifested. Indeed, it enriches the pleasure derived from overcoming an arbitrarily chosen obstacle. In fact, even if each of these games is played alone and is not replaced by an openly competitive one, it can easily and quickly be converted into a contest, with or without prizes, such as newspapers organize on occasion.

There is also an aspect of *ludus* that, in my opinion, is explained by the presence of *agôn* within it: that is, that it is strongly affected by fashion. The yo-yo, cup-and-ball, diabolo,

and ring puzzle appear and disappear as if by magic and soon are replaced by other games. In parallel fashion, the vogues for amusements of a more intellectual nature are no less limited in time; e.g. the rebus, the anagram, the acrostic, and the charade have had their hours. It is probable that crossword puzzles and detective stories will run the same course. Such a phenomenon would be enigmatic if *ludus* were an individual amusement, as seems superficially to be the case. In reality, it is permeated with an atmosphere of competition. It only persists to the degree that the fervor of addicts transforms it into virtual *agôn*. When the latter is missing, *ludus* cannot persist independently. In fact, it is not sufficiently supported by the spirit of organized competition, which is not essential to it, and does not provide the substance for a spectacle capable of attracting crowds. It remains transient and diffuse, or else it risks turning into an obsession for the isolated fanatic who would dedicate himself to it absolutely and in his addiction would increasingly withdraw from society.

Industrial civilization has given birth to a special form of *ludus*, the hobby, a secondary and gratuitous activity, undertaken and pursued for pleasure, e.g. collecting, unique accomplishments, the pleasure in billiards or inventing gadgets, in a word any occupation that is primarily a compensation for the injury to personality caused by bondage to work of an automatic and picayune character. It has been observed that the hobby of the worker-turned-artisan readily takes the form of constructing *complete* scale models of the machines in the fabrication of which he is fated to cooperate by always repeating the same movement, an operation demanding no skill or intelligence on his part. He not only avenges himself upon reality, but in a positive and creative way. The hobby is a response to one of the highest functions of the play instinct. It is not surprising that a technical civilization contributes to its development, even to providing compensations for its more brutal aspects. Hobbies reflect the rare qualities that make their development possible.

In a general way, *ludus* relates to the primitive desire to find

diversion and amusement in arbitrary, perpetually recurrent obstacles. Thousands of occasions and devices are invented to satisfy simultaneously the desire for relaxation and the need, of which man cannot be rid, to utilize purposefully the knowledge, experience, and intelligence at his disposal, while disregarding self-control and his capacity for resistance to suffering, fatigue, panic, or intoxication.

What I call *ludus* stands for the specific element in play the impact and cultural creativity of which seems most impressive. It does not connote a psychological attitude as precise as that of *agôn*, *alea*, *mimicry* or *ilinx*, but in disciplining the *paidia*, its general contribution is to give the fundamental categories of play their purity and excellence.

Besides, *ludus* is not the only conceivable metamorphosis of *paidia*. A civilization like that of classical China worked out a different destiny for itself. Wisely and circumspectly, Chinese culture is less directed toward purposive innovation. The need for progress and the spirit of enterprise generally seem to them a kind of compulsion that is not particularly creative. Under these conditions the turbulence and surplus of energy characteristic of *paidia* is channelized in a direction better suited to its supreme values. This is the place to return to the term *wan*. According to some, it would etymologically designate the act of indefinitely caressing a piece of jade while polishing it, in order to savor its smoothness or as an accompaniment to reverie. Perhaps this origin clarifies another purpose of *paidia*. The reservoir of free movement that is part of its original definition seems in this case to be oriented not toward process, calculation, or triumph over difficulties but toward calm, patience, and idle speculation. The term *wan* basically designates all kinds of semiautomatic activities which leave the mind detached and idle, certain complex games which are part of *ludus*, and at the same time, nonchalant meditation and lazy contemplation.

Tumult and din are covered by the expression *jeou-nao*, which

means literally "passion-disorder." When joined to the term *nao*, the term *wan* connotes any exuberant or joyous behavior. But this term *wan* must be present. With the character *tchouang* (to pretend), it means "to find pleasure in simulating." Thus *wan* coincides fairly exactly with the various possible manifestations of *paidia*, although when used alone it may designate a particular kind of game. It is not used for competition, dice, or dramatic interpretation. That is to say, it excludes the various kinds of games that I have referred to as institutional.

The latter are designated by more specialized terms. The character *hsı* corresponds to games of disguise or simulation, covering the domain of the theater and the spectacle. The character *choua* refers to games involving skill and ability; however, it is also used for contests involving jokes or puns, for fencing, and for perfection in practicing a difficult art. The character *teou* refers to conflict as such, cock fighting or dueling. It is also used for card games. Lastly, the character *tou*, not to be applied to children's games, covers games of chance, feats of daring, bets, and ordeals. It also is the name for blasphemy, for to tempt chance is considered a sacrilegious wager against destiny.¹⁶

The vast semantic area of the term *wan* makes it even more deserving of interest. To begin with, it includes child's play and all kinds of carefree and frivolous diversion such as are suggested by the verbs to frolic, to romp, to trifle, etc. It is used to describe casual, abnormal, or strange sex practices. At the same time, it is used for games demanding reflection and *forbidding haste*, such as chess, checkers, puzzles (*tai Kiao*), and the game of nine rings.¹⁷ It also comprises the pleasure of appreciating the savor of good food or the bouquet of a wine, the taste for collecting works of art or even appreciating them, voluptuously handling and even fashioning delicate curios, comparable to the Occidental category of the hobby, collecting or putting. Lastly, the transitory and relaxing sweetness of moonlight is suggested, the pleasure of a boat ride on a limpid lake or the prolonged contemplation of a waterfall.¹⁸

The example of the word *wan* shows that the destinies of cultures can be read in their games. The preference for *agôn*, *alea*, *mimicry*, or *ilinx* helps decide the future of a civilization. Also, the channeling of the free energy in *paidia* toward invention or contemplation manifests an implicit but fundamental and most significant choice.

Table I. Classification of Games

	AGÔN (Competition)	ALEA (Chance)	MIMICRY (Simulation)	ILINX (Vertigo)
PAIDIA ↑ Tumult Agitation Immoderate laughter	Racing Wrestling } Etc. Athletics not regulated	Counting-out rhymes Heads or tails	Children's initiations Games of illusion Tag, Arms Masks, Disguises	Children "whirling" Horseback riding Swinging Waltzing
Kite-flying Solitaire Patience Crossword puzzles ↓ LUDUS	Boxing, Billiards Fencing, Checkers Football, Chess Contests, Sports in general	Betting Roulette Simple, complex, and continuing lotteries*	Theater Spectacles in general	Volador Traveling carnivals Skiing Mountain climbing Tightrope walking

N.B. In each vertical column games are classified in such an order that the *paidia* element is constantly decreasing while the *ludus* element is ever increasing.

* A simple lottery consists of the one basic drawing. In a complex lottery there are many possible combinations. A continuing lottery (e.g. Irish Sweepstakes) is one consisting of two or more stages, the winner of the first stage being granted the opportunity to participate in a second lottery. [From correspondence with Caillois. M.B.]

The Social Function of Games

Play is not merely an individual pastime. It may not even be that as frequently as is supposed. To be sure, there are a number of games, notably games of skill, in which an entirely personal ability is displayed and which should not occasion surprise when played alone. However, games of skill may quickly become games of competitive skill. There is an obvious proof of this. As individualized as one imagines the operation of the contraption to be—whether kite, top, yo-yo, diabolo, cup-and-ball, or hoop—it would quickly lose its capacity to amuse if there were no competitors or spectators, at least potentially. There is an element of rivalry in these varied activities, and everyone tries to vanquish his rivals, perhaps invisible or absent, by accomplishing unpublicized feats, triumphing over obstacles, establishing precarious records for endurance, speed, precision, and altitude—in a word, even though alone, reaping glory from a performance difficult to equal. Generally, the owner of a top hardly finds pleasure in the presence of curling fans, nor does the lover of kite-flying,

in a group occupied with rolling hoops. Possessors of the same toys congregate in an accustomed or convenient place where they test their skill. This is often essential to their pleasure.

The competitive drive does not remain implicit or spontaneous for long. It leads to the establishment of rules by common agreement. Regulated kite-flying contests take place in Switzerland. The kite that flies highest is proclaimed the victor. In the Orient, the contest takes on the characteristic appearance of a tournament. For a certain distance from the kite the string is coated with grease to which sharp-edged pieces of glass are attached. The object is to skillfully cut the strings of the other kite fliers. This keen competition is the result of a pastime that in principle does not seem to be so adapted.

Another striking example of the transition from solitary pastime to competitive and even spectacular pleasure is provided by the game of cup-and-ball. An Eskimo is disguised as a very schematic representation of an animal, bear, or fish. He is stabbed many times. The player must use his weapon in a pre-determined order, holding the knife properly. Then he begins the series again, his knife held inside his index finger, then emerging from behind his elbow, next pressed between his teeth, while the thrust of the weapon describes even more complicated figures. If he misses, the awkward player must pass the weapon to a rival. The latter goes through the same motions, trying to catch up or take the lead. While stabbing and withdrawing, the player simulates an adventure or analyzes an action. He tells the story of a journey, a hunt, or a combat, enumerating various phases of the dismemberment of his prey, an operation that is a female monopoly. At each new hole, he triumphantly announces:

She grips her knife
Cuts open the seal
Removes the skin
Removes the intestines
Opens the chest
Removes the entrails
Removes the ribs

Removes the vertebral column
Removes the pelvis
Removes the hind quarters
Removes the head
Removes the fat
Folds the skin in half
Soaks it in urine
Dries it in the sun . . .

Sometimes the player substitutes his rival and imagines that he is cutting him to pieces:

I beat you
I kill you
I cut off your head
I cut off your arm
And then the other
I cut off your leg
And then the other
The pieces for the dogs
The dogs eat . . .

Not only dogs, but foxes, crows, crabs, and anything that comes to mind. His rival, before entering combat, must first reassemble his body in inverse order of its mutilation. This idyllic pursuit is punctuated by clamoring for assistance from the audience, which has passionately been following the episodes in the duel.

At this stage, the game of skill is obviously a cultural phenomenon, an aid to communion and collective recreation in the cold and long darkness of the Arctic night. This extreme case is no exception. However, it has the advantage of suggesting at what point games that are among the most personal in nature or intent lend themselves, in certain circumstances, to developments and refinements that bring them close to institutionalization. It would seem that play lacks something when it is reduced to a mere solitary exercise.

Games generally attain their goal only when they stimulate an echo of complicity. Even when the player could in principle conveniently play alone, games quickly become a pretext for a

contest or an exhibition, as has been observed in kite-flying or cup-and-ball. Most of them indeed seem to reflect stimulus and response, thrust and parry, provocation and contagion, and effervescence or shared tension. They need an attentive and sympathetic audience. It is unlikely that any category of play would be an exception to this law. Even games of chance seem to be more of an attraction in a group, if not in a crowd. Nothing prevents the players from placing their bets by telephone or risking their money in comfort either at home or in a discreet salon. But they would rather be pressed by the throng which fills the hippodrome or casino, for the pleasure, thrill, and excitement engendered by fraternization with an anonymous multitude.

It is also painful to find oneself alone at a spectacle, even at the movies, despite the absence of living actors who would suffer from lack of an audience. It is also clear that one is disguised or masked for the sake of others. Finally, games of vertigo are in the same category—swinging, horseback riding, and tobogganning demand an effervescence and collective passion to sustain and encourage the intoxication that they produce.

Therefore, the different categories of play—*agôn* (by definition), *alea*, *mimicry*, and *ilinx*—presuppose not solitude but company. Moreover, a necessarily restricted circle is most often required. Each plays in his turn, as he desires and as required by the rules, so that the number of players could not be multiplied indefinitely without reducing the frequency of individual play. A game permits only a limited number of participants. Thus a game readily seems like a pursuit for small groups of initiates or *aficionados*, who momentarily surrender to their favorite pastime. In addition, the mass of spectators favors *mimicry*, just as collective turbulence stimulates, and is in turn stimulated by, *ilinx*.

Under certain conditions, even the games intended by their very nature to be played by a limited number of players exceed the limit. They reflect forms which, while doubtless remaining in the domain of play, evolve a bureaucracy, a complex ap-

paratus, and a specialized, hierarchical personality. In a word, they sustain permanent and refined structures, institutions of an official, private, marginal, and sometimes clandestine character, whose status seems nonetheless remarkably assured and durable.

Each of the basic categories of play has socialized aspects of this sort and has become socially legitimate because of its prevalence and stability. For *agôn*, the socialized form is essentially sports, to which are added contests in which skill and chance are subtly blended as in games and contests on radio and as part of advertising. In *alea*, there are casinos, racetracks, state lotteries, and pari-mutuels. For *mimicry*, the arts involved are public spectacles, puppet shows, the Grand Guignol, and much more equivocally, carnivals and masked balls which are already oriented toward vertigo. Finally, *ilinx* is revealed in the traveling show and the annual or cyclical occasions for popular merry-making and jollity.

A whole chapter of this study of games is devoted to examining the means by which games become part of daily life. Indeed, these manifestations contribute to the development in various cultures of their most characteristic customs and institutions.

The Corruption of Games

Where the problem is to enumerate the characteristics that define the nature of play, it appears to be an activity that is (1) free, (2) separate, (3) uncertain, (4) unproductive, (5) regulated, and (6) fictive, it being understood that the last two characteristics tend to exclude one another.

These six purely formal qualities are not clearly related to the various psychological attitudes that govern play. In strongly opposing the world of play to that of reality, and in stressing that play is essentially a *side* activity, the inference is drawn that any contamination by ordinary life runs the risk of corrupting and destroying its very nature.

At this point, it may be of interest to ask what becomes of games when the sharp line dividing their ideal rules from the diffuse and insidious laws of daily life is blurred. They certainly cannot spread beyond the playing field (chess- or checkerboard, arena, racetrack, stadium, or stage) or time that is reserved for them, and which ends as inexorably as the closing of a parenthe-

sis. They will necessarily have to take quite different, and on occasion doubtlessly unexpected, forms.

In addition, a strict and absolute code governs amateur players, whose prior assent seems like the very condition of their participation in an isolated and entirely conventional activity. But what if the convention is no longer accepted or regarded as applicable? Suppose the isolation is no longer respected? The forms or the freedom of play surely can no longer survive. All that remains is the tyrannical and compelling psychological attitude that selects one kind of game to play rather than another. It should be recalled that these distinctive attitudes are four in number: the desire to win by one's merit in regulated competition (*agôn*), the submission of one's will in favor of anxious and passive anticipation of where the wheel will stop (*alea*), the desire to assume a strange personality (*mimicry*), and, finally, the pursuit of vertigo (*ilinx*). In *agôn*, the player relies only upon himself and his utmost efforts; in *alea*, he counts on everything except himself, submitting to the powers that elude him; in *mimicry*, he imagines that he is someone else, and he invents an imaginary universe; in *ilinx*, he gratifies the desire to temporarily destroy his bodily equilibrium, escape the tyranny of his ordinary perception, and provoke the abdication of conscience.

If play consists in providing formal, ideal, limited, and escapist satisfaction for these powerful drives, what happens when every convention is rejected? When the universe of play is no longer tightly closed? When it is contaminated by the real world in which every act has inescapable consequences? Corresponding to each of the basic categories there is a specific perversion which results from the absence of both restraint and protection. The rule of instinct again becoming absolute, the tendency to interfere with the isolated, sheltered, and neutralized kind of play spreads to daily life and tends to subordinate it to its own needs, as much as possible. What used to be a pleasure becomes an obsession. What was an escape becomes an obligation, and what was a pastime is now a passion, compulsion, and source of anxiety.

The principle of play has become corrupted. It is now necessary to take precautions against cheats and professional players, a unique product of the contagion of reality. Basically, it is not a perversion of play, but a sidetracking derived from one of the four primary impulses governing play. The situation is not unique. It occurs whenever the specified instinct does not encounter, in an appropriate game, the discipline and refuge that anchor it, or whenever it does not find gratification in the game.

The cheat is still inside the universe of play. If he violates the rules of the game, he at least pretends to respect them. He tries to influence them. He is dishonest, but hypocritical. He thus, by his attitude, safeguards and proclaims the validity of the conventions he violates, because he is dependent upon others obeying the rules. If he is caught, he is thrown out. The universe of play remains intact. Neither does the professional player change the nature of the game in any way. To be sure, he himself does not play, but merely practices a profession. The nature of competition or the performance is hardly modified if the athletes or comedians are professionals who play for money rather than amateurs who play for pleasure. The difference concerns only the players.

For professional boxers, bicycle riders, or actors, *agôn* or *mimicry* has ceased being a recreation intended as a relaxation from fatigue or a relief from the monotony of oppressive and exhausting work. It is their very work, necessary to their subsistence, a constant and absorbing activity, replete with obstacles and problems, from which they properly find relaxation by playing at a game to which they are not contracted.

For the actor also, a theatrical performance is mere simulation. He puts on make-up and costume, plays and recites. But when the curtain falls, and the lights go on, he returns to reality. The separation of the two universes remains absolute. For the professional bicycle rider, tennis or football player also, the contest, match, and track remain regulated and formal competition. As soon as the contest ends, the audience runs for the exit. The champion returns to his routine responsibilities, where he must

protect his interests, devise and apply a strategy that will assure him a successful future. As soon as he leaves the stadium, velodrome, or ring, the perfect and precise rivalries in which he has pitted his strength under conditions as artificial as possible give way to rivalries that are formidable in quite another way. The latter are insidious, incessant, and implacable, and permeate all of life. Life, the comedian off the stage, is now again part of the common lot, removed from the closed-off space and the privileged time ruled by the strict, gratuitous, and indisputable laws of play.

Outside of the arena, after the gong strikes, begins the true perversion of *agôn*, the most pervasive of all the categories. It appears in every conflict untempered by the rigor or spirit of play. Now competition is nothing but a law of nature. In society it resumes its original brutality, as soon as it finds a loophole in the system of moral, social, and legal constraints, which have limits and conventions comparable to those of play. That is why mad, obsessive ambition, applied to any domain in which the rules of the game and free play are not respected, must be denounced as a clear deviation which in this case restores the original situation. There is no better example of the civilizing role of play than the inhibitions it usually places upon natural avidity. A good player must be able to contemplate with objectivity, detachment, and at least an appearance of calm, the unlucky results of even the most sustained effort or the loss of large sums. The referee's decision is accepted in principle even if unjust. The corruption of *agôn* begins at the point where no referee or decision is recognized.

In games of chance, there is a comparable corruption of the principle as soon as the player ceases to respect chance, that is, when he no longer views the laws of chance as impersonal neutral power, without heart or memory, a purely mechanical effect. With superstition, the corruption of *alea* is born. It is indeed tempting for one who submits to fate to try to predict the outcome, or at least influence it in his favor. The player finds special significance in all kinds of phenomena, encounters, and

omens, which he imagines to be forebodings of good or bad luck. He looks for talismans that will protect him most efficaciously. He abstains from anything unlucky, as revealed by dreams, forebodings, or presentiments. Finally, in order to be rid of unlucky influences, he indulges in various magical practices.

Such an attitude is only aggravated by games of chance. It is found to be quite prevalent, even if subconscious. It is not restricted to the habitués of casinos or racetracks and the purchasers of lottery tickets. The regular publication of horoscopes by daily and weekly newspapers transforms each day and each week into a kind of promise or menace for their readers, who are thus kept in suspense by the heavens and the dark powers of the stars. These horoscopes most often reveal the daily lucky number for readers born under the different signs of the Zodiac. Each one can then buy the lottery tickets corresponding to these numbers: some ending with that number, some in which that number is contained several times, and some with a succession of numbers that add up to it—thus applicable to all to some degree.¹⁹ It is significant that the most popular and most obvious superstition of this type is directly associated with games of chance. And yet it must be admitted that it is not limited to games of chance.

Upon waking up in the morning, everyone is supposed to find himself winning or losing in a gigantic, ceaseless, gratuitous, and inevitable lottery which will determine his general coefficient of success or failure for the next twenty-four hours. Decisions, new enterprises, and love affairs are all considered. The astrologer is careful to point out that the influence of the stars is exerted within quite variable limits, so that the oversimplified prophecy could scarcely turn out to be entirely false. To be sure, the reaction of the majority of the public is to smile at such puerile predictions. But it still reads them. And more important, it keeps on reading them. At this point, many begin reading the astrological section of their newspaper. It seems that newspapers with large circulations do not readily risk depriving their readers of this

satisfaction, the importance or prevalence of which should not be underestimated.

The more credulous are not content with the summary articles in papers and general magazines. They have recourse to specialized periodicals. In Paris, one of these has a circulation of more than 100,000. The adept often visit a fortuneteller with some regularity. The figures are quite revealing: 100,000 Parisians consult 6,000 diviners, seers, or fortunetellers daily. According to the *Institut national de Statistique*, 34 billion francs are spent annually in France on astrologers, magicians, and other frauds. In the United States, for astrology alone, a 1953 investigation counted 30,000 professional establishments, twenty specialized magazines with a circulation of 500,000 readers, and 2,000 periodicals that publish horoscopes. It was estimated that \$200 million are spent annually for no other purpose than seeking answers from the stars—this not including other methods of divination.

Numerous indications of the association between games of chance and divination are easily found. One of the most conspicuous and immediate is that the very same cards used by players in trying their luck may also be used by prophets to predict the future. Seers only use special games in order to enhance their prestige. Ordinary dinner plates may be used, newly inscribed with naive legends, impressive illustrations, or traditional allegories. At every point there is a quite natural transition from chance to superstition.

As for the avarice today observed in the pursuit of good fortune, it probably compensates for the continuous tension involved in modern competition. Whoever despairs of his own resources is led to trust in destiny. Excessively rigorous competition discourages the timid and tempts them to rely on external powers. By studying and utilizing heavenly powers over chance, they try to get the reward they doubt can be won by their own qualities, by hard work and steady application. Rather than persist in thankless labor, they ask the cards or the stars

to warn them of the propitious moment for the success of their enterprises.

Superstition therefore seems to be a perversion, i.e. the application to reality of one of the principles of play, *alea*, which causes one to expect nothing of himself and leaves all to chance. The corruption of *mimicry* follows a parallel course. It is produced when simulation is no longer accepted as such, when the one who is disguised believes that his role, travesty, or mask is real. He no longer *plays another*. Persuaded that he is the other, he behaves as if he were, forgetting his own self. The loss of his real identity is a punishment for his inability to be content with merely playing a strange personality. It is properly called *alienation*.

Here, too, play is a protection from danger. The actor's role is sharply defined by the dimensions of the stage and the duration of the spectacle. Once he leaves the magic area, the fantasy ends and the most vainglorious histrionics and the most eloquent performances are brutally constrained by the very necessity of passing from the dressing-room of the theater to the resumption of his own personality. Applause is not merely approval and reward. It marks the end of illusion and play. The masked ball ends at dawn and the carnival is only for a short time. The costume is returned to the store or the wardrobe. The old personality is restored. The sharp limits of play prevent alienation.

Alienation occurs toward the end of profound and continuous labor. It takes place when there is no sharp dividing line between fantasy and reality, when the subject has gradually donned a second, chimerical, and all-pervasive personality which claims exorbitant rights with respect to a reality with which it is of necessity incompatible. The time arrives when the alienated one—who has become another—tries desperately to deny, subdue, or destroy this new self, which strongly resists, and which he regards as inadmissible, inconceivable, and irksome.

It is remarkable that in *agôn*, *alea*, and *mimicry*, the intensity of play may be the cause of the fatal deviation. The latter always results from contamination by ordinary life. It is produced when

the instinct that rules play spreads beyond the strict limits of time and place, without previously agreed-to rules. It is permissible to play as seriously as desired, to be extremely extravagant, to risk an entire fortune, even life itself, but the game must stop at a preordained time so that the player may resume ordinary responsibilities, where the liberating and isolating rules of play no longer are applicable.

Competition is a law of modern life. Taking risks is no longer contradictory to reality. Simulation also has a role, as in the case of confidence men, spies, and fugitives. As a compensation, vertigo is almost absent except for those rare professions in which the task is to control it. The risk of sudden death is also present. At fairs, special precautions are taken to avoid accidents on the various rides that stimulate vertigo artificially. Accidents nevertheless happen even on equipment designed and constructed to assure complete safety to the users, through having undergone careful periodic checks. Physical vertigo, an extreme condition depriving the patient of protection, is as difficult to attain as it is dangerous to experience. That is why the search for unconsciousness and distortion of perception, in order to spread into daily life, must assume forms very different from those observed on contraptions that gyrate, speed, fall, or propel and which were devised to stimulate vertigo in the closed and protected world of play.

These costly, complex, cumbersome installations are scarce except for amusement parks in capitals or when erected periodically by traveling carnivals. In their very atmosphere, they belong to the universe of play. In addition, the thrills they provide correspond point for point to the definition of play: they are brief, intermittent, calculated, and as discrete as games or successive encounters. And finally, they remain independent of the real world. Their influence is limited to the duration of the ride. It stops as soon as the machine stops and leaves no trace in the rider except for his being fleetingly stunned until his usual equilibrium is restored.

To adapt vertigo to daily life, it is necessary to substitute ambiguous chemical power for clear-cut physical effects. The desired stimulus or sensuous panic, which is brutally and brusquely provided by the amusements at a fair, is now sought in drugs or alcohol. But this time the whirling is no longer outside or separate from reality. It is imbedded and generated there. If this intoxication and euphoria can temporarily destroy clarity of vision and motor coordination, free one from the burden of memory and from the terrors of social responsibilities and pressures, just as in the case of physical vertigo, nevertheless its influence does not cease with the passing of the seizure. The organism is slowly but permanently changed. Given a permanent need, there is created an unbearable anxiety. This is in complete contrast to play, which is always contingent and gratuituous activity. Through intoxication, the pursuit of vertigo makes increasing inroads into reality, all the more extensive and pernicious in that it creates a dependency which constantly presses against the threshold across which the desired disorder is found.

Even on this point, the case of insects is instructive. They find a source of pleasure in games of vertigo, illustrated by the whirling mania of whirligig-beetles which transform the surface of the quietest pond into a silvery carousel, if not by moths flitting about a flame. Yet insects, especially the social insects, also exhibit the "corruption of vertigo" in the form of an intoxication that has disastrous consequences.

Thus, one of the most prevalent types of ant, *Formica sanguinea*, greedily licks up the fragrant exudates of rich ether secreted by the abdominal glands of a small coleopterous insect called *Lochemusa strumosa*. The ants place its larvae into their nests, feeding them so meticulously that they neglect their own young. Soon the larvae of *Lochemusa* devour the ants' offspring. The ant queens, badly cared for, will no longer give birth to any but sterile females. The anthill dies and disappears. *Formica fusca*, which in a free state kills the *Lochemusae*, spares them when it is enslaved by *Formica sanguinea*. To indulge its taste

for fragrant grease, it permits *Atemeles emarginatus*, which is no less a peril to its safety, to enter its hive. Moreover, it will destroy this parasite if it is enslaved by *Formica rufa*, which does not tolerate the parasite. Thus, it is not a case of irresistible attraction, but of a kind of vice that can disappear under certain circumstances. Servitude, in particular, sometimes stimulates it, and sometimes makes it resistible. The masters impose their habits upon the slaves.²⁰

These are not isolated cases of voluntary intoxication. Another species of ant, *Iridomyrmex sanguineus* of Queensland, seeks the caterpillars of a small grey moth in order to drink the intoxicating liquid they exude. The ants press the juice flesh of these larvae with their mandibles in order to extract the liquid. When they have drained one caterpillar, they move on to another. It is unfortunate that the larvae devour the eggs of *Iridomyrmex*. Sometimes the insect that produces the fragrant exudate "is aware of" its power and entices the ant to its vice. The caterpillar of *Lycaena arion*, studied by Chapman and Frockhawk, is provided with a sac of honey. When it encounters a worker of the species *Myrmica laevinodis*, it raises the anterior segments of its body, inviting the ant to transport it to its nest. There it feeds on the larvae of *Myrmica*. The latter has no interest in the caterpillar during the periods in which it does not produce any honey. Lastly, a Javanese hemipter, *Ptilocerus ochraceus*, described by Kirkaldy and Jacobson, has in the middle of its ventral side a gland containing a toxic liquid which it offers to ants that are partial to it. They hasten to lick it up at once. The liquid paralyzes them, and they thus become an easy prey for *Ptilocerus*.²¹

The aberrant behavior of ants does not prove the existence of instincts harmful to the species, as has been maintained. It proves rather that the irresistible attraction for a paralyzing substance may neutralize the most powerful instincts, particularly the instinct for self-preservation which causes the individual ant to guard its safety and directs it to protect and feed its offspring. The ants, so to speak, "forget" everything because of the drug.

They behave most disastrously, submitting themselves or abandoning their eggs and larvae to the enemy.

In an oddly analogous way, the stupidity and drunkenness produced by alcohol lead man down a road where he is insidiously and irrevocably destroyed. In the end, deprived of the freedom to desire anything but his poison, he is left a prey to chronic organic disorder, far more dangerous than the physical vertigo which at least only momentarily compromises his capacity to resist the fascination of oblivion.

As for *ludus* and *paidia*, which are not categories of play but ways of playing, they pass into ordinary life as invariable opposites, e.g. the preference for cacaphony over a symphony, scribbling over the wise application of the laws of perspective. Their continuous opposition arises from the fact that a concerted enterprise, in which various expendable resources are well utilized, has nothing in common with purely disordered movement for the sake of paroxysm.

What we set out to analyze was the corruption of the principles of play, or preferably, their free expansion without check or convention. It was shown that such corruption is produced in identical ways. It entails consequences which seem to be inordinately serious. Madness or intoxication may be sanctions that are disproportionate to the simple overflow of one of the play instincts out of the domain in which it can spread without irreparable harm. In contrast, the superstitions engendered by deviation from *alea* seem benign. Even more, when the spirit of competition freed from rules of equilibrium and loyalty is added to unchecked ambition, it seems to be profitable for the daring one who is abandoned to it. Moreover, the temptation to guide one's behavior by resort to remote powers and magic symbols in automatically applying a system of imaginary correspondences does not aid man to exploit his basic abilities more efficiently. He becomes fatalistic. He becomes incapable of deep appreciation of relationships between phenomena. Perseverance and

trying to succeed despite unfavorable circumstances are disengaged.

Transposed to reality, the only goal of *agôn* is success. The rules of courteous rivalry are forgotten and scorned. They seem merely irksome and hypocritical conventions. Implacable competition becomes the rule. Winning even justifies foul blows. If the individual remains inhibited by fear of the law or public opinion, it nonetheless seems permissible, if not meritorious, for nations to wage unlimited ruthless warfare.

Table II

<i>AGÔN</i>	<i>Cultural Forms Found at the Margins of the Social Order</i>	<i>Institutional Forms Integrated into Social Life</i>	<i>Corruption</i>
(Competition)	Sports	Economic competition Competitive examinations	Violence Will to power Trickery
ALEA (Chance)	Lotteries Casinos Hippodromes Pari-mutuels	Speculation on stock market	Superstition Astrology, etc.
MIMICRY (Simulation)	Carnival Theater Cinema Hero-worship	Uniforms Ceremonial etiquette	Alienation Split personality
ILINX (Vertigo)	Mountain climbing Skiing Tightrope walking Speed	Professions requiring control of vertigo	Alcoholism and drugs

Various restrictions on violence fall into disuse. Operations are no longer limited to frontier provinces, strongholds, and military objectives. They are no longer conducted according to a strategy that once made war itself resemble a game. War is far removed from the tournament or duel, i.e. from regulated combat in an enclosure, and now finds its fulfillment in massive destruction and the massacre of entire populations.

Any corruption of the principles of play means the abandonment of those precarious and doubtful conventions that it is always permissible, if not profitable, to deny, but the arduous adoption of which is a milestone in the development of civilization. If the principles of play in effect correspond to powerful instincts (competition, chance, simulation, vertigo), it is readily understood that they can be positively and creatively gratified only under ideal and circumscribed conditions, which in every case prevail in the rules of play. Left to themselves, destructive and frantic as are all instincts, these basic impulses can hardly lead to any but disastrous consequences. Games discipline instincts and institutionalize them. For the time that they afford formal and limited satisfaction, they educate, enrich, and immunize the mind against their virulence. At the same time, they are made fit to contribute usefully to the enrichment and the establishment of various patterns of culture.

Toward a Sociology Derived from Games

For a long time the study of games has been scarcely more than the history of games. Attention has been focused upon the equipment used in games more than on their nature, characteristics, laws, instinctive basis, or the type of satisfaction that they provide. They have generally been regarded as simple and insignificant pastimes for children. There was no thought of attributing the slightest cultural value to them. Researches undertaken on the origin of games and toys merely confirm this first impression that playthings are mere gadgets and games are diverting and unimportant activities better left to children when adults have found something better to do. Thus, weapons fallen into disuse become toys—bows, shields, pea-shooters, and slingshots. The cup-and-ball and top originally were magical devices. A number of other games are equally based upon lost beliefs or reproduce in a vacuum rites

that are no longer significant. Roundelay and counting-out rhymes also seem to be ancient incantations now obsolete. "In play, all is lost," is the conclusion to which the reader of Hirm, Groos, Lady Gomme, Carrington Bolton, and so many others is led.²²

Huizinga, however, in his key work *Homo Ludens*, published in 1938, defends the very opposite thesis, that culture is derived from play. Play is simultaneously liberty and invention, fantasy and discipline. All important cultural manifestations are based upon it. It creates and sustains the spirit of inquiry, respect for rules, and detachment. In some respects the rules of law, prosody, counterpoint, perspective, stagecraft, liturgy, military tactics, and debate are rules of play. They constitute conventions that must be respected. Their subtle interrelationships are the basis for civilization. In concluding *Homo Ludens*, one asks oneself, "What are the social consequences of play?"

The two theses are almost entirely contradictory. The only purpose in presenting them is perhaps to choose between them or to better articulate them. It must be admitted that they are not easily reconciled. In one case games are systematically viewed as a kind of degradation of adult activities that are transformed into meaningless distractions when they are no longer taken seriously. In the other case, the spirit of play is the source of the fertile conventions that permit the evolution of culture. It stimulates ingenuity, refinement, and invention. At the same time it teaches loyalty in the face of the adversary and illustrates competition in which rivalry does not survive the encounter. To the degree that he is influenced by play, man can check the monotony, determinism, and brutality of nature. He learns to construct order, conceive economy, and establish equity.

I believe that it is possible to resolve the contradiction. The spirit of play is essential to culture, but games and toys are historically the residues of culture. Misunderstood survivals of a past era or culture traits borrowed from a strange culture and deprived of their original meaning seem to function when re-

moved from the society where they were originally established. They are now merely tolerated, whereas in the earlier society they were an integral part of its basic institutions, secular or sacred. At that time, to be sure, they were not games, in the sense that one speaks of children's games, but they already were part of the essence of play, as correctly defined by Huizinga. Their social function changed, not their nature. The transfer or degradation that they underwent stripped them of their political and religious significance. But this decadence only reveals, when isolated, what is basically the structure of play.

It is fitting to give examples. The first and no doubt the most remarkable example is the mask—a sacred object universally present, whose transformation into a plaything perhaps marks a prime mutation in the history of civilization. This is very well confirmed in comparable cases. The greasy pole is related to myths of heavenly conquest, football to the conflict over the solar globe by two opposing phratries. String games have been used to inaugurate the changing seasons and the social groups corresponding to them. The kite, before becoming a toy in Europe toward the end of the eighteenth century, in the Far East symbolized the soul of its owner resting on the ground outside his body, but magically bound (in reality by the cord to which the kite is fastened) to the fragile paper framework at the mercy of the eddying currents of air. In Korea the kite served as a scapegoat to liberate a sinful community from evil. In China it was utilized to measure distance, to transmit messages like a crude telegraph, and finally to lead a rope across a stream and in this way allow a bridge of boats to be constructed. In New Guinea it was used in advance of launchings. Hopscotch indeed symbolized the labyrinth through which the initiate must first wander. In the game of tag, beneath the childish innocence and activity, is recognized the terrifying choice of a propitiatory victim. Chosen by decree of destiny, before being selected by the sonorous and hollow syllables of counting-out rhymes, the victim could (at least in theory) rid himself of his defilement by

passing it through touch to someone whom he had overtaken in the race.

In Egypt of the Pharaohs, a checkerboard is frequently represented in the tombs. The five squares at the bottom and to the right are ornamented with beneficent hieroglyphics. Above the player are inscriptions referring to the sentences in judgment of the dead, over which Osiris rules. The deceased plays for his destiny in the other world and wins or loses eternal salvation. In Vedic India, the sacrificer sways on a swing in order to help the sun rise. The trajectory of the swing is supposed to bind heaven and earth. The swing is currently associated with ideas of rain, fecundity, and renewal of nature. In the spring, Kama, god of love, is swinging as is Krishna, patron of herds. The cosmic swing helps the universe of creatures and worlds eternally coming and going.

The games played periodically in Greece were accompanied by sacrifices and processions. Dedicated to a divinity, they themselves constituted an offering of effort, skill, or grace. These sports contests were above all a kind of cult, the liturgy of a pious ceremony.

Games of chance have been associated with divination in the same way games of strength or skill or riddle contests had probative value in the enthronement rituals for an important responsibility or ministry. The real game is often sadly bereft of its sacred origins. The Eskimos only play cup-and-ball at the time of the spring equinox. This is on condition that they do not go hunting the next day. This delay for purification would not be explicable if the game of cup-and-ball had not to begin with been something more than a mere distraction. In fact, it leads to all kinds of mnemonic recitations. In England there is a special time fixed for spinning tops, and it is proper to confiscate the top of anyone playing with it out of season. It is known that villages, parishes, and cities once had gigantic tops that special confraternities caused to spin during certain festivals. Here too, a children's game would seem to evolve out of a significant pre-history.

Roundelays and pantomimes would seem to prolong or double forgotten liturgies, e.g. in France, "*La Tour prends garde*," "*Le Pont du Nord*," or "*Les Chevaliers du Guet*," and in Great Britain "Jenny Jones" or "Old Rogers."

It should not be necessary to point out in the scripts of these pastimes references to marriage by capture, various taboos, funeral rituals, and many forgotten customs.

Finally, there is hardly a game which may not appear to specialized historians as the last stage in the gradual decline of a solemn and decisive activity that used to be tied to the prosperity or destiny of individuals or communities. I ask myself nevertheless whether such a doctrine, which persists in regarding every game as the ultimate and humiliating metamorphosis of a serious activity, is not fundamentally erroneous, to wit, a pure and simple optical illusion which does not resolve the problem.

It is indeed true that the bow, the slingshot, and the pea-shooter have survived as toys where they have replaced the more lethal weapons. But children play just as well with water pistols, cap pistols, or air rifles. They also play with miniature tanks, submarines, and airplanes which drop sham atomic bombs. There is no new weapon that may not momentarily be introduced as a toy. Conversely, we are not at all certain that prehistoric children might not have been playing with bows, slingshots, and pea-shooters "for fun" at the same time that fathers used them "for real," to use a very revealing expression from children's slang. It is doubtful whether the automobile could have been invented so quickly if it were intended merely as a plaything. The game of Monopoly does not follow but rather reproduces the functions of Capitalism.

This observation is no less valid for the sacred than for the profane. Kachinas are semidivinities that are the principal object of piety among the Pueblo Indians of New Mexico. This does not prevent the same adults, who revere and reincarnate them in the course of masked dances, from making dolls resembling them for the amusement of their children. Similarly, in Catholic

countries children currently play Mass, confirmation, marriage, and burial. Parents allow this, at least as long as the imitation remains respectful. In North Africa, analogously, children fashion masks and bull-roarers and for the same reasons are punished if the imitation goes too far and takes on a character too much like parody or sacrilege.

In sum, religious instruments, symbols, and rituals, just like military actions, are currently imitated by children. They find pleasure in behaving like adults, in momentarily making believe that they are grown up. That is why every ceremony, or more generally, every regulated activity, provided it be impressive or solemn and above all if a special costume be required, normally serves to support a game which reproduces it in a vacuum. From this derives the success of toy weapons and contrivances that, thanks to appropriate parts and the elements of rudimentary travesty, enable the child to change into an army officer, policeman, jockey, aviator, sailor, cowboy, bus driver, or whatever remarkable character has come to his attention. An example is playing with dolls, which everywhere allows a little girl to imitate her mother or herself be a mother.

There are grounds for suspecting that children's games are not a degradation of serious activities, but rather that two different levels are simultaneously involved. In India, the child is playing on a swing at the very moment that the officiant is piously swinging Kama or Krishna in the liturgical swing sumptuously ornamented with precious stones and garlands. Today children play soldiers without armies' having disappeared. And is it conceivable that doll play can ever disappear?

To pass to adult activities, tournaments are games, wars are not. In various ages few or many are killed in wars. To be sure, one can be killed in a tournament, but only accidentally, just as in an auto race, boxing match, or fencing bout, because the tournament is more regulated, more separated from real life, and more circumscribed than war. In addition, it is naturally of no consequence outside the lists. It is a pure occasion for feats of

prowess that are forgotten after the next exploit, in the same way as a new record erases a prior one. Again, roulette is a game, but playing the market is not, even though the risk is no less. The difference is that in the former case it is forbidden to influence the outcome, whereas in the latter there is no limit on manipulation except the fear of scandal or prison.

Through this approach, it is seen that play is not at all a meaningless residue of a routine adult occupation, although it eventually perpetuates a counterfeit of adult activity after the latter has become obsolete. Above all, play is a parallel, independent activity, opposed to the acts and decisions of ordinary life by special characteristics appropriate to play. These I have tried to define and analyze at the outset.

Thus on the one hand children's games consist of imitating adults, just as the goal of their education is to prepare them in their turn as adults to assume real responsibilities that are no longer imaginary, that can no longer be abolished by merely saying, "I am not playing any more." The true problem starts here. For it must not be forgotten that adults themselves continue to play complicated, varied, and sometimes dangerous games, which are still viewed as games. Although fate and life may involve one in comparable activities, nevertheless play differs from these even when the player takes life less seriously than the game to which he is addicted. For the game remains separate, closed off, and, in principle, without important repercussions upon the stability and continuity of collective and institutional existence.

The many writers who persist in viewing games, especially children's games, as pleasant and insignificant activities, with little meaning or influence, have not sufficiently observed that play and ordinary life are constantly and universally antagonistic to each other. Such an error of perspective does have a moral. It surely shows that the history of games or their evolution through the ages—the destiny of a liturgy that ends in a roundelay, a magic instrument or object of worship that becomes a toy—is as remote from revealing their nature as are the scholars who have discovered these enduring and hazardous connections.

To compensate, as a kind of ricochet, they establish that play is correlated with culture, the most remarkable and complex manifestations of which are closely allied to the structure of games, or else the structure of games is diffused to reality and institutionalized in legislation, becoming imperious, constraining, irreplaceable, preferred—in a word, rules of the social game, norms of a game which is more than a game.

In the end, the question of knowing which preceded the other, play or the serious, is a vain one. To explain games as derived from laws, customs, and liturgies, or in reverse to explain jurisprudence, liturgy, and the rules for strategy, syllogisms, or esthetics as a derivation of play, are complementary, equally fruitful operations provided they are not regarded as mutually exclusive. The structures of play and reality are often identical, but the respective activities that they subsume are not reducible to each other in time or place. They always take place in domains that are incompatible.

Moreover, what is expressed in play is no different from what is expressed in culture. The results coincide. In time, to be sure, when a culture evolves, what had been an institution may become degraded. A once-essential contract becomes a purely formal convention to be respected or neglected at will, because abiding by it is now an extra responsibility, a luxurious and charming survival, without repercussions upon the actual functioning of society. Gradually this reverence deteriorates to the level of simply a rule of the game. For example, advantages or responsibilities formerly vested in people by the accident of birth must now be achieved by merit, competition, or examination. In other words, the principles ruling various types of games—chance or skill, luck or proven superiority—are reflected to the same extent outside the closed universe of play. However, it must be remembered that the latter is ruled absolutely, without resistance, and like an imaginary world without matter or substance. In the confused, inextricable universe of real, human relationships, on the other hand, the action of given principles is never isolated, sovereign, or limited in advance. It

entails inevitable consequences and possesses a natural propensity for good or evil.

In both cases, moreover, the same qualities can be identified:

The need to prove one's superiority

The desire to challenge, make a record, or merely overcome an obstacle

The hope for and the pursuit of the favor of destiny

Pleasure in secrecy, make-believe, or disguise

Fear or inspiring of fear

The search for repetition and symmetry, or in contrast, the joy of improvising, inventing, or infinitely varying solutions

Solving a mystery or riddle

The satisfaction procured from all arts involving contrivance

The desire to test one's strength, skill, speed, endurance, equilibrium, or ingenuity

Conformity to rules and laws, the duty to respect them, and the temptation to circumvent them

And lastly, the intoxication, longing for ecstasy, and desire for voluptuous panic

These attitudes and impulses, often incompatible with each other, are found in the unprotected realm of social life, where acts normally have consequences, no less than in the marginal and abstract world of play. But they are not equally necessary, do not play the same role, and do not have the same influence.

In addition, it is impossible to keep them in proper balance. They largely exclude one another. Where the ones are honored, the others are of necessity decried. Depending upon circumstances, one obeys the law or heeds the voice of unreason, relies on reason or inspiration, esteems violence or diplomacy, prefers merit or experience and wisdom or some unverifiable (hence indisputable) knowledge supposed to come from the gods. An implicit, inexact, and incomplete division is thus made in each culture between values that are regarded as socially efficacious and all others. The latter then spread into secondary domains

which are abandoned to them, where play occupies an important place. It is also possible that the variability of cultures, on the basis of which each has its culture pattern and characteristic traits, can be correlated with certain games that are prevalent even though not popularly regarded as beneficial.

It is obvious that trying to define a culture by deriving it from games alone would be a rash and probably fallacious undertaking. In fact, every culture has and plays a large number of games of different kinds. Above all, it is not possible to determine, without prior analysis, which are in accordance with, confirm, or reinforce established values, and conversely, which contradict and flout them, thus representing compensations or safety valves for a given society. To take one example, it is clear that in Ancient Greece, the stadium games illustrate the ideal of the city and contribute to its fulfillment, while in a number of modern states national lotteries or parimutuels go against the professed ideal. Nevertheless they play a significant, perhaps indispensable, role to the precise degree that they offer an aleatory counterpart for the recompense that—in principle—work and merit alone can provide.

In all ways, because play occupies a unique domain the content of which is variable and sometimes even interchangeable with that of modern life, it is important first to determine as precisely as possible the special characteristics of this pursuit, which is regarded as proper for children, but which, when transformed, continues to seduce adults. This has been my first task.

At the same time, I must affirm that this supposed relaxation, at the moment that the adult submits to it, does not absorb him any less than his professional activity. It sometimes makes him exert even greater energy, skill, intelligence, or attention. This freedom and intensity, the fact that the behavior that is so exalting develops in a separate, ideal world, sheltered from any fatal consequence, explains in my view the cultural fertility of games and makes it understandable how the choice to which they attest itself reveals the character, pattern, and values of every society.

Inasmuch as I am also convinced that there exist precise inter-relationships of compensation or connivance in games, customs, and institutions, it does not seem to me unreasonable to find out whether the very destiny of cultures, their chance to flourish or stagnate, is not equally determined by their preference for one or another of the basic categories into which I have tried to divide games, categories that are not equally creative. In other words, I have not only undertaken a sociology of games, I have the idea of laying the foundations for a sociology *derived from* games.

P A R T T W O

Play and Games: Variations

An Expanded Theory of Games

The basic attitudes governing play—competition, chance, simulation, and vertigo—are not always encountered in isolation. In many situations it is possible to observe that they are apt to unite their attractions. Numerous games are even based on their capacity to associate. Moreover, such clear-cut principles are not likely to blend indistinctly. To take them only in pairs, the four fundamental attitudes in theory can be coupled in six and only six ways. Each in turn is joined to one of the three others:

- Competition – chance (*agôn – alea*)
- Competition – simulation (*agôn – mimicry*)
- Competition – vertigo (*agôn – ilinx*)
- Chance – simulation (*alea – mimicry*)
- Chance – vertigo (*alea – ilinx*)
- Simulation – vertigo (*mimicry – ilinx*)

To be sure, tripartite combinations can be visualized, but it is obvious that they would almost always be rare juxtapositions with no influence upon the character of the games in which they appeared. Thus a horse race, typical *agôn* for the jockeys, is at the same time a spectacle which, as such, stimulates *mimicry* and is also a pretext for betting, through which the competition is a basis of *alea*. Moreover, the three domains stay relatively autonomous. The principle of the race is not modified, by one's betting on the horses. There is no association, but merely a meeting which, additionally, is in no way due to chance, and is explained by the very nature of the principles of play.

The principles in question do not blend, even in pairs, with equal facility. Their substance gives the six theoretically possible combinations levels of probability and efficacy that are very different. In certain cases their nature is such that their blending is inconceivable to begin with or even is excluded from the universe of play. Certain other combinations, which are not ruled out by the nature of things, remain purely accidental. They have no corresponding drives. Lastly, it happens that the major drives may inherently continue to oppose various kinds of games. In sum, a basic collusion is revealed.

That is why, out of the six possible conjunctions between the principles of play, two upon examination seem unnatural, two others are merely viable, while the last two are basically compatible. It is important to pursue this analysis closely.

1. *Forbidden Relationships*

In the first place, it is clear that vertigo cannot be associated with regulated rivalry, which immediately dilutes it. The paralysis it provokes, like the blind fury it causes in other cases, is a strict negation of controlled effort. It destroys the conditions that define *agôn*, i.e. the efficacious resort to skill, power, and calculation, and self-control; respect for rules; the desire to test oneself under conditions of equality; prior submission to the decision

of a referee; an obligation, agreed to in advance, to circumscribe the conflict within set limits, etc. Nothing is left.

Rules and vertigo are decidedly incompatible. Simulation and chance are no more susceptible to mixing. In fact, any ruse makes the turn of the wheel purposeless. It makes no sense to try to deceive chance. The player asks for a decision that assures him the unconditional favor of destiny. At the moment of entreaty, he would not wish to appear in the guise of a stranger, nor would he believe or pretend that he was anyone other than himself. Besides, no simulation can deceive destiny, by definition. *Alea* presupposes full and total abandon to the whims of chance, submission to which is incompatible with disguise or subterfuge. Otherwise, one enters the domain of magic, the object of which is to coerce destiny. Just as the principle of *agôn* is abruptly destroyed by vertigo, *alea* is similarly destroyed and there is no longer any game, properly speaking.

2. *Contingent Relationships*

In contrast, *alea* may be associated harmlessly with vertigo, and competition with *mimicry*. In games of chance, it is indeed common knowledge that a special kind of vertigo seizes both lucky and unlucky players. They are no longer aware of fatigue and are scarcely conscious of what is going on around them. They are entranced by the question of where the ball will stop or what card will turn up. They lose all objectivity and sometimes gamble more than they have. Casino folklore abounds in anecdotes that are significant in this respect. It is important merely to observe that *ilinx*, which destroys *agôn*, does not at all rule out *alea*. It paralyzes, fascinates, and maddens the player, but does not in any way cause him to violate the rules of the game. It can also be proven that he even becomes more resigned to the results of chance if persuaded to submit to it more completely. *Alea* presupposes the resignation of the will, and it is

therefore understandable that states of trance, possession, or hypnosis may develop. Herein lies the true compatibility of the two tendencies.

There is an analogous relationship between *agôn* and *mimicry*. I have already had occasion to stress that every competition is also a spectacle. It unfolds according to identical rules, and with the same anticipation of the outcome. It requires the presence of an audience which crowds about the ticket windows of the stadium or velodrome just as at those of the theater and cinema.

The competitors are applauded for each point they score. Their contest has its vicissitudes corresponding to the different acts or scenes in a drama. The point is finally reached where the champion and the star become interchangeable. The two tendencies are also compatible in this respect, for *mimicry* not only does no harm to *agôn* but reinforces it, since the competitors must not deceive the audience which acclaims and controls them. In the performance they are expected to do their best, i.e. on the one hand to exhibit perfect discipline and on the other to do their utmost to win.

3. *Fundamental Relationships*

The cases in which there is a basic compatibility between the principles of play remain to be described. Nothing is more noteworthy in this regard than the exact symmetry between the natures of *agôn* and *alea*: parallel and complementary. Both require absolute equity, an equality of mathematical chances of almost absolute precision. Admirably precise rules, meticulous measures, and scientific calculations are evident. However, the two kinds of games have opposite ways of designating the winner. As has been seen, in one the player counts only upon himself and in the other on everything except himself. To put all one's personal resources to work is contrasted with the deliberate refusal to use them. However, between the two extremes—represented for example by chess and dice or football and lotteries—lies a

multitude of games that combine the two attitudes in varying degree, such as card games which are not purely games of chance, dominoes, golf, and many others in which the player's pleasure derives from having done as well as possible in a situation not of his creation, the course of which he alone can only partly control. Chance is represented in the resistance offered by nature, the external world, or the will of the gods to his strength, skill, or knowledge. The game seems like the very image of life, yet an imaginary, ideal, ordered, separate, and limited image. It could not be otherwise, since these are the immutable characteristics of play.

In play and games, *agôn* and *alea* are regulated. Without rules, there can be no competitions or games of chance. At the other extreme, *mimicry* and *ilinx* equally presume a world without rules in which the player constantly improvises, trusting in a guiding fantasy or a supreme inspiration, neither of which is subject to regulation. In *agôn*, the player relies directly on his will, while in *alea* he renounces it. In *mimicry* the awareness of simulation and make-believe is presupposed while the gist of vertigo and ecstasy is to erase such awareness.

In other words, a kind of split personality is observed in simulation between the real personality and the role of the actor. In vertigo, on the contrary, there is disorder and panic, if not a total eclipse of consciousness. But a fatal situation is created by the fact that simulation in itself generates both vertigo and split personality, the source of panic. Pretending to be someone else tends to alienate and transport. Wearing a mask is intoxicating and liberating. As a result the conjunction of mask and trance, in this dangerous domain where perception becomes distorted, is very frightening. It provokes such seizures and paroxysms that the real world is temporarily abolished in the mind that is hallucinated or possessed.

The combination of *alea* and *agôn* is a free act of will stemming from the satisfaction felt in overcoming an arbitrarily conceived and voluntarily accepted obstacle. The alliance of *mimicry* and *ilinx* leads to an inexorable, total frenzy which in its most

obvious forms appears to be the opposite of play, an indescribable metamorphosis in the conditions of existence. The fit so provoked, being uninhibited, seems to remove the player as far from the authority, values, and influence of the real world, as the real world seems to influence the formal, protected, regulated, and protected activities that characterize the wholly inhibited games subsumed under the rules of *agôn* and *alea*. The association of simulation and vertigo is so powerful and so inseparable that it is naturally part of the sphere of the sacred, perhaps providing one of the principal bases for the terror and fascination of the sacred.

The quality of such sorcery seems to me to be invincible, to the degree that I am not surprised that it has taken ages to free man from this illusion. This has been achieved by what is commonly called civilization. I believe that the attainment of civilization everywhere is the result of a kind of wager made under different conditions in various places. I will try, in this second part of the book, to speculate about the general lines of this decisive revolution. At the end, using an improvised approach, I will try to determine how the divorce or fissure was produced, which secretly condemns the conjunction of vertigo and simulation while nearly everybody believes them to be ineradicably permanent.



In addition, before beginning the examination of the significant displacement of the world of the mask and ecstasy by that of merit and chance, there is still another basis for symmetry that must be briefly noted in these introductory pages. We have just seen that *alea* and *agôn*, like *mimicry* and *ilinx*, can be readily combined. However at the same time, within the mixture, it is remarkable that one of the elements in the compound is always active and creative and the other is passive and destructive.

Competition and simulation may and indeed do create cultural forms to which an educational or esthetic value is readily ascrib-

able. Stable and influential institutions are frequently and almost inevitably derived from them. Regulated competition is in fact, equivalent to sports, and simulation, conceived as play, is nothing other than the theater. The pursuit of chance and vertigo, on the other hand, with rare exceptions leads to nothing and creates nothing that can be developed or established. It frequently happens that they paralyze, interrupt, or destroy.

It does not seem difficult to find the root of such inequality. In the first combination, which governs the world of rules, *alea* and *agôn* express attitudes diametrically opposed with regard to the will. *Agôn*, the desire and effort to win a victory, implies that the champion relies upon his own resources. He wants to triumph, to prove his supremacy. Nothing is more creative than such an ambition. *Alea*, on the contrary, seems to be a foregone acceptance of the verdict of destiny. This compliance signifies that the player submits to a roll of the dice, that he will do nothing but throw them and read the number that comes up. The rule is that he abstain from motions that might falsify or influence the outcome.

Both of these are certainly symmetrical ways of assuring perfect equilibrium and absolute equity among the competitors. However, one involves a struggle of the will against external obstacles and the other entails submission of the will to a supposed omen. Emulation is also continuous exercise and good training for human faculties and capacities, while fatalism is basically passivity. The first attitude requires the development of personal superiority and the other requires one to wait, motionless and silent, for a wholly external consecration or doom. It is not surprising in these circumstances that knowledge and skill aid and reward *agôn*, while magic, superstition, and the study of miracles and coincidences are invariable accompaniments of the uncertainties of *alea*.²³

In the chaotic universe of simulation and vertigo an identical polarity is confirmable. *Mimicry* consists in deliberate impersonation, which may readily become a work of art, contrivance, or

cunning. The actor must work out his role and create a dramatic illusion. He is compelled to concentrate and always have his wits about him, just like the athlete in competition. Conversely in *ilinx*, in this regard comparable to *alec*, there is submission not only of the will but of the mind. The person lets himself drift and becomes intoxicated through feeling directed, dominated, and possessed by strange powers. To attain them, he need only abandon himself, since the exercise of no special aptitude is required.

Just as the peril in games of chance is to be unable to limit the stakes, in this case the danger lies in not being able to end the disorder that has been accepted. In these negative games, it would seem they would give rise to an increasing capacity of resistance to their fascination. However, the contrary is true. For this aptitude has no meaning except in relation to the obsessive temptation, so that it is continuously tormenting and naturally tends to disorder. It cannot be converted. One is exposed to it until one succumbs. Games of simulation lead to the arts of the spectacle, which express and reflect a culture. The individual pursuit of anxiety and panic conquers man's discernment and will. He becomes a prisoner of equivocal and exalting ecstasies in which he believes that he is divine and immortal, ecstasies which in the end destroy him.

Thus, in each of the major combinations only one category of play is truly creative: *mimicry* in the conjuring of masks and *vertigo* and *agôn* in regulated rivalry and chance. The others are immediately destructive. They result in inordinate, inhuman, and irremediable excitations, a kind of frightening and fatal attraction, the import of which is to neutralize creative influence. In societies ruled by simulation and hypnosis, the result occurs at the moment when the spectacle borders on the trance, that is to say, when the sorcerer's mask becomes a theater mask. In societies based upon the combination of merit and chance, there is also an incessant effort, not always successful or rapid, to augment the role of justice to the detriment of that of chance. This effort is called progress.

It is now time to examine games of double combinations (simulation and vertigo on the one hand, chance and merit on the other), along with the supposed vicissitudes of the human adventure, as it is designated in contemporary ethnography and history.

Simulation and Vertigo

The persistence of games is remarkable. Empires and institutions may disappear, but games survive with the same rules and sometimes even the same paraphernalia. The chief reason is that they are not important and possess the permanence of the insignificant. Herein lies a major mystery. For in order to benefit from this kind of fluid and yet obstinate continuity, they must be like the leaves on the trees which survive from one season to the next and remain identical. Games must be ever similar to animal skins, the design on butterfly wings, and the spiral curves of shell fish which are transmitted unchanged from generation to generation. However, games do not have this hereditary sameness. They are innumerable and changeable. They are clad in thousands of unequally distributed shapes, just as vegetable species are, but infinitely more adaptable, spreading and acclimating themselves with disconcerting ease. Their diffusion does not remain determinate for very long. It is noteworthy that playing with dolls and flying kites, decidedly Occidental, were unknown in Europe until the

eighteenth century. Other games have been prevalent all over the world in one form or another since ancient times. They provide proof of the constancy of human nature on certain levels. If their origins could only occasionally be pinpointed, their unlimited diffusion could not be denied. They are all-persuasive. The impressive universality of rules, principles, apparatus, and capabilities must be admitted.

1. *The Interdependence of Games and Culture*

Stability and universality are complementary. They seem all the more significant since games are largely dependent upon the cultures in which they are practiced. They affect their preferences, prolong their customs, and reflect their beliefs. In antiquity, hopscotch was a labyrinth in which one pushed a stone—i.e. the soul—toward the exit. With Christianity, the design became elongated and simplified, reproducing the layout of a basilica. The problem in moving the stone became to help the soul attain heaven, paradise, halo, or glory, coinciding with the high altar of the church, and schematically represented on the ground by a series of rectangles. In India, chess was played with four kings. The game spread to medieval Europe. Under the dual influence of the cults of the Virgin and of courtly love, one of the kings was changed to a queen or lady which became the most powerful piece, while the king was limited to the quasi-passive role of figurehead in the game. However, it is important that these vicissitudes have not affected the essential continuity of the games of hopscotch or chess.

One can even go further and posit in addition a truly reciprocal relationship between a society and the games it likes to play. There is indeed an increasing affinity between their rules and the common characteristics and deficiencies of the members of the groups. These preferred and widely diffused games reflect, on the one hand, the tendencies, tastes, and ways of thought that are prevalent, while, at the same time, in educating and training

the players in these very virtues or eccentricities, they subtly confirm them in their habits and preferences. Thus, a game that is esteemed by a people may at the same time be utilized to define the society's moral or intellectual character, provide proof of its precise meaning, and contribute to its popular acceptance by accentuating the relevant qualities.

It is not absurd to try diagnosing a civilization in terms of the games that are especially popular there. In fact, if games are cultural factors and images, it follows that to a certain degree a civilization and its content may be characterized by its games. They necessarily reflect its culture pattern and provide useful indications as to the preferences, weakness, and strength of a given society at a particular stage of its evolution. Perhaps for an infinite intelligence, for the demon imagined by Maxwell, Sparta's destiny could be read in the military rigor of the games in the palaestra, that of Athens in the aphorisms of the sophists, that of Rome in the combats of the gladiators, and the decadence of Byzantium in the conflicts in the hippodrome. Games lead to habits and create reflexes. They cause certain kinds of reactions to be anticipated, and as a consequence the opposite reactions come to be regarded as brutal, snide, subversive, or disloyal. The contrast with games preferred by neighboring peoples does not provide the surest method of determining the origins of psychological incompatibility, but it can provide impressive illustrations, after the fact.

To take an example, it is not without significance that the Anglo-Saxon sport, par excellence, is golf, a game in which a player at any time has the opportunity to cheat at will, but in which the game loses all interest from that point on. It should not be surprising that this may be correlated with the attitude of the taxpayer to the treasury and the citizen to the state.

No less instructive an illustration is provided by the Argentine card game of *truco* in which the whole emphasis is upon guile and even trickery, but trickery that is codified, regulated and obligatory. In this game, related to poker and manilla, it is essential for each player to let his partner know the cards in his hand,

without his opponents learning them. The cards are symbolized by various facial expressions. Appropriate pouts, grimaces, and winks, always identical, correspond to different high cards. These signals, part of the rules of the game, must be meaningful to one's partner, without enlightening one's adversary. The good player rapidly and discreetly profits from the least inattention of his opponents. An imperceptible sign alerts his partner. Various card combinations are named after flowers. Skill is required to communicate them to the partner's mind without pronouncing them, merely suggesting them in so farfetched a manner that only one's partner can understand the message. Such rare components in a game so prevalent as to be almost a national pastime may excite, sustain, or reflect habits of mind that help give ordinary life, and possibly public affairs too, their basic character—the recourse to ingenious allusions, a sharpened sense of solidarity among colleagues, a tendency toward deception, half in jest and half serious, admitted and welcomed as such for purposes of revenge, and finally a fluency in which it is difficult to find the key word, so that a corresponding aptitude must be acquired.

Together with music, calligraphy, and painting, the Chinese place the games of checkers and chess among the five arts that a scholar must practice. They feel that both these games train the mind to find pleasure in multiple responses, combinations, and surprises that continuously give rise to new situations. Aggressiveness is thus inhibited while the mind finds tranquility, harmony, and joy in contemplating the possibilities. This is without doubt a civilizational trait.

However, it is clear that such diagnoses are infinitely precarious. Those that seem most obvious must be qualified drastically because of other facts. It is also generally the case that the multiplicity and variety of games simultaneously in favor in a particular culture is very significant. And finally, games happen to provide a nonmaterial reward, the pleasant and imaginative result of the illicit tendency disapproved and condemned by law and public opinion. By contrast to wire marionettes, fairylike and graceful, guignols usually reincarnate (as already observed by

Hirn)²⁴ ugly and cynical types, inclined to be grotesque and immoral, if not even sacrilegious. The traditional story of Punch and Judy is an example. Punch kills his wife and child, refuses alms to a beggar whom he gives a beating, commits all manner of crimes, kills death and the devil, and for a finale, hangs the executioner who has come to punish him on his own gallows. It would surely be a mistake to view this systematic caricature as an ideal reflection of the British audience that applauds these exploits. It does not approve them at all, but its boisterous pleasure provides a catharsis. To acclaim the wicked and triumphant puppet is cheap compensation for the thousands of moral constraints and taboos imposed upon the audience in real life.

Whether an expression or a contradiction of social values, games seem necessarily related to the patterns and functions of different cultures. The relationship is rough or exact, precise or diffuse, but nevertheless inevitable. It now seems proper to conceive of a broader, and seemingly more rash, but perhaps less aleatory enterprise than a mere search for random correlations. It may be presumed that the principles which regulate games and permit them to be classified must make their influence felt outside of the domain of play, defined as separate, regulated, and imaginary.

The taste for competition, the pursuit of chance, the pleasure of simulation, and the attraction of vertigo certainly seem to be the principal effects of games, but their influence infallibly penetrates all of social life. Just as games are universal, but are not played the same way or to the same extent everywhere—in one place baseball is played more and chess in another—it is appropriate to inquire whether the principles of play (*agôn*, *alea*, *mimicry*, *ilinx*), outside of games, are not also inequally diffused through different societies. In this way, the alleged differences may result in important contrasts in the collective and institutional behavior of peoples.

I do not mean to insinuate in any way that cultures are like games and therefore also governed by *agôn*, *alea*, *mimicry*, and *ilinx*. On the contrary, I maintain that the domain of play after

all constitutes a kind of islet, artificially dedicated to calculated competition, limited risks, inconsequential make-believe, and meaningless panic. However I also suspect that the principles of play, persistent and widespread mainsprings of human activity, so much so that they seem constant and universal, must markedly influence different types of society. I even suspect that they may in their turn be so classified, inasmuch as social norms may almost exclusively favor one of these at the expense of another. Must anything further be added? The question is not one of discovering that every society has members who are ambitious, fatalistic, simulate others, or are enfrenzied, and that each society offers unequal chances of success or satisfaction to these types. This is already known. The question is to determine the role played by competition, chance, mimicry, or hysteria in various societies.

It is obvious how extremely ambitious a project it is that aims at nothing less than trying to define basic social mechanisms and their most diffuse and vague premises. These basic aspects are essentially of so insidious a nature that to describe their influence would not add materially to the precise depiction of social structures. At best a new set of labels or general concepts is provided. In addition, if the adopted nomenclature is recognized as corresponding to major contrasts, it tends by that very fact to set up for the classifying of societies a dichotomy as radical—for example—as that which separates cryptogamous from phanerogamous plants and vertebrate from invertebrate animals.

In societies conventionally called primitive as against those described as complex or advanced, there are obvious contrasts that in the latter are not exhausted by the evolution of science, technology, industry, the role of administration, jurisprudence, or archives, theoretical and applied mathematics, the myriad consequences of urbanization and imperialism, and many others with consequences no less formidable or revocable. It is plausible to believe that between these two kinds of society there is a fundamental antagonism of another order, which may be at the

root of all the others, recapitulating, supporting, and explaining them.

I shall describe this antagonism in the following manner: Some primitive societies, which I prefer to call "Dionysian," be they Australian, American, or African, are societies ruled equally by masks and possession, i.e. by *mimicry* and *ilinx*. Conversely, the Incas, Assyrians, Chinese, or Romans are orderly societies with offices, careers, codes, and ready-reckoners, with fixed and hierarchical privileges in which *agôn* and *alea*, i.e. merit and hereditary, seem to be the chief complementary elements of the game of living. In contrast to the primitive societies, these are "rational."²⁵ In the first type there are simulation and vertigo or pantomime and ecstasy which assure the intensity and, as a consequence, the cohesion of social life. In the second type, the social nexus consists of compromise, of an implied reckoning between hereditary, which is a kind of chance, and capacity, which presupposes evaluation and competition.

2. *Mask and Trance*

One of the principal ethnographic mysteries is conceded to lie in the general use of masks in primitive society. An extreme and even a religious importance is attached everywhere to these instruments for metamorphosis. They emerge in festivals—an interregnum of vertigo, effervescence, and fluidity in which everything that symbolizes order in the universe is temporarily abolished so that it can later re-emerge. Masks, always fabricated secretly and destroyed or hidden after use, transform the officiants into gods, spirits, animal ancestors, and all types of terrifying and creative supernatural powers. On the occasion of unrestrained excitement or riot, which is popular and valued for its excesses, the use of masks is supposed to reinvigorate, renew, and recharge both nature and society. The eruption of phantoms and strange powers terrifies and captivates the individual. He temporarily reincarnates, mimics, and identifies with these fright-

ful powers and soon, maddened and delirious, really believes that he is the god as whom he disguised himself, cleverly or crudely, in the beginning. The situation has now become reversed. It is he who inspires fear through his possessing this terrible and inhuman power. It was sufficient for him merely to put on the mask that he himself made, to don the costume that he sewed, in order to resemble the revered and feared being and to produce a weird drone with the aid of a secret weapon, the bull-roarer, of which he alone has known the existence, character, operation, and function, ever since his initiation. He only learns that it is inoffensive, familiar, and all-too-human when he has it in his hands and in his furor uses it to frighten others. After the delirium and frenzy have subsided, the performer lapses to a state of dullness and exhaustion that leaves him only a confused, blurred memory of what has transpired.

The whole group is involved in these great seizures and sacred convulsions. At the time of the festival, dancing ritual and pantomime are only preliminary. This prelude incites an increasing excitement. Vertigo then takes the place of simulation. As the Cabala warns, one becomes a ghost in playing a ghost.

Under pain of death, children and women must not assist in the fabrication of masks, ritual disguises, and various devices whose purpose is to frighten. They do not know that it is only a masquerade or make-believe that their parents are simulating. They conform because they are required to by society and, as do the performers themselves, because they believe that the actors have become transformed, possessed, and prey to the powers animating them. In order to yield themselves to spirits that exist only in their minds and to suddenly experience the brutal transport, the performers must evoke and excite them, must push their *selves* to the final debacle that permits the rare intrusion. To this end they employ thousands of artifices, any one of which may be suspect—fasting, drugs, hypnosis, monotonous or strident music, clatter, paroxysms of noise and movement, intoxication, shouting, and spasms.

The festival—the destruction of wealth accumulated over a long period, disorder transformed into order, all norms inverted by the contagious presence of masks—is climaxed by shared vertigo. It seems to be the ultimate basis for a society not too stable in other respects. It reinforces a fragile coherence, dull and not too significant, which would be difficult to maintain without this periodic explosion which draws together and integrates persons absorbed at all other times in domestic preoccupations and exclusively private concerns. These daily preoccupations have hardly any repercussions upon a rudimentary association in which the division of labor is very slight, and as a consequence each family is expected to provide for its own subsistence. Masks are the true social bond.

The invasion of ghosts, the trances and frenzies they cause, the intoxication of fear or inspiring of fear, even if they reach their peak in the festival, are not absent from ordinary life. Political or religious institutions are frequently based upon the awe engendered by just as overwhelming a phantasmagoria. The initiates suffer severe privations, endure painful trials, and submit to cruel tests in order to attain the dream, hallucination, or spasm by which their tutelary spirits will be revealed to them. They are indelibly anointed, and they are assured of being able to trust henceforth in a highly esteemed protection, infallible, supernatural, and entailing incurable paralysis as punishment for sacrilege.

Beliefs doubtless vary infinitely in detail, being countless and almost inconceivable. However, in varying degree almost all of them exhibit an astonishing combination of simulation and vertigo, one leading to the other. There is doubtless an identical explanation for the diversity of myth and ritual, legend and liturgy. The same relationship is continuously revealed.

A striking illustration is provided by the culture complex known as shamanism. This designates a complicated but well-articulated and easily identifiable phenomenon, the most significant manifestations of which have been observed in Siberia, more generally about the Arctic Circle. It is equally encountered

along the Pacific coast, particularly in the American Northwest, in the Araucanian area of South America, and in Indonesia.²⁶ Wherever found, it always involves a violent crisis and a temporary loss of consciousness in which the shaman becomes possessed by one or more spirits. He then embarks upon a magic journey through the other world, which he narrates and re-enacts. In some situations ecstasy is variously attained by narcotics, a hallucinating agent (agaric),²⁷ chanting and convulsive movement, drums, steam baths, the fumes of incense or hemp, or even by hypnosis, through staring at the flames in the fireplace until entranced.

In addition, the shaman is frequently chosen because of his psychopathic tendencies. The candidate, so designated by heredity, temperament, or some miracle, leads a wild and solitary life. Among the Tungus it is reported that he must eat animals that he has caught with his teeth. The revelation that makes him a shaman arises during an epileptic fit which supposedly authorizes him to endure additional seizures and assures their supernatural character. These fits seem to be provoked or unleashed almost at will, causing the shaman to be appropriately called a "professional hysteric." This hysteria is obligatory on shamanistic occasions.

During initiations, the spirits dismember the body of the shaman, then put it together again after substituting new bones and viscera. The subject now has the ability to enter the beyond. While his mortal remains lie inanimate, he visits the heavens and the underworld. He meets gods and demons. From his divine and demonic associations, he brings back special powers and magical clairvoyance. During séances, he renews his travels. The trance-states to which he is vulnerable, an example of *ilinx*, often approach real catalepsy. As for *mimicry*, it is illustrated in his pantomimes, when possessed. He imitates the cries and behavior of supernatural animals that he reincarnates. He crawls along the ground like a snake, roars and runs on all fours like a tiger, simulates the plummeting of a duck, or waves his arms as if they were a bird's wings. On rare occasions he wears animal

masks, but the feathers and head of the eagle or owl, in which he is dressed, enable him to fly magically up to the heavens. Next, despite a costume weighing more than thirty pounds because of the iron ornaments sewed into it, he leaps into the air to show that he is flying very high. He yells that he can see a large part of the earth. He narrates and re-enacts the adventures he experienced in the other world. He goes through the motions of his struggle with the evil spirits. Underground, in the realm of darkness, he is so cold that he shivers and quakes. He asks his mother's spirit for a blanket. An assistant throws him one. Some other spectators strike sparks from flint, which serve as stars to guide the magic voyage through the darkness of the nether regions.

Such cooperation between the shaman and his audience takes place constantly. However, it is not unique to shamanism. It is also found in voodoo and in nearly all séances of an ecstatic character. In fact it is a necessity, for the audience must be protected against the inevitable violence of his mania, the effects of his awkwardness, and his unconscious fury, and lastly must help him to play his role correctly. Among the Vedda of Ceylon there is a type of shamanism that is very significant in this respect. The shaman, who is always on the threshold of unconsciousness, feels dizzy and nauseous. The ground seems to slip from under his feet. The officiant remains in a state of extreme receptivity. This

. . . leads him to enact almost automatically and certainly without careful forethought the traditional parts of the dance in their conventionally correct order. Further, the assistant, who follows every movement of the dancer, prepared to catch him when he falls, may also greatly assist by conscious or unconscious suggestion in the correct performance of these complicated possession dances.²⁸

All is acting. All is also vertigo, ecstasy, trance, convulsions, and, for the officiant, loss of consciousness and finally amnesia, for it is proper that he be unaware of what has happened to him or what he has screamed in the course of his seizure. In Siberia,

the usual aim of a seance is to cure illness. The shaman seeks the soul of the patient, mislaid, stolen, or being kept by a demon. He narrates and plays the critical episodes in the rewinning of the vital principle ravished by its demon possessor. He finally recovers it in triumph. Another technique consists of drawing the evil out of the patient's body by suction. The shaman approaches and in a state of trance applies his lips to the spot that the spirits indicate is the focus of infection. He soon extracts it, suddenly producing a pebble, worm, insect, feather, or piece of white or black thread which he shows around, curses, chases away with kicks, or buries in a hole. It so happens that the audience is well aware that the shaman, prior to the cure, is careful to hide in his mouth the object which he is later to exhibit, after pretending to have drawn it out of his patient's body. However they accept it, saying that these objects merely serve as a trap or help to catch the poison. It is possible or even probable that the magician shares this belief.

In any case, gullibility and simulation seem to be strangely united. Eskimo shamans have themselves bound with thongs so that they will only travel *in spirit*, without their bodies being carried into the air and disappearing irretrievably. Do they themselves believe it, or is this merely an ingenious strategem for making others believe? Always, after their magic flights, they unbind themselves instantaneously and unaided, just as mysteriously as the Davenport brothers from their casket.²⁹ This is confirmed by as careful an ethnographer as Franz Boas.³⁰ Bogoras, too, has made recordings of the "disembodied voices" of the Chukchee shamans who suddenly are silent, while inhuman voices are heard that seem to rise from all corners of the tent, from the depths of the earth, or from very far away. At the same time, various types of levitation are produced and there is a shower of stones and bits of wood.³¹

These ventriloquistic and magical effects are not rare in a domain in which there is exhibited at the same time a marked tendency toward parapsychology and alleged miracles, such as immunity to fire (keeping burning coals in the mouth or grasping

red-hot irons), climbing barefoot a ladder that has knives for rungs, producing stab-wounds that do not bleed or that heal immediately. This is frequently not too different from simple prestidigitation.³²

It does not matter, for what is essential is not to separate the variable part that is premeditated make-believe from that which is genuine trance-state, but rather to verify the exact and almost inevitable combinations of vertigo and mimicry, ecstasy and simulation. This association is in no way exclusive to shamanism. It is also found, for example, in the phenomena of possession, originating in Africa and spreading to Brazil and the Antilles, known as voodoo. There, too, the beat of drums and the contagion of movement is utilized to stimulate ecstasy. Coma and spasm signify the departure of the soul. Changes of face and voice, sweat, loss of equilibrium, tics, fainting, and quasi-rigor mortis precede real or feigned amnesia.

However, no matter how violent the attack, all of it takes place according to a precise liturgy and in conformity with a traditional mythology. The séance is like a play, with the possessed in costume. They have the attributes of the gods that inhabit them and imitate typical divine behavior. One who reincarnates Zaka, the peasant deity, wears a straw hat and a money-bag and smokes a short pipe. Another, impersonating the god of the sea, Agwé, brandishes an oar. A person possessed by Damballah, the snake god, writhes on the ground like a reptile. This is a general rule also confirmed among other peoples. One of the better proofs is provided by the commentaries and photographs of Tremearne³³ for the Bori cult in Moslem Africa, which spread from Lybia to Nigeria, is half African and half Islamic, and in nearly all ways resembles voodoo, if not in theory at least in practice. The spirit Malam al Hadgi is a wandering holy man. The one possessed by him pretends to be old and trembling. He gesticulates as if he were counting beads with his right hand. He holds and reads an imaginary book. He is stooped, dyspeptic, and has a slight cough. Clad in white, he assists at marriages. When possessed by Makada, the actor is

naked and performs wearing only a monkey skin smeared with filth. He hops about and simulates sexual intercourse. To free him from the clutches of the god, an onion or tomato must be placed in his mouth. Nana Ayesha Karama causes the evil eye and smallpox. Her impersonator wears red and white garb. Two handkerchiefs are tied together round her head. She claps her hands, runs hither and yon, sits on the ground, scratches herself, holds her head in her hands, cries if not given sugar, dances a kind of round, sneezes,³⁴ and disappears.

In Africa as in the Antilles the audience assists and encourages the subject and passes him the traditional paraphernalia of the divinity he is impersonating, while the actor creates his role out of his knowledge of the characteristics and life of his subject and his recollections of the séances at which he has in the past assisted. His delirium hardly permits any inventiveness or initiative. He behaves as expected and as he knows he must behave. Alfred Métraux, analyzing the course and nature of the voodooistic fit, has demonstrated how the subject's conscious desire to undergo it, an appropriate technique for stimulating it, and a liturgical pattern in its unfolding are necessary.³⁵ The role of suggestion and even simulation is certain. However, most of the time they themselves seem to be the results of the impatience of the one desiring to be possessed and therefore a means of hastening the onset of the seizure. Suggestion and simulation increase one's susceptibility and stimulate the trance. The loss of consciousness, exaltation, and oblivion that they cause are favorable to the true trance, i.e. possession by the god. The resemblance to children's mimicry is so obvious that the writer does not hesitate to conclude (p. 33): "In observing certain cases of possession, one is tempted to compare them to a child who imagines he is an Indian, for example, or an animal, and who strengthens the illusion by means of a piece of clothing or some other object." The difference is that in this case mimicry is not a game. It ends in vertigo, becomes part of the religious order, and fulfills a social function.

One keeps returning to the general problem posed by the

wearing of masks. It is also associated with the experiences of possession and of communion with ancestors, spirits, and gods. The wearer is temporarily exalted and made to believe that he is undergoing some decisive transformation. In any case, the unleashing of instincts and of overwhelmingly fearful and invincible forces is encouraged. No doubt the wearer of the mask is not deceived at the beginning, but he rapidly yields to the intoxication that seizes him. His mind enthralled, he becomes completely abandoned to the disorder excited in him by his own mimicry. Georges Buraud writes: "The individual no longer knows himself. A monstrous shriek rises out of his throat, a cry of beast or god, a superhuman noise, a pure emanation of the force of combat, the passion of procreation, the unlimited magic powers by which he believes himself to be, and is momentarily possessed."³⁸ And to evoke the ardent climax of the masking in the brief African dawn, there is the hypnotic beat of the tom-tom, then the mad leaping of ghosts with gigantic strides as, mounted on stilts, they race above the tall grass, in a terrifying uproar of strange noises—hisses, rattles, and the whirring of bull-roarers.

It is not merely vertigo, born of blind, uninhibited, and purposeless sharing of cosmic powers or of a dazzling epiphany of bestial divinities soon to return to the shadow world. It is also a simple intoxication with the permeation of terror and anxiety. Above all, these apparitions from the beyond are the forerunner of government. The mask has now become institutionalized. Among the Dogon, for example, a culture that continuously resorts to masks, it has been observed how all of the public life of the group is impregnated with them. It is at the initiation rites of the male societies with their special masks that the basis for collective life and the crude beginnings of political power may be found. The mask is an instrument of secret societies. While disguising the identity of their members, it serves to inspire terror in the laity.

Initiation, the passage rite of puberty, frequently consists of revealing the purely human nature of the mask wearers to the

novices. From this viewpoint, initiation is an atheistic, agnostic, or negative teaching. It exposes a deception and makes one a party to it. Until then, adolescents were terrorized by masked apparitions. One of them pursued the novices with whips. Excited by the performer, they caught, mastered, and disarmed him, tore off his costume, and removed his mask, recognizing a tribal elder. Henceforth, they belong to the other camp.³⁷ They inspire fear. Clad in white and masked in their turn, reincarnating the spirits of the dead, they frighten the uninitiated, maltreat and rob those whom they catch or deem to deserve such treatment. They often stay constituted as semisecret societies or even undergo a second initiation so that they may be granted membership. Like the first initiation, it is accompanied by physical abuse, painful ordeals, and sometimes even by real or feigned catalepsy that simulates death and resurrection. Also, just as at the first ceremony, the initiates learn that the supposed spirits are only men in disguise and that their cavernous voices come out of particularly powerful bull-roarers. And finally, just like the original initiation, it gives them the privilege of playing all kinds of tricks upon the uninitiated. Every secret society possesses its distinctive fetish and protective mask. Each member of an inferior fraternity believes that the guardian-mask of the superior society is a supernatural being, while knowing full well the nature of his own.³⁸

Among the Bechuana, a bond of this type is called *mopato*, or mysterious, after the name of the initiation hut. It refers to the turbulence of youth, liberated from popular beliefs and commonly shared fears. The threatening and brutal actions of the initiates serve to reinforce the superstitious terror of their victims. In this way, the vertiginous combination of simulation and trance is sometimes deliberately transformed into a mixture of deceit and intimidation. It is at this point that a particular kind of political power emerges.³⁹

These associations have varied goals. As may be the case, they specialize in the celebration of a magic rite, dance, or mystery, but they are charged with the repression of adultery, larceny,

black magic, and poisoning. In Sierra Leone, there is a warrior society,⁴⁰ with local branches, which pronounces and executes judgments. It organizes punitive expeditions against rebellious villages. It intervenes to keep the peace and prevent feuds. Among the Bambara, the *komo*, "who knows all and punishes all," a kind of African equivalent to the Ku Klux Klan, is the cause of an incessant reign of terror. The masked bands thus keep order in society in a way in which vertigo and simulation or their close derivatives, terrifying mimicry and superstitious fear, again emerge, not as fortuitous elements in primitive culture, but as truly basic factors. It should be understood that mask and panic are present *in association*, inextricably interwoven and occupying a central place, whether in the social paroxysms called festivals, in magico-religious practices, or in the as yet crude form of a political system, even though they do not fulfill a major function in these three domains simultaneously.

May it be asserted that the transition to civilization as such implies the gradual elimination of the primacy of *ilinx* and *mimicry* in combination, and the substitution and predominance of the *agôn-alea* pairing of competition and chance? Whether it be cause or effect, each time that an advanced culture succeeds in emerging from the chaotic original, a palpable repression of the powers of vertigo and simulation is verified. They lose their traditional dominance, are pushed to the periphery of public life, reduced to roles that become more and more modern and intermittent, if not clandestine and guilty, or are relegated to the limited and regulated domain of games and fiction where they afford men the same eternal satisfactions, but in sublimated form, serving merely as an escape from boredom or work and entailing neither madness nor delirium.

Competition and Chance

Wearing of masks permits Dionysian societies to reincarnate (and feel imbued with) powers and spirits, special energies and gods. It covers a primitive type of culture founded, as has been shown, on the powerful association of pantomime with ecstasy. Spread over the entire surface of the planet, it seems to be a false solution, obligatory and fascinating, prior to slow, painful, deliberate, and decisive social progress. The birth of civilization means the emergence from this impasse.

However, a revolution of such magnitude is not accomplished in a day. In addition, while it always takes place in transitional eras that make cultures accessible to history, it is only the last phases that succeed in doing this. The older documents attesting to it can scarcely regard as significant the first obscure and perhaps fortuitous choices with immediate consequences, choices which nevertheless on occasion have committed cultures to a decisive adventure. However, the difference from

their initial primitive state, as reconstructed from their artifacts, is not the only convincing argument that their progress was only possible as a result of a long struggle against the prestige associated with simulation and vertigo.

No traces remain of their early virulence. But occasional clues to the struggle itself have survived. The intoxicating fumes of hemp were used by the Scythians and Iranians to stimulate ecstasy. It is also relevant that *Yâska* (19–20) affirms that Ahura Mazda is not drugged with hemp. Also, India provides thousands of illustrations of the magic flight, as in the important passage from the *Mahabharata* (Vol. 160, 55 ff.), "We too can fly into the sky, and assume diverse magical forms."⁴¹

Thus the genuine mystic ascent is clearly distinguished from the circuitous flights and simulated metamorphoses of ordinary magicians. It is well known how much asceticism and, above all, the formulae and metaphors of Yoga owe to shamanistic mythology. The analogy is so precise and literal that they are often believed to be directly related. As has also been stressed, Yoga is an internalization, a transposition to the spiritual plane of the powers of ecstasy. It is no longer a matter of the illusory conquest of space in the world, but rather a question of liberating oneself from the illusion that makes up the world. The role of striving is reversed. The goal is no longer to reach a state of panic and thus become easy prey to any type of catharsis, but on the contrary it is a system of exercises, a schooling in self-control.

In Tibet and China the experiences of the shamans have left many traces. The lamas have command of the air, rise to the sky, perform magic dances "adorning themselves with seven bone ornaments," and speak an unintelligible language rich in onomatopoeia. Taoists and alchemists, like Liu-An and Li Chao Kun, fly through the air. Others reach the gates of heaven, remove the comets, or climb the rainbow. However, this awesome heritage cannot prevent the development of critical reflection. Wang Ch'ung denounces the deceitful character of the words emitted by the dead from the mouths of those of the

living whom they have thrown into a trance, or produced by sorcerers "while clutching their black robes." The *Kwoh Yü* relates how in antiquity King Chao (515–448 B.C.) interrogated his minister as follows:

The writings of the Chou dynasty relate that Chung-Li was sent as a messenger to the remote regions of the sky and the earth. How was such a thing possible? Can men rise to the sky?⁴²

His minister then instructed him as to the spiritual significance of the phenomenon. The just one, the one who is capable of concentrating, attains a superior kind of knowledge. He reaches the heights and descends to the nether regions so that he may distinguish between "the conduct to observe and the things to accomplish."⁴³ As an official, the text goes on, he is then to watch over the order of precedence of the gods, victims, utensils, and liturgical costumes proper to the changing seasons.⁴⁴

The shaman, the man possessed, transformed by vertigo and ecstasy into an official, mandarin, or master of ceremonies, watchful over protocol and the correct allocation of honors and privileges, as an illustration of the revolution to be accomplished, is exaggerated almost to the point of caricature.

1. *Transition*

If there are only isolated clues to indicate how the techniques of vertigo evolved toward methodical control in India, Iran, and China, the documents that permit one to follow the different stages in this major metamorphosis are more numerous and explicit. Thus, in the Indo-European world, the contrast between the two systems has long been evident in the two opposing forms of power clarified in the works of G. Dumézil. On the one side is the rational—a sovereign god presiding over contracts, exact, ponderous, meticulous, and conservative, a severe and mechanical assurance of norms, laws, and regularity, whose actions are bound to the necessarily predictable and conven-

tional forms of *agōn*, whether on the list in single combat and equal arms or in the praetorium interpreting the law impartially. On the other side is the charismatic⁴⁵—also a sovereign god, but inspired and terrible, unpredictable and paralyzing, esctatic, a powerful magician, master of illusion and metamorphosis, frequently patron and inspiration of a troop of masked men running wild.

Between these two aspects of power, the rational and the charismatic, the competition seems to have been a sustained one and not everywhere subject to the same conditions. In the Germanic world, for example, the god of vertigo is preferred. Odin, whose name Adam de Brême regards as equivalent to "furor," remains in mythology a perfect shaman. He has an eight-footed horse, properly regarded as a shaman's mount even as far away as Siberia. He can change into any animal, transport himself anywhere in an instant, and is kept informed by two supernatural crows, Huginn and Muninn. He hangs from a tree for nine days and nine nights in order to learn its secret constraining language—the runic. He is the founder of necromancy, interrogating the mummified head of Mimir. What is more, he practices (or is accused of practicing) the *seidhr*, which is purely shamanistic séance, complete with hallucinating music, ritual costume (blue cloak, bonnet of black lamb, skins of white cats, baton and bustle of chicken feathers), voyages to the other world, chorus of ghostly auxiliaries, trances, ecstasy, and prophecy. The *berserkers* that change themselves into fauns are also connected with masked societies.⁴⁶

Conversely, in Ancient Greece, if the point of departure is the same, nevertheless the rapidity and sharpness of the evolution, remarkably evident thanks to the relative abundance of documents, was so widely successful as to be deemed miraculous. It must be kept in mind that the word *evolution* acquires acceptable meaning only if one is aware of the results obtained; i.e., ceremonies and temples, the desire for order, harmony, proportion, logic, and science spring from a legendary back-

ground haunted by magic bands of dancers and blacksmiths, Cyclopes and Curetes, Cabiri and Dactyls or Corybants, turbulent bands of terrifying, masked half-men and half-beasts, such as centaurs, whose equivalents in African initiatory societies have long been recognized. Spartan ephеби were given to lycanthropy just like the panther-men and tiger-men of equatorial Africa.⁴⁷

During their cryptia, when the Spartan youth may have hunted Helots, it is certain that they led a life of isolation and ambush. They might not be seen or surprised. It was not a question of military preparation; such training was in no way compatible with the hoplites' way of fighting. The youth lives like a wolf and attacks like a wolf; he makes a solitary and sudden leap like a wild beast. He steals and kills with impunity, since his victims cannot catch him. The experience entails the dangers and advantages of an initiation. The neophyte wins the power and right to act like a wolf. He is eaten by a wolf and reborn as a wolf. He risks being torn to pieces by wolves, and he in turn is now qualified to devour humans. On the mountain of Lyceum in Arcadia, where Zeus is the patron of a band of lycanthropes, the one who eats the flesh of a child, which has been mixed with other meats, becomes a wolf, or the initiate swims across a pool and becomes a wolf for nine years in the wilderness he now inhabits. Lycurgus of Arcadia, whose name means "wolfmaker," pursues the young Dionysus. He threatens him with a mysterious contraption. Terrifying roars are heard, as well as the noise of a "subterranean drum, a thunder of pain and anguish"⁴⁸ according to Strabo. It is not difficult to recognize the sound of the bull-roarer, used by masked dancers everywhere.

Reasons are not lacking for connecting the Spartan Lycurgus with the Arcadian Lycurgus. Between the sixth and the fourth centuries (B.C.) the supernatural apparition that provoked panic became the wise lawgiver. The sorcerer presiding over initiations became a teacher. In the same way, the wolf-men of Lacedaemonia are no longer fauns possessed by a god, living a wild

and subhuman life at the age of puberty. They are now a kind of political police sent on punitive expeditions in order to instill fear and obedience into the people.

The traditional ecstatic crisis is calmly adapted to purposes of repression and intimidation. Metamorphoses and trances are now mere memories. The cryptia no doubt remains secret. It is still one of the routine mechanisms of a militaristic republic whose rigid institutions ingeniously combine democracy and despotism. A minority of conquerors, who have already adopted another kind of law, continue to use the old formulae in ruling the subjugated population.

It is a striking and significant development, but it is a special case. At the same time, everywhere in Greece to some extent, orgiastic cults were still resorting to dancing, rhythm, and intoxication in order to stimulate ecstasy, oblivion, and divine possession. However, vertigo and simulation of this type were suppressed. They are no longer, and have not been for a long time, the central values of the city. They are a survival from remote antiquity. Descents to the nether regions and celestial expeditions in spirit, while the voyager's body remains inanimate on his bed, no longer take place. The soul of Aristaeas of Proconnessus was seized by Apollo and accompanied him in the shape of a crow. Hermotimus of Clazomenae was able to shed his body for years at a time, in the course of which he sought knowledge of the future. Fasting and ecstasy had bestowed magic powers upon Epimenides of Crete in the divine cavern of Mount Ida. Abaris, prophet and healer, rode through the air mounted on a golden arrow. However, even the most persistent and the most elaborate of these tales already exhibit characteristics that are the converse of their primitive significance. Orpheus does not guide his dead spouse back from the underworld where he went to seek her. One begins to understand that death is irrevocable and there is no magic that can vanquish it. In Plato, the ecstatic voyage of Er of Pamphylia is no longer a shamanistic odyssey, rich in dramatic crises, but

an allegory used by a philosopher to illustrate the laws of the cosmos and destiny.

The disappearance of the mask, either as a means of transformation leading to ecstasy or as an instrument of political power, was a slow, irregular, and difficult process. The mask was the best symbol of superiority. In masked societies, the key question is whether one is masked and inspires fear or is not masked and is therefore afraid. In a more complex organization, some are afraid and others frighten, according to the degree of initiation. To pass to a higher grade is to be instructed in the mystery of a more secret mask. One learns that the terrifying supernatural apparition is merely a man in disguise, and oneself dons a mask in order to terrify nonmembers or lower-grade initiates.

There is surely a problem in the decline of the mask. How and why were men led to renounce it? The question does not seem to have bothered ethnographers. However, it is of extreme importance. I am advancing the following hypothesis, which is not narrow but on the contrary points to many, varied, and incompatible trends, corresponding to particular cultures and situations. However, it does suggest a common basis. The system of initiation and masks only functions when there is a precise and constant correlation between the revelation of the secret behind the mask and the right to use it in turn to reach a deifying trance and frighten novices. Knowledge and its application are closely connected. Only one who knows the true nature of the mask and its wearer may assume that formidable appearance. Moreover, it is not possible to come under its influence, or at least to the right degree, with the same emotion of sacred panic, if one knows that it is merely a disguise. Practically speaking, it is not possible to remain unaware of this for long. This gives rise to a permanent fissure in the system, which must be defended against the curiosity of the profane by a whole series of prohibitions and punishments, the latter being more real. In fact, only death is efficacious when a secret has

been exposed. It follows that despite the intimate experience provided by ecstasy and possession, it is nevertheless a fragile mechanism. It must constantly be protected from fortuitous discovery, indiscreet questions, and sacrilegious hypotheses or explanations. It is inevitable that gradually, without basically losing their sacred character, the fabrication and wearing of masks and disguises would no longer be protected by major interdictions. Then, by imperceptible changes, they become liturgical ornaments and accessories to ceremonies, the dance, or the theater.

Perhaps the last attempt at political domination through masks was that of Hakim al-Mokanna, the veiled prophet of Khurasan, who in the eighth century A.D., between the 160th and the 163rd years of the Hegira, kept the armies of the caliph in check. He wore a green veil on his face, or a golden mask that he never removed, according to some writers. He claimed to be God and declared that he covered his face because any mortal seeing it would become blind. However, justly, his pretensions were strenuously disputed by his adversaries. The chroniclers—all official historians of the caliphs—write that he acted in this way because he was bald, had one eye, and was repulsively ugly. His disciples called upon him to provide the crucial test, asking to see his face. He showed it to them. Some were indeed burnt, and others were persuaded. Now the official history explains the miracle by revealing (or inventing) the stratagem. This is the story of the episode as found in one of the earliest sources, the *Description topographique et historique de Boukhara* by Abou-Bak Mohammad ibn Dja far Narshakhî, completed in 332nd year of the Hegira.⁴⁹

Fifty thousand of Mokanna's soldiers gathered at the palace gates, prostrated themselves, and asked to see him. But they received no response. They insisted and implored, saying that they would not budge until they saw the face of their God. Mokanna had a servant named Hadjeb. He said to him: "Go and say to my creations: Moses asked me to let him see my face, but I refused, for he would have been unable to withstand the sight of me, for if someone were to

see me, he would die at once." However, the soldiers continued to implore him. Mokanna then said to them: "Come at such and such a day and I will show you my face."

Then to the women who were with him in the palace [one hundred of them, most of whom were the daughters of the peasants of Soghd, Kesh, and Nakhshad] he ordered that each should take a mirror and go to roof of the palace. [He taught them] . . . to hold their mirrors in such a way while standing in parallel rows, at the time when the rays of the sun shone [most intensely] . . . Then the men were gathered. When the sun was reflected from the mirrors, the entire area was suffused with light. He then said to his servant: "Say to my creatures: Here is your God before you. Look at him! Gaze upon him!" The men, seeing the whole place dazzling with light, were frightened. They fell prostrate.

Like Empedocles, when Hakim was defeated he tried to disappear without leaving a trace, in order to create the belief that he had risen to heaven. He poisoned his hundred wives, decapitated his servant, and threw himself naked into a pit filled with quicklime (or into a cauldron of mercury, vat of vitriol, or oven of molten copper, tar, or sugar). Here, too, the chroniclers denounce his ruse. Although still efficacious (Hakim's followers believe in his divinity, not in his death, and Khurasan will not be at rest for a long time), the reign of the mask henceforth will seem like imposture and trickery. It is already defeated.



The reign of *mimicry* and *ilinx* as recognized, honored, and dominant cultural trends is indeed condemned as soon as the mind arrives at the concept of cosmos, i.e. a stable and orderly universe without miracles or transformations. Such a universe seems the domain of regularity, necessity, and proportion—in a word, a world of number. Even in Greece the revolution in certain specific areas is already perceptible. Thus the first Pythagoreans still used concrete numbers. They conceived of them as having form and figure. Some numbers were triangular, some square, and others oblong, i.e. they could be represented by triangles, squares, or rectangles. They no doubt resembled the

ways in which the dots on dice and dominoes are arranged rather than symbols with no other significance beyond the numbers themselves. In addition, they also constituted sequences ruled by the three basic musical chords. And finally, they were endowed with distinct virtues corresponding to marriage (3), justice (4), opportunity (7), or any other concept traditionally or arbitrarily attributed to them. Nevertheless, from this partly qualitative enumeration, drawing attention to the noteworthy properties of certain special progressions, there quickly emerged an abstract series of numbers which excluded arithmetical philosophizing and required pure calculation, perhaps in this way becoming useful to science.⁵⁰

Number, quantification, and the spirit of precision that they spread, even if incompatible with the spasms and paroxysms of ecstasy and disguise, compensate by allowing free rein to *agôn* and *alea* as rules of games. At the same time as Greece was moving away from masked societies, replacing the frenzy of the ancient festivals with the serenity of processions and establishing a protocol at Delphi in place of prophetic delirium, it was institutionalizing regulated competition and even drawing lots. In other words, in the founding of great games (Olympic, Isthmian, Pythian, and Nemean) and in the method of choosing city magistrates, *agôn* in association with *alea* takes the privileged place in society that *mimicry-ilinx* occupies in Dionysian societies.

Stadium games devise and illustrate a rivalry that is limited, regulated, and specialized. Stripped of any personal feeling of hate or rancor, this new kind of emulation inaugurates a school of loyalty and generosity. At the same time, it spreads the custom of and respect for refereeing. Its civilizing role has often been stressed. In fact, "national" games are present in nearly all the great civilizations. The Aztec games of pelota comprise ritualistic festivals in which the ruler and his court participate. In ancient China, archery contests tested the nobles not so much through the results but through their correctly shooting an arrow or consoling an unlucky adversary. In medieval

Christendom, tournaments fulfilled the same function. The goal was not victory at any price, but prowess exhibited under conditions of equality, against a competitor whom one esteems and assists when in need, and using only legitimate means agreed to in advance at a fixed place and time.

The evolution of administration also favors the extension of *agôn*. More and more, the recruitment of officials is accomplished through competitive examinations. The object is to assemble the ablest and most competent, in order to place them in a hierarchy (*cursus honorum*) or mandarinate (*chin*) in which advancement is defined by certain norms, fixed and controlled as much as possible by autonomous jurisdiction. Bureaucracy is thus a factor in a type of competition, in which *agôn* is the principle underlying any administrative, military, university, or judicial career. It penetrates institutions, timidly at first and only in minor posts. The rest long remain dependent upon the caprice of the ruler or the privileges conferred by birth or good fortune. It is no doubt theoretically the case that acceptance is regulated by competition. However, owing to the nature of the tests or the composition of examining boards, the highest grades in the army and important diplomatic or administrative posts often remain the monopoly of an ill-defined caste jealous of its esprit de corps and protective of its solidarity. And yet, democracy progresses precisely through fair competition and equality of law and opportunity, which is sometimes more nominal than real.

In Ancient Greece, the first theorists of democracy resolved the difficulty in perhaps bizarre but impeccable and novel fashion. They maintained that selecting magistrates by lot was an absolutely equalitarian procedure. They viewed elections as a kind of subterfuge or makeshift inspired by aristocrats.

Aristotle, especially, reasons in this way. In addition, his argument conformed to conventional practice. In Athens, nearly all magistrates were drawn by lot, with the exception of generals and finance ministers, i.e. technicians. The members of the

Council were drawn by lot, after a qualifying examination, from candidates nominated by the demes. By way of compensation for this, the delegates to the Boeotian League were elected. Elections were preferred whenever the territory involved was very large or where a large number of participants necessitated a representative government. The verdict of the lots, expressed by a white bean, was no less esteemed as an egalitarian system. At the same time, it may be regarded as a precaution against the intrigues, maneuvers, or conspiracies of the oligarchs who were difficult to replace. In its beginnings, democracy wavers very instructively between *agôn* and *alea*, the two opposing forms of justice.

This unexpected competition sheds light upon the profound relationship between the two opposing principles. It demonstrates that they are contrasting but complementary solutions to a unique problem—that all start out equal. This may be accomplished by lot, provided they agree not to make any use of their natural capacities and provided they consent to a strictly passive attitude. Or, it may be achieved competitively if they are required to use their abilities to the utmost, thus providing indisputable proof of their excellence.

The competitive spirit has indeed become dominant. Good government consists of legally assuring each candidate of an identically equal chance to campaign for votes. One concept of democracy, perhaps more prevalent and plausible, tends to consider the struggle between political parties as a kind of sports rivalry, exhibiting most of the characteristics of combat in the arena, lists or ring—i.e. limited stakes, respect for one's opponent and the referee's decision, loyalty, and genuine co-operation between the rivals, once a verdict has been reached.

In further enlarging the descriptive framework, it is seen that all of collective life, not merely its institutional aspect, from the moment when *mimicry* and *ilinx* have been suppressed, rests on a precarious and infinitely variable equilibrium between *agôn* and *alea*, or merit and chance.

2. *Merit and Chance*

The Greeks, who as yet had no words to designate self or consciousness,⁵¹ concepts basic to the new order, in order to compensate continued to use a group of precise concepts to designate luck (*tyché*), the portion allotted to each man by destiny (*moira*), the opportune moment (*kariros*), i.e. the occasion inscribed in the immutable and irreversible order of things, and not repeatable because it is part of this order. Therefore birth is comparable to a ticket in a universal and compulsory lottery which assigns everyone certain gifts and privileges. Some are innate, others are social. There are more explicit conceptions of this idea, and in any event it is more prevalent than is realized. Among the Indians of Central America, who have been converted to Christianity for ages, it is believed that each man is born with a personal *suerte*. This determines the individual's character, talents, weaknesses, social status, profession, and ultimately his luck, i.e. his future success or failure, his ability to recognize opportunity. No ambition is possible, nor is any competition imaginable. Each is born and becomes what fate has prescribed.⁵² *Agôn*—the desire to win—normally counteracts such excessive fatalism.

From a certain viewpoint, the infinite variety of political systems shows a preference for one or the other of the two opposing orders of superiority. A choice must be made between inheritance, which is a lottery, and merit, which is competitive. Some try to perpetuate original inequalities as much as possible by means of caste or closed class systems. Others are devoted, on the contrary, to accelerating the circulation of elites, i.e. to reducing the impact of the original *alea* in order to increase the role of a more and more strictly regulated kind of rivalry.

Neither of these political extremes is absolute. However oppressive the privileges associated with name, wealth, or some other advantage of birth, there always exists, however infini-

tesimally, a chance for audacity, ambition, and valor. Conversely, in more equalitarian societies where the hereditary in any form would not openly be admitted, it is hard to imagine that an accident of birth or the position of one's father would be without effect upon the son's career or would not automatically facilitate it. It can scarcely be denied that there is an advantage in the simple fact that the young man grew up in a certain milieu in which he belonged, that he could count upon relatives and be protected, that he was familiar with its usages and prejudices, and that he received counsel and a valuable initiation from his father.

In fact, in all societies to varying degree, as soon as they have become more complex, there is the opposition between wealth and poverty, glory and obscurity, power and slavery. The equality of citizens is proclaimed, the question of juridical equality is at issue. Inheritance continues to weigh upon everybody like a mortgage that cannot be paid off—the laws of chance that reflect the continuity of nature and the inertia of society. The purpose of legislation is to counterbalance these effects. Laws and constitutions therefore seek to establish a fair balance between capacities and performance so that the influence of class can be checked and ability can become truly dominant, as affirmed by qualified judges, just as in sports contests. However, it is obvious that the competitors are not equal in opportunity to make a good start.

Wealth, education, training, family background are all external and often decisive conditions which in practice may negate legal equality. Several generations are sometimes necessary for the underprivileged to catch up to the rich. The promised rules for true *agôn* are flouted. The son of an agricultural worker from a poor and distant province, even if very able, finds it difficult to compete with the intellectually mediocre son of a high official in the capital. The origins of university youth have been studied statistically as a good means of measuring the fluidity of the class system. It is impressively

confirmed how even in socialist countries, despite indisputable progress, there is still social stratification.

To be sure, there are examinations, competitions, scholarships, and all kinds of encouragement for ability. However, this is mere homage or even palliation since most of the time these measures are lamentably insufficient—remedies, exceptions, and alibis rather than norms and general rules. Reality must be faced and the problem understood in societies that pretend to be equalitarian. Then it is clear that on the whole the only effective competition is between people of the same level, origin, and milieu. The government does not seem to care. The son of a dignitary is always favored in whatever ways will make for access to high rewards. The problem is a difficult one in a democratic (or socialist or communist) society—i.e. how to properly compensate for the accident of birth.

The principles of an equalitarian society certainly do not include the obtaining of rights and advantages through chance, for the latter are proper only to caste systems. However, even if many, rigorous mechanisms are designed to place everyone on his uniquely proper rung of the social ladder and to favor only true merit and proved ability, even here chance persists.

First, it is found in the very *alea* of heredity, which distributes abilities and defects unequally. And it can only be chance that in fact indubitably favors the candidate who is asked only the question that he has carefully studied, while it compromises the success of the unlucky one who is questioned on just the very point that he has omitted. Thus, in the very heart of *agôn*, an aleatory element is suddenly introduced.

In fact, chance, opportunity, and aptitude to profit from them, play a constant and important role in society. The intrusions of physical and social advantages of heredity (honors, wealth, beauty, or refinement) upon triumphs of the will, patience, competence, and work (the prerogatives of merit) are complex and innumerable. On the one hand, the gift of the gods or coincidence; on the other, the reward for effort, persistence, and ability. Similarly, in card games, winning sanctions a supe-

riority composed of the cards dealt the player plus his knowledge. *Alea* and *agôn* are therefore contradictory but complementary. They are opposed in permanent conflict, but united in a basic alliance.

Both as a matter of principle and institutionally, modern society tends to enlarge the domain of regulated competition, or merit, at the expense of birth and inheritance, or chance, an evolution which is reasonable, just, and favorable to the most capable. That is why political reformers ceaselessly try to devise more equitable types of competition and hasten their implementation. However, the results of their efforts are still meager and deceptive and also seem remote and improbable.

Until something better turns up, everyone old enough to reflect upon the situation readily understands that it is too late and that the die is cast. Each man is conditioned by environment. He may perhaps ameliorate conditions through merit, but he cannot transcend them. He is unable to radically change his station in life. From this arises the nostalgia for crossroads, for immediate solutions offering the possibility of unexpected success, even if only relative. Chance is courted because hard work and personal qualifications are powerless to bring such success about.

In addition many people do not count on receiving anything much on personal merit alone. They are well aware that others are abler, more skillful, stronger, more intelligent, more hard-working, more ambitious, healthier, have a better memory, and are more pleasing or persuasive than they are. Also, being conscious of their inferiority, they do not trust in exact, impartial, and rational comparisons. They therefore turn to chance, seeking a discriminatory principle that might be kinder to them. Since they despair of winning in contests of *agôn*, they resort to lotteries or any games of chance, where even the least endowed, stupidest, and most handicapped, the unskilled and the indolent may be equal to the most resourceful and perspicacious as a result of the miraculous blindness of a new kind of justice.

Under these conditions, *alea* again seems a necessary compensation for *agôn*, and its natural complement. Those it dooms are entirely without hope in the future. It provides new experience. Recourse to chance helps people tolerate competition that is unfair or too rugged. At the same time, it leaves hope in the dispossessed that free competition is still possible in the lowly stations in life, which are necessarily more numerous. That is why, to the degree that *alea* of birth loses its traditional supremacy and regulated competition becomes dominant, one sees a parallel development and proliferation of a thousand secondary mechanisms designed to bring sudden success out of turn to the rare winner.

Games of chance serve this purpose just as do numerous tests, games of chance in disguise, which are commonly publicized as competitions even though they are essentially gambles of a simpler complex character. These tests or lotteries promise the lucky player a more modest fortune than he expects, but the very thought of it is sufficient to dazzle him. Anyone can win. This illusory expectation encourages the lowly to be more tolerant of a mediocre status that they have no practical means of ever improving. Extraordinary luck—a miracle—would be needed. It is the function of *alea* to always hold out hope of such a miracle. That is why games of chance continue to prosper. The state itself even profits from this. Despite the protests of moralists, it establishes official lotteries, thus benefiting from a source of revenue that for once is accepted enthusiastically by the public. Even if the state forgoes this expedient and leaves its exploitation to private enterprise, it still taxes it very heavily.

To gamble is to renounce work, patience, and thrift in favor of a sudden lucky stroke of fortune which will bring one what a life of exhausting labor and privation has not, if chance is not trifled with and if one does not resort to speculation, which is partly related to chance. Moreover, in order to be attractive, at least the top prizes must be very high. Conversely, tickets must be as cheap as possible and easily divisible so that they can be more readily within the reach of the masses of im-

patient players. It follows that large winnings are rare, and therefore even more entrancing.

To take a ready example, probably not the best, in the Sweepstakes of the *Grand Prix de Paris*, the first prize is 100 million francs, a sum that the vast majority of ticket buyers, who with difficulty earn only about 30,000 francs per month, must regard as simply fabulous. In fact, if the annual salary of the average worker is 400,000 francs, the first prize would require about 250 years of work. A ticket costing 18,500 francs, more than half a month's wages, is beyond the reach of the majority of wage earners. They must therefore be content to purchase "tenths," which for 2,000 francs cause them to contemplate a prize of 10 million, ordinarily requiring a quarter of a century of work. The attraction of such sudden wealth is inevitably intoxicating because it in fact connotes a radical change in status, the pure favor of destiny, and practically inconceivable through normal means.

The magic is efficacious. According to the most recent statistics, in 1955 the French spent 115 billions merely on state-controlled games of chance. Of this total, the gross receipts of the *Loterie Nationale* accounted for 46 billions, about 1,000 francs per capita. The same year, about 25 billions were distributed in prizes. The top prizes, whose relative importance in relation to the total does not cease increasing, are deliberately calculated to stimulate the hope of sudden wealth in the public, who identify with the winners.

I can cite as an example the official publicity to which the beneficiaries of unexpected wealth are more or less subjected, although anonymity is guaranteed if requested. But public opinion demands that the newspapers provide detailed information of their daily lives and their plans. They seem to be inviting the mass of their readers to try their luck again.

Games of chance are not organized in all countries as gigantic lotteries on a national scale. When deprived of their official character and state support, they seem to diminish rapidly in importance. The total value of the prizes falls as the

number of players is reduced. There is no longer an almost infinite disproportion between the amount wagered and the possible winnings. However, this does not result from the more modest volume of betting as the total wagered is diminished.

The contrary is true, because the drawing is no longer a solemn and relatively rare operation. The continuity of the games contributes generously to the volume of betting. When the casino opens, the croupiers, by direction, follow a fixed rhythm on the dozens of tables over which they preside, not for a moment stopping the roll of the roulette ball at the announcement of the outcome. In the gambling capitals of the world, at Deauville, Monte Carlo, Macao, or Las Vegas for example, even though the total money in continuous circulation may reach a fabulous level, nevertheless the law of averages guarantees a constant percentage of profit on rapid and uninterrupted operations. This profit is sufficient for the city or state to prosper flamboyantly and scandalously, as reflected in brilliant festivals, rampant luxury, immorality, and all the vices overtly designed as a contrast with ordinary life.

Such specialized metropolises attract in the main a transient clientele who have come to spend several days in the stimulating luxuries of pleasure and ease and then return to a more laborious and austere way of life. The cities that cater to the gambling urge are cloistered, are both refuge and paradise, and seem like huge, secret retreats or opium dens. They are tolerated to a degree and are profitable. A nomadic, curious, idle or maniacal population passes through them without settling there. Seven million tourists leave 60 million dollars annually at Las Vegas, a sum representing about 40% of the budget of the state of Nevada. The time passed there is merely a set of parentheses in their ordinary lives. The basic pattern of the culture has not been appreciably affected.

The existence of large cities whose reason for being and almost sole support lies in games of chance is no doubt an expression of the passion to gamble. Moreover, it is not in these abnormal cities that the instinct is strongest. Elsewhere, pari-

mutuels permit one to play the horses without even going to the track. Sociologists have noted the tendency of factory workers to organize pools in which they bet relatively large sums, perhaps disproportionate to their salaries, on football games.⁵³ This too is a culture trait.⁵⁴

State lotteries, casinos, hippodromes, and pari-mutuels of all kinds are subsumed under pure *alea*, following the mathematical laws of probability.

In fact, when the general expenses of administration are deducted, the seemingly disproportionate profit is exactly proportionate to the amount risked by each player. A more remarkable modern innovation consists of what I shall arbitrarily call disguised lotteries—i.e. those not requiring money to be risked and seeming to reward talent, learning, ingenuity, or any other type of merit, thus naturally escaping general notice or legal sanction. Some grand prizes of a literary character may truly bring fortune and glory to a writer, at least for several years. These contests stimulate thousands of others that are of little significance but which somehow trade upon the prestige of the more important competition. A young girl, after having triumphed over many imposing rivals, is finally proclaimed Miss Universe. She becomes a movie star or marries a multimillionaire. Innumerable and unexpected Queens, Maids of Honor, Nurses, Sirens, etc. are similarly chosen, and in most cases enjoy a season of intoxicating but disputed notoriety and a dazzling but insecure season at one of the modish pleasure resorts. There are no limits to all this. Radiologists have even selected a girl (a Miss Lois Conway, 18 years of age) as Miss Skeleton, proved by X-rays to have the prettiest bony structure. Sometimes preparation for the contest is necessary. On television, a small fortune is offered to anyone answering increasingly difficult questions on a particular subject. A special staff and impressive paraphernalia lend solemnity to this weekly program. An expert orator entertains the public. A very photogenic young girl serves as receptionist. Uniformed guards stand watch over the check exposed to public scrutiny. An electronic computer

assures an impartial choice of questions, and lastly, an isolation booth permits the candidates to meditate upon and prepare their fateful answers in solitude yet visible to all. In a modest way, they appear to be quaking before a stern tribunal. Hundreds of thousands of faraway viewers share in their anxiety and at the same time are flattered into feeling that they are judging the test.

What is ostensibly involved is an examination in which the questions are designed to measure the extent of knowledge of the subject, i.e. *agôn*. In reality, a series of wagers have been arranged in which the chances of winning diminish as the value of the prize increases. The name frequently given to this game, "Double or Nothing," leaves no doubt of this. The rapidity of the process is further proof. Fewer than ten questions suffice to render the risk extreme and the reward captivating. Those surviving the full course for a time become national heroes. In the United States, the press and public opinion successively became enamored of a shoemaker who specialized in Italian opera, a Negro schoolgirl who was a champion speller, a policeman learned in Shakespeare, an old lady expert on the Bible, and a soldier who was a gourmet. Each week provides fresh examples.⁵⁵

The enthusiasm engendered by these successive wagers and the success of the event clearly indicate that the formula corresponds to a generally felt need. In any case, the exploitation is profitable just as are beauty contests—and doubtless for the same reasons. Sudden fortune, legitimate besides, because apparently due to merit, is compensation for the lack of opportunity to compete freely because of inequalities of class, status, or education. Daily competition is harsh and implacable as well as monotonous and exhausting. It provides no diversion and accumulates rancor. It abuses and discourages—for, practically speaking, it provides scarcely any hope of improving one's status by means of one's earnings alone. Therefore everyone seeks to compensate. Each man dreams of an activity with opposing powers, both in excitement and a sudden means of genuinely

transcending his condition. To be sure, if he thinks about it, he will not be enticed. The consolation which such competition provides is a joke, but since publicity magnifies its appeal, the paucity of winners is less influential than the large mass of fans who follow their vicissitudes. They more or less identify themselves with the competitors. Through *identification*, they become drunk with the victor's triumph.

3. *Identification*

At this point a new fact emerges, the significance and impact of which it is important to understand. *Identification* is a degraded and diluted form of *mimicry*, the only one that can survive in a world dominated by the combination of merit and chance. The majority fail in competition or are ineligible to compete, having no chance to enter or succeed. Every soldier may carry a marshal's baton in his knapsack and be the most worthy to bear it, except that he may never become a marshal commanding battalions of mere soldiers. Chance, like merit, selects only a favored few. The majority remain frustrated. Everyone wants to be first and in law and justice has the right to be. However, each one knows or suspects that he will not be, for the simple reason that by definition only one may be first. He may therefore choose to win indirectly, through identification with someone else, which is the only way in which all can triumph simultaneously without effort or chance of failure.

From this is derived the worship of stars and heroes, especially characteristic of modern society. This cult may in all justice be regarded as inevitable in a world in which sports and the movies are so dominant. Yet there is in this unanimous and spontaneous homage a less obvious but no less persuasive motive. The star and the hero present fascinating images of the only great success that can befall the more lowly and poor, if lucky. An unequaled devotion is given the meteoric apotheosis of someone who succeeds only through his personal resources—

muscles, voice, or charm, the natural, inalienable weapons of the man without social influence.

Consecration is rare and in part even unpredictable. It does not climax a conventional career. It is the reward of an extraordinary and mysterious convergence in which are compounded one's being magically gifted from infancy on, perseverance that no obstacle could discourage, and the ultimate test presented by the precarious but decisive opportunity met and seized without hesitation. The idol, for one, has visibly triumphed in an insidious, implacable, and confused competition, where success must come quickly—for these resources, which the most humble may have inherited and which may be the precarious lot of the poor, are time-bound; beauty fades, the voice cracks, muscles become flabby, and joints stiffen. Moreover, who does not at least vaguely dream of the fantastic possibility, which seems so near, of reaching the improbable heights of luxury and glory? Who does not desire to become a star or a champion? However, how many among this multitude of dreamers are discouraged by the first obstacles? How many come to grips with them? How many really think of some day braving them? That is why many prefer to triumph *vicariously*, through heroes of film or fiction, or better still, through the intervention of real and sympathetic characters like stars and champions. They feel, despite everything, that they are represented by the manicurist elected Beauty Queen, by the sales-girl entrusted with the heroine's role in a super production, by the shopkeeper's daughter winning the *Tour de France*, by the gas station attendant who basks in the limelight as a champion toreador.

There is doubtless no combination more inextricable than that of *agôn* and *alea*. Merit such as each might claim is combined with the chance of an unprecedented fortune, in order to seemingly assure the novice a success so exceptional as to be miraculous. Here *mimicry* intervenes. Each one participates indirectly in an inordinate triumph which may happen to him, but which deep inside him he knows can befall only one in millions.

In this way, everyone yields to the illusion and at the same time dispenses with the effort that would be necessary if he truly wished to try his luck and succeed.

This superficial and vague, but permanent, tenacious, and universal identification constitutes one of the essential compensatory mechanisms of democratic society. The majority have only this illusion to give them diversion, to distract them from a dull, monotonous, and tiresome existence.⁵⁶ Such an effort, or perhaps I ought to say such alienation, even goes so far as to encompass personal gestures or to engender a kind of contagious hysteria suddenly possessing almost all the younger generation. This fascination is also encouraged by the press, movies, radio, and television. Advertising and illustrated weeklies inevitably and seductively publish pictures of the hero or star far and wide. A continuous osmosis exists between these seasonal divinities and their multitude of admirers. The latter are kept informed with regard to the tastes, manias, superstitions, and even the most trivial details of the lives of the stars. They imitate them, copying their coiffures, adopting their manners, clothing, preferences, cosmetics, and diets. They live by them and in them, even to the extent that some are inconsolable when the stars die and refuse to survive them. These impassioned devotions exclude neither collective frenzy nor suicide waves.⁵⁷

It is obviously not the athlete's prowess nor the performer's art that provides an explanation of such fanaticism, but rather a kind of general need for identifying with the champion or the star. Such a habit quickly becomes second nature.

The star symbolizes success personified, victory and recompense for the crushing and sordid inertia of daily life, a triumph over the obstacles that society sets in the way of valor. The inordinate glory of the idol is a continuous witness to the possibility of a triumph which has already been of some benefit to, and which to some extent is due to, those who worship the hero. This exaltation, which seemingly consecrates the hero, flouts the

established hierarchy in brilliantly and drastically obliterating the fate imposed upon all by the human condition.⁵⁸ One also imagines such a career to be somewhat suspicious, impure, or irregular. The residue of envy underlying admiration does not fail to see in it a triumph compounded of ambition, intrigue, impudence, and publicity.

Kings are exempt from such suspicion, but their status, far from contradicting social inequality, on the contrary provides the most striking illustration of it. For one sees the press and public excited over the persons of monarchs, court ceremony, love affairs of princesses, and abdication of rulers, no less than over film stars.

Hereditary majesty, its legitimacy guaranteed by generations of absolute power, evokes an image of a symmetrical grandeur which derives from the historic past a more stable type of prestige than that conferred by a sudden and transitory success. To benefit from such decisive superiority, monarchs merely have to be born. Their merit is immaterial. They admittedly are uniquely privileged in that no effort, desire, or choice is even required—merely the pure verdict of absolute *alea*. Identification with them is therefore minimal. By definition, kings are part of a forbidden world into which admission is only by birth. They represent social inertia and order, together with the limits and obstacles that they place in the paths of both merit and justice, and not social mobility or chance. The legitimacy of princes seems like the supreme, if scandalous, incarnation of natural law. It literally crowns and destines for the throne a person distinguished by nothing but chance from those whom he is called upon to rule, by virtue of a blind decree of fate.

Because of this, the popular imagination needs to bring the one from whom it is separated by insurmountable barriers as close as possible to the common level. People desire that he be simple, sensitive, and above all unwed to the pomp and honors to which he is condemned. He is pitied, if he is in the least envious of others. It is evident that the simplest pleasures are forbidden to him, and it is stressed repeatedly that he is not free

to love, that he owes himself to the crown, etiquette, and affairs of state. A bizarre mixture of envy and pity thus surrounds the royal personage, and even while people acclaim kings and queens, they seek to persuade themselves that they are no different from them and that the scepter entails boredom, sadness, fatigue, and servitude, even more than it confers good fortune and power.

Queens and kings are depicted as avid for affection, sincerity, solitude, escape, and, above all, freedom. "I can't even buy a newspaper," said the Queen of England when she visited Paris in 1957. This is indeed a prototype of what is expected of sovereigns, and it seems to correspond to a basic popular need.

The press treats queens and princesses like stars of stage and screen, but stars in bondage to a unique, crushing, and fixed role that they can merely aspire to abandon. They are stars who have been trapped by the characters they play.

Even an equalitarian society leaves the lowly with small hope of rising above their disappointing existence. It condemns almost all of them to live out their lives within the very narrow range to which they were born. They are lulled by radiant visions which divert the ambition they have legitimately acquired in school and that life has shown to be chimerical. While the champion and the star illustrate the dazzling successes possible even to the most underprivileged, despotic court protocol is a reminder that the lives of monarchs are only happy to the degree that they retain something of the common touch, thus confirming that not too great an advantage accrues from even the most inordinate endowments of fortune.

These beliefs are strangely contradictory. Deceitful as they are, they nevertheless have an unavoidable lure. They declare a confidence in the gifts of chance when they favor the humble, and they deny the advantages that seem to assure, from the cradle, a brilliant destiny to the sons of the powerful.

Such prevalent attitudes are not odd. An explanation of their magnitude and stability is needed. They are part of the per-

manent social structure. The new social *game*, as has been seen, is defined in terms of the debate between birth and merit, between victory through proven superiority and the triumph of the luckiest. Moreover, while society rests upon universal equality and proclaims so, only the very few inherit or achieve a place at the top, and it is all too clear that no others can reach the top except through an inconceivable revolution. From such a stratified society arises the subterfuge of identification.

An elementary and benign imitation provides harmless compensation to the masses, who are resigned and have neither hope nor opportunity of attaining the luxury and glory by which they are dazzled. *Mimicry* is diffused and corrupted. Deprived of the mask, it no longer leads to possession and hypnosis, merely to the vainest of dreams. These dreams originate in the magic of a darkened auditorium or a sunny stadium, when all eyes are fixed upon the gestures of a dazzling hero. They are endlessly reinforced by publicity, press, and radio. The dreams vicariously captivate many thousands who are influenced by their favorite idols from afar and who live in imagination the sumptuous and full life dramatically described to them daily. Although the mask is no longer worn, except on rare occasions, and has no utility, *mimicry*, infinitely diffused, serves as a support or a balance for the new norms governing society.

At the same time *vertigo*, which has been even more displaced, no longer exercises, except in the corrupt form of alcohol and drugs, a permanent and powerful attraction. Like the mask or travesty it is no longer, properly speaking, play, i.e. regulated, circumscribed activity separated from real life. These foregoing episodic roles certainly do not exhaust the virulence of the forces of simulation and trance, which are now subdued. That is why they erupt in hypocritical and perverse form, in the midst of a world which inhibits and normally does not recognize them.

It is time to conclude. The question was merely one of showing how the mainsprings of play complement each other. This

involves a dual analysis. On the one hand, vertigo and simulation, which together lead to the alienation of individuality, are dominant in a type of society in which neither competition nor chance is excluded. But competition has not been systematized in that society and has very little place in its institutions. Even when present, it is most often a mere test of strength or comparative prestige. In addition, this prestige is often magical in origin and nature, derived from trances and spasms and based upon masks and mimicry. As for chance, it is not an abstract expression of a statistical coefficient, but a sacred sign of the favor of the gods.

On the other hand, regulated competition and the verdict of chance, implying both exact calculation and speculation intended to assign risks and rewards equitably, constitute complementary principles in another type of society. They create law, i.e. a fixed, abstract, and coherent code, so profoundly modifying the social norms that the Roman adage "*Ubi societas, ibi ius,*" presupposing as it does an absolute correlation between society and law, seems to affirm that society itself begins with this revolution. Ecstasy and pantomime are not unknown in such a universe, but when found there they are, so to speak, *déclassé*. In normal times they are absent except in meager, weak, or chastened forms, mostly harmless and vicarious. However, their magnetic power is still sufficient to suddenly precipitate a crowd into a monstrous frenzy. History provides enough strange and terrible examples of this, from the Children's Crusade in the Middle Ages to the orchestrated vertigo of the Nazi rallies at Nuremberg. There are the numerous epidemics of jumpers, dancers, epileptics, and flagellants, the Münster Anabaptists of the sixteenth century, the Ghost Dance religion of the Sioux at the end of the nineteenth century—as yet badly adapted to the new culture pattern—the "revival" in Wales in 1904 and 1905, and many other sudden, irresistible, and at times devastating, contagions that contradict the norms of the civilization that support them.⁵⁹ A recent example, typical but more localized, is

provided by the rioting of Stockholm adolescents on New Year's Eve, 1957, an incomprehensible explosion of a passion for silent and willful destruction.⁶⁰

These excesses or paroxysms could no longer be the rule, nor appear as the time or sign of fortune, as an expected and revered explosion. Possession and mimicry no longer lead to anything but an incomprehensible aberration, transitory and horrible like war, which seems the modern equivalent of primitive festivals. The madman is no longer regarded as the medium of a god by whom he is possessed. He is not viewed as a prophet or healer. By common agreement, authority is allied with calm and reason, not with frenzy. It was also necessary to correlate dementia and the festival—every Dionysian revelry, whether born of the delirium of one possessed or the effervescence of a multitude. For this price the city could be born and grow, men could pass from the illusory, magical, sudden, total, and vain mastery of the universe to the slow but effective technical control of natural resources.

The problem is far from resolved. Still ignored is the fortunate series of decisive choices that enables certain rare cultures to slip through the narrowest crack, to win the most unlikely bet—choices that introduce into history, which at the same time sanctions it, an undirected aspiration; thanks to these fortunate choices the authority of the past ceases to paralyze the power to innovate and progress—heritage replaces obsession.

The group that can hold to such a wager escapes from the kind of time that lacks a usable past or a sense of the future—a time in which it can only wait for the cyclical return of the masked gods, imitated at fixed intervals in complete unconsciousness of self. Such a group engages in an audacious and creative venture, which is linear rather than periodically returning to the same point—experimental, exploratory, endless: the very adventure of civilization.

It would certainly be unreasonable to conclude, in the attempt to prove a definite hypothesis, that it was ever sufficient for a

group to challenge the ascendancy of the *mimicry-ileinx* combination and substitute for it a universe in which merit and chance, *agôn* and *alea*, would rule. As to this we can only speculate. But that this rupture accompanies the decisive revolution and is involved in correctly describing it, even where its effects are almost imperceptible, can hardly be denied; indeed, this may be so obvious as not to require emphasis.

Revivals in the Modern World

Since *mimicry* and *ilinx* are always tempting to man, it is not easy to eliminate them from social life at the point where they have become merely children's amusements or aberrant behavior. As careful as one may be in discrediting their power, discouraging their use, and controlling or neutralizing their effects, mask and possession still remain quite menacing. It may therefore be necessary to concede them some outlet, no doubt limited and harmless but noisy and at least bordering upon their vaguely mysterious and thrilling pleasures, upon panic, stupor, and frenzy.

In this way, savage explosive powers are unleashed that may suddenly become a dangerous paroxysm. In addition, their major force derives from their being paired. In order to subdue them more easily there is nothing better than to divide their strength and ban their combining. Simulation and vertigo, mask and ecstasy, have always been allied in the unique and hallucinated universe that survives because of their collusion. Henceforth they can no longer be present, except in disjointed, at-

tenuated, and isolated form, in a world that denies them and which prospers only to the degree that it succeeds in containing or duping their irresponsible violence.

In effect, the mask necessarily loses its power of metamorphosis in a society freed from bondage to the *mimicry-ilinx* combination. The wearer of the mask no longer feels that he is the reincarnation of the monstrous powers whose inhuman visage he has donned. Those whom he frightens can no longer be harmed by the strange apparition. The mask itself has changed its appearance and also, in large measure, its purpose. In fact, it has acquired a new, strictly utilitarian role. As a means of disguise for the malefactor seeking to hide his identity, it does not intrude a new presence but protects him from being recognized. Besides, what good is a mask? A handkerchief would do. A mask is rather a mechanism for protecting the respiratory organs in a contaminated environment or assuring a supply of needed oxygen to the lungs. In both cases, the traditional function of the mask is remote.

The Mask and the Uniform

As George Buraud has aptly observed, modern society is scarcely aware of the two survivals of the sorcerer's mask: the black mask and the grotesque carnival mask. The black mask, the mask reduced to its essentials, elegant and abstract, has long been associated with erotic fetes and with conspiracies. It characterizes equivocally sensual intrigues and mysterious plots against the powers that be. It is the symbol of amorous or political intrigue.⁶¹ It is disturbing and somewhat of a thrill. At the same time, it assures anonymity, protects, and liberates. At a ball, it is not merely two strangers who hold and dance with each other; they are two beings who symbolize mystery and who are already bound by a tacit promise of secrecy. The mask ostensibly liberates them from social constraints. In a world in which sexual relationships are subject to many taboos, it is

noteworthy that the black mask, named after a wild and predatory beast,⁶² traditionally symbolizes the means and often the announced decision to violate these taboos.

The entire intrigue is conducted like a game, i.e. conforming to pre-established conventions, in an atmosphere and within limits that separate it from and do not entail any consequences for ordinary life.

In origin, the carnival is an explosion of license that, even more than the costume ball, requires disguise and is founded upon the liberty that it facilitates. Enormous, comic, and exaggeratedly painted cardboard masks are the equivalent on the popular level of the black mask of high society. This time, it is no longer a question of gallant adventures, of complicated intrigues along with clever repartee in which the partners attack and retreat, each in turn. Carnival masks involve instead indecencies, jostling, provocative laughter, exposed breasts, mimicking buffoonery, a permanent incitement to riot, feasting, and excessive talk, noise, and movement. Masks are a brief compensation for the decency and prudence that must be observed the rest of the year. The masked ones approach and act as if they are terrifying. The passer-by, playing the game, makes believe that he is afraid, or conversely, that he is not afraid. If he becomes angry, he is disqualified. In refusing to play, he fails to understand that the social conventions have been momentarily replaced by others intended to flout them. In a delimited time and space, the carnival results in disorder, violence, cynicism, and unbridled instinct. However, it leads at the same time to disinterested, idle, and joyous activity, to a *jeu bouffon*, to use G. Burraud's exact expression, and further, is not thought of as a game. But no one is deceived. This ultimate decadence of sacred *mimicry* is nothing but a game, and possesses most of the characteristics of a game. Basically, it is nearer to *paidia* than to *ludus*, wholly related to anarchic improvisation, Dionysianism, and gesticulation, a pure release of energy.

Even this is too much. Order and moderation are soon imposed upon this effervescence, and it all ends in parades, blos-

som festivals, and costume competitions. On the other hand, the authorities are so well aware that masks are a vital source of release that they were content merely to ban them alone as in Rio de Janeiro, when the general frenzy threatened for a dozen consecutive years, to reach proportions incompatible with the simple functioning of public services.

In a police state, the uniform replaces the mask of a vertiginous society. The uniform is almost the exact opposite of the mask, and always symbolizes a type of authority founded on entirely opposing principles. The mask aimed to dissimulate and terrify. It signified the eruption of a fearful, capricious, intermittent, and inordinate power, which emerged to evoke pious terror in the profane masses and to punish them for their imprudence and their faults. The uniform is also a disguise, but it is official, permanent, regulated, and, above all, leaves the face exposed. It makes the individual a representative and a servant of an impartial and immutable rule, rather than the delirious prey of contagious vehemence. Behind the mask, the face of the possessed, when repelled, can assume a haggard or tortured expression with impunity, while the official must be careful that his bare face reveal nothing but calm and rationality, the face of a person specially charged with administering the law. Perhaps there is no better or more striking indication of the contrast between these two types of society than in these two distinctive appearances—one that disguises and the other that proclaims—and between those upon whom devolves the responsibility for preserving such contrasting types of social order.

The Traveling Fair

Apart from modest resort to rattles and drums, roundelay and farandoles, the carnival is strangely lacking in instruments and occasions of vertigo. It seems disarmed, reduced to the minimal yet considerable resources derived from wearing masks. The proper domain of vertigo is elsewhere, as if a special wis-

dom had prudently dissociated the powers of *ilinx* and *mimicry*. Fairgrounds and amusement parks, where by contrast the wearing of masks is not customary, in compensation constitute special places in which are found the seeds, snares, and lures of vertigo.

These surroundings exhibit the basic characteristics of playing fields. They are separated in space by porticoes, hedges, ramps, luminous signs, posts, flags, and all kinds of decorations that are visible from a distance and which demarcate the boundaries of a consecrated universe. In fact, once the frontier is crossed, one finds himself in a world that is peculiarly more crowded than that of ordinary life. It is a world of excited and noisy throngs, a debauch of color and light, of ceaseless and exhausting motion to the point of satiety, in which one may easily accost others or try to attract attention to oneself and which is conducive to freedom, familiarity, boastfulness, and debonair impudence. All this adds a peculiar atmosphere to the general animation. Where traveling fairs are involved, their seasonal character also adds a time dimension to the spatial separation, thus opposing a time of paroxysm to the monotonous routine of daily life.

As has been observed, the fair and the amusement park seem to be the proper domain of vertigo-inducing contraptions—machines for rotation, oscillation, suspension, and falling, constructed for the purpose of provoking visceral panic. However, all the categories of play are concurrently and seductively involved. Shooting guns or arrows are competitive games of skill in the most classic form. The booths of wrestlers are an invitation to everyone to measure his strength against that of the bemedaled, corpulent, breast-plated champions. Further on one encounters an incline that precariously balances at one end a chariot laden with numerous, heavy weights.

Lotteries are everywhere. Wheels spin, deciding the winner at the point where they stop. The tension of *agôn* alternates with the anxious anticipation of fortune's favor. Fakirs, fortunetellers, and astrologers predict the future or read the stars. They employ secret techniques newly discovered by science, "nuclear

radioactivity," or "existential psychoanalysis." Thus is satisfied the taste for *alea* and for superstition that damns one's soul.

Mimicry is also present. Jesters, clowns, ballerinas, and mummers parade and cavort in order to lure the public. They are examples of the attraction of simulation and the power of travesty, which they monopolize, since the crowd on this occasion is not permitted to wear disguises.

However, the dominant atmosphere is that of vertigo. To begin with, there are the huge, impressive, and complicated engines that cause intoxication at three- to six-minute intervals. Little cars travel on arc-shaped, almost perfectly circular tracks, so that the vehicle, before straightening out, seems to fall freely and the passengers strapped to the seat have the impression that they are falling with it. In addition, the patrons are enclosed in swinging cages which turn them upside down high above the crowd. In a third contraption, the sudden release of gigantic springs catapults cars to the end of a track; they are slowly returned to their starting place to be projected outward again. All is calculated to stimulate thrills, fright, and panic through speed, falling, shaking, and accelerated gyrations combined with alternating ascents and descents. And lastly, there is an invention which utilizes centrifugal force. While the floor slopes downward and sinks several yards, the stunned patrons, with nothing to lean on, their bodies sprawled in all kinds of postures, are glued to a giant cylinder. They lie there "like flies on flypaper," to quote from the establishments' publicity.

These physical sensations are reinforced by many related forms of fascination designed to disorient, mislead, and stimulate confusion, anxiety, nausea, and momentary terror, quickly transformed into laughter upon getting off the contraption, a sudden transition from physical disorder to ineffable relief. This is the function of labyrinths of mirrors and of freak shows exhibiting giants, dwarfs, mermaids, creatures that are half-child and half-monkey or half-woman and half-octopus, men whose skins have dark spots like those of leopards. The horror is compounded by being invited to touch them. Facing these attractions

are the no less ambiguous seductions of phantom trains and gloomy, haunted houses filled with apparitions, skeletons, entangling spider webs, bats' wings, trap doors, drafts, unearthly cries, and many other equally puerile effects, a naive arsenal or miscellany of terror, adequate to exacerbate nervousness grown complacent and generate a fleeting horror.

Games involving glass, special effects, and ghosts all lead to the same result—the creation of a fictional world in desired contrast with the ordinary life that is dominated by the conventional species and from which demons have been banished. The disconcerting reflections that multiply and distort the shape of one's body, the hybrid fauna, legendary monsters, nightmarish defectives, the grafts of an accursed surgery, the sickly horror of embryonic gropings, larvae, vampires, automatons, and Martians (for everything that is strange or disturbing is of use here), supplement on another level the wholly physical thrill by which the vertiginous machines momentarily distort one's sensory stability.

Is a reminder necessary that all of this is still play, i.e. free, isolated, limited, and regulated? First comes vertigo, and then intoxication, terror, and mystery. Sometimes the sensations are frightfully brutal, but the duration and intensity of the shock are controlled in advance. For the rest, everyone knows that the phantasmagoria is make-believe and intended to entertain rather than really injure. Everything is regulated in great detail and conforms to one of the more conservative traditions. Even the delicacies on display in the confectioners' stalls have something changeless about their nature and appeal, viz. nougats, jelly apples, or gingerbread cake on a glazed paper plate decorated with medallions and long, bright fringes, or gingerbread pigs with the first name of the buyer imprinted on them.

It is pleasure founded upon excitement, illusion, and disorder that has been agreed to, falling and being caught, blunted shocks and harmless collisions. A perfect example of such recreation is furnished by the colliding autos in which, to the pleasure of being at the wheel (the serious, almost solemn faces of some

drivers should be observed), is added the elemental joy reminiscent of *paidia*, quarreling, pursuing other vehicles, outflanking them, barring their passage, endlessly causing pseudo-accidents with no damage or victims, doing exactly and until sated what in real life is most strictly forbidden.

For those old enough, on the mock auto raceway just as elsewhere at the fair, in every panic-inducing machine, on every frightening ride, the effects of dizziness and terror are joined to produce an added diffuse and insidious anguish and delight, that of seeking a sexual liaison. At this point one leaves the realm of play as such. At least in this respect, the fair approximates the masqued ball and the carnival, presenting the same propitious atmosphere for the desired adventure, with one significant exception. Vertigo has replaced the mask.

The Circus

The circus is a natural part of the traveling fair. This is a segregated society with its own costumes, pride, and laws. It comprises a population jealous of its special character, proud of its isolation, and endogamous. Its professional secrets are transmitted from father to son. As far as possible, it settles its own differences without resorting to the courts.

Lion tamers, jugglers, equestriennes, clowns, and acrobats are subjected to a rigorous discipline from infancy. All dream of perfecting their numbers to the least detail in order to assure success and—in an emergency—safety.

This closed and rigorous universe constitutes the austere side of the fair. The decisive sanction of death is necessarily present, for the lion tamer just as for the acrobat. It forms part of the tacit agreement that binds the performers and the spectators. It enters into the rules of a game that anticipates a total risk. The unanimity of circus people in refusing the net or cable that would protect them from a tragic fall speaks for itself. It is necessary

for the state to impose such safety devices against their stubborn resistance, but this falsifies the totality of the wager.

For circus people the big top represents not merely a profession but a way of life, not really comparable to sports, casino, or stage for champions, gamblers, or professional actors. In the circus there is added a kind of hereditary fatalism and a much sharper break with ordinary life. Because of this, circus life, strictly speaking, cannot be regarded as synonymous with play. And yet, two of its traditional activities are literally and significantly associated with *ilinx* and *mimicry*. I allude to the tightrope and the universality of certain kinds of clowning.

The Tightrope

Sports is the profession corresponding to *agôn*; a special way of courting chance is the profession or rather the denial of a profession associated with *alea*; and the theater is comparable to *mimicry*. The tightrope is the profession corresponding to *ilinx*. In fact, vertigo is not merely an obstacle, difficulty, or danger on the tightrope. The flying trapeze goes beyond mountain climbing, forced recourse to parachute jumping, and those occupations requiring the worker to do his job high over the earth. On the high wire, the very heart of prowess and the only aim is to master vertigo. The game consists expressly in moving through space as if the void were not fascinating, and as if no danger were involved.

An ascetic existence is necessary to obtain this supreme skill. It involves a regime of severe privation and strict continence, ceaseless exercise, continuous repetition of the same movements, and the acquisition of impeccable reflexes and faultless responses. Somersaults are performed in a state bordering upon hypnosis. Supple and strong muscles and imperturbable self-control are necessary conditions. To be sure, the acrobat must calculate the effort, time, distance, and trajectory of the trapeze. But he lives in terror of thinking of it at the decisive moment,

when it nearly always has fatal consequences. It paralyzes instead of aiding, at a moment when the least hesitation is disastrous. Consciousness is the killer. It is disturbing to his somnambulistic infallibility and compromises the functioning of a mechanism whose extreme precision cannot tolerate doubts or regrets. The tightrope walker only succeeds if he is hypnotized by the rope, the acrobat only if he is sure enough of himself to rely upon vertigo instead of trying to resist it.⁶³ Vertigo is an integral part of nature, and one controls it only in obeying it. These games are always comparable to the exploits of the Mexican *voladores*, affirming and exemplifying the natural creativity involved in mastering *ilinx*. Aberrant disciplines, heroic feats accomplished to no purpose or profit, disinterested, mortally dangerous and useless, they are of merit in furnishing admirable witness, even if not generally recognized, to human perseverance, ambition, and hardiness.

The Parody of the Gods

Clowns' pranks are innumerable. They depend upon individual caprice and inspiration. There is, however, a kind of clowning that is especially persistent, seeming to attest to a very ancient and salutary human preoccupation—that of the grotesque imitation of a serious mimic by a ridiculous character doing everything in reverse. At the circus, this is the function of the Auguste, or chief clown. His clothes are patched and ill-fitting (either too large or too small), and his wig is bushy and red, in contrast to the spangled brilliance and white caps worn by the other clowns. The wretch is incorrigible. Being pretentious and awkward at the same time, he tries desperately to imitate the others, but only succeeds in provoking catastrophes of which he is the victim. He is inevitably mistaken, evoking laughter and blows as well as being drenched by buckets of water.

This buffoon is now part of mythology. He symbolizes the

hero-dunce, mischievous or stupid as the case may be, who has been mocking the work of the gods by his fumbling imitation of their gestures ever since the creation of the world, and on occasion introducing intimations of mortality.

The Navajo Indians of New Mexico celebrate a festival named after the god Yebitchaï in order to cure disease and obtain the benediction of the spirits for the tribe. The principal actors are masked dancers impersonating the divinities, fourteen in number. Six of them are male spirits, six are female, one is Yebitchaï himself, the "talking god," and finally there is Tonenili, God of the Water. The latter is the troupe's *Auguste*. He wears the same mask as the male spirits, but he is clad in rags and he drags an old fox skin, which is attached to his belt. He purposely dances out of step in order to confuse the others and he acts foolishly. He makes believe that his fox skin is alive and shoots arrows at it, in pantomime. Above all, he apes and ridicules the noble attitudes of Yebitchaï. He puffs himself up and acts important, because he now is important. He is one of the principal Navajo gods, the god of parody.

Among the Zuni, who inhabit the same region, ten of the supernatural beings whom they call Kachinas are separate from the others. These are the Koyemshis. It seems that when the world was new, the son of a priest committed incest with his sister, and nine children were born of this forbidden union. They are frightfully ugly, comically as well as repulsively so. They are also infantile—lispings, retarded, and sexually immature and exhibitionistic. People observing this say it is not important, "for they are childlike." Each of them has a unique personality, from which is derived a special kind of comic behavior, which is always the same. Thus, Pilaschiwanni is the coward, always simulating fear. Kalutsi is always supposed to be thirsty. Muyapona makes believe that he is invisible and hides behind any small object. He has a round mouth, two bumps in place of ears, another bump in front, and two horns. Posuki laughs continuously, has a vertical mouth and several bumps on his face. Nabashi, in contrast, is sad; his mouth and eyes form a balcony

and he has an enormous wart on his scalp. The band thus performs like a troupe of identifiable clowns.

Magicians, prophets, and those who reincarnate them with horribly shaped masks are subjected to rigorous fasts and numerous penances. It is also expected that those who agree to become Koyemshis will devote themselves to the common good. They are feared during the time that they are masked. Whoever refuses them a gift or a service risks disorder. At the end of the most important festival, Shalako, the entire village rewards them with many gifts—food, clothing, and money—which are later formally displayed. During the ceremonies they mock the other gods, organize riddle contests, play vulgar pranks, engage in a thousand buffooneries, and bait the audience, reproaching one for his avarice, commenting on the marital difficulties of a second, and ridiculing a third for living like a white man. This behavior is strictly liturgical.

What is remarkably significant about the Zuni and Navajo parodies of the gods is that the masked characters are not subject to possession and their identities are not hidden. One knows that relatives and friends in costume are involved. If one fears and respects the spirits they incarnate, they are not taken for the gods themselves. Theology confirms this, relating that once upon a time the Kachinas came in person to men in order to assure their prosperity, but they always took a certain number—by enchantment or by force—to go with them to the Land of the Dead. Seeing the fatal consequences of the visits that they intended to be beneficent, the masked gods decided that they would no longer visit the living in person, merely in spirit. They asked the Zuni to fabricate masks similar to theirs, promising to come and inhabit these guises. In this way, the conjuring of secrecy, mystery, terror, ecstasy, mimicry, coma, and anguish, which is so powerful and prevalent in other societies, is not present in Zuni society. There is a masquerade without possession, and an evolution of magic ritual toward ceremony and

spectacle. *Mimicry* definitely leads to *ilinx* instead of having the subordinate function of introducing it.

One specific fact adds to the resemblance between the Auguste or circus clown and the parody of the gods. At one or another moment, they are drenched, and the public is enthralled by seeing them streaming water and terrified by the unexpected deluge. At the summer solstice, Zuni women throw water from atop the terraces upon the Koyemshis, after they have visited all the houses in the village, and the Navajos explain Tonenili's rags by saying that they are good enough to clothe someone who is going to be soaked.⁶⁴

Whether or not there is a connection, mythology and the circus join in clarifying one particular aspect of *mimicry*, the social function of which is indisputable—viz., satire. To be sure, it shares this characteristic with caricature, epigram, and song, with the court jesters who regale conquerors and monarchs with their buffoonery. It is no doubt fitting to see in this cluster of institutions, so diverse and widespread, yet inspired by an identical aim, the expression of the same need for equilibrium. Excessive dignity requires a grotesque counterpart—for popular reverence and piety, homage to the great, and honor to supreme power run the dangerous risk of turning people toward anyone who assumes the responsibility or wears the mask of a god.

The faithful do not agree to be entirely captivated, nor do they deem to be without danger the frenzy that can seize the idol dazzled by his own grandeur. In this new role, *mimicry* is not a springboard toward vertigo, but a precaution against it. If the decisive and difficult leap, or the narrow door that gives access to civilization and history (to progress and to a future), coincides with the substitution, as bases of collective existence, of the norms of *alea* and *agôn* for the prestige of *mimicry* and *ilinx*, it is certainly proper to investigate through what mysterious and highly improbable good fortune certain societies have succeeded in breaking the vicious circle of simulation and vertigo.

It is surely a special road which puts man on the brink of so fearful a spell. It has been seen how the Lacedaemonian sorcerer became a legislator and pedagogue, the masked band of wolf-men evolved into a political police, and frenzy ultimately became institutionalized. Here we have another provocative development, more fecund, more propitious for the development of grace, liberty, and invention, always oriented toward equilibrium, detachment, and irony and not toward the pursuit of an implacable and perhaps, in its turns, a vertiginous domination. Evolution does not rule out the emergence of the first fissure, destined after a thousand vicissitudes to destroy the all-powerful coalition of simulation and vertigo, through a strange, almost imperceptible innovation, apparently absurd and doubtless sacrilegious. This is the introduction into the band of masked divinities of characters of equal rank and identical authority, charged with parodying their bewitching mimes, and tempering by laughter what might end fatally in trance and hypnosis, were this antidote absent.

ADDENDA

The Importance of Games of Chance

Even in an industrial civilization, founded on the value of work, the taste for games of chance remains extremely powerful, the exact opposite of what is involved in earning money, described in Théodule Ribot's formula as "the fascination of acquiring a lot of money all at once, and without effort."⁶⁵ From this is derived the abiding attraction of lotteries, gambling houses, and the pari-mutuels at horse races and football games. For the assured but ill-esteemed rewards of patience and effort there is substituted the seductive mirage of sudden wealth, leisure, and luxury. For the masses who work hard and earn little, the prospect of getting rich quickly seems the only way to ever emerge from lowly or wretched status. Play mocks at work and represents a competing attraction which, at least in some cases, assumes sufficient importance to partly determine the life-style of an entire society.

The cultural creativity of these considerations is not proved, even though they sometimes contribute a socioeconomic function to games of chance. Instead they are suspected of encouraging indolence, fatalism, and superstition. It is agreed that studying their laws contributed to the discovery of the theory of probability, to topology and the theory of strategic games. But they are not regarded as capable of providing a model for depicting the real world or unwittingly structuring a kind of embryonic, encyclopedic knowledge of it. Moreover, fatalism and strict determinism, to the degree that they deny free will and responsibility, view the entire universe as a gigantic, general, obligatory, and endless lottery in which each drawing inevitably implies the possibility or even the necessity of participating in the next drawing, and the next, and the next, *ad infinitum*.⁶⁶ Also, among leisure classes whose work is insufficient to absorb their energies or occupy all their available time, games of chance frequently acquire an unexpected cultural significance which influences their art, ethics, economy, and even life experience.

It may even be asked whether this phenomenon may not be characteristic of those societies in transition no longer governed by the combined powers of mask and possession or pantomime and ecstasy but which have not yet attained a social system based upon institutions where regulated and organized competition play an essential role. What happens specifically is that peoples suddenly find themselves rid of the domination of simulation and trance through contact with cultures that, thanks to a slow and difficult evolution, have long been free of this infernal bondage. The peoples so influenced are in no way prepared to adopt the new way of life. The transition is too abrupt. In this case it is not *agôn*, but *alea* that imposes its pattern upon the society undergoing change. Submission to what is decided by lot is agreeable to these indolent and impatient beings whose basic values are no longer operable. What is even better, through resort to superstition and magic assuring them of the favor of the powers-that-be, this immutable and simple norm

again links them to their traditions and in part restores their original world. Furthermore, under these conditions, games of chance suddenly attain unexpected significance. They tend to replace work, provided the climate is suitable and the need for food, clothing, and shelter does not force them, like others more vulnerable, into regular activity. A drifting mass of people has no very compelling needs. It lives in the present and is protected by a government in which it takes no part. In lieu of submitting to the discipline of monotonous and discouraging labor, it devotes itself to play. In the end games of chance determine the beliefs, knowledge, habits, and ambitions of these nonchalant addicts, who no longer govern themselves and yet find it extremely difficult to adapt themselves to another culture, so that they are left to vegetate on its periphery, eternal children.

I shall cite briefly several examples of the peculiar success of games of chance, to the point where they become habitual, routine, and second nature. They influence the life-style of an entire culture, for no one seems capable of resisting their contagion. I will begin with a case in which there has been no culture contact, and the traditional values have therefore remained intact. Playing dice is very widespread in Southern Cameroun and Northern Gabon. It is played with the aid of figures cut into the exceptionally tough wood, of the consistency of bone, from a tree that provides an oil more valuable than palm oil (*Baillonella Toxisperma*). The dice have only two faces. On one side is etched a symbol whose power is stronger than that of competing signs.

These quasi-heraldic designs are numerous and varied. They constitute a kind of visual encyclopedia. Some represent persons, perhaps depicted in ritual, enacting a dramatic scene or engaged in the pursuit of the multiplicity of occupations involved in daily life. A child attempts to speak to a parrot, a woman traps a bird for her dinner, a man is attacked by a python, another loads his gun, three women till the soil, etc. Carved on other dice are graphic symbols depicting various plants, the female genitalia, the night sky with moon and stars.

Animals—mammals, birds, reptiles, fish, and insects—are abundantly represented. A last series of designs refers to the things carried by the player—axes, guns, mirrors, drums, watches, or dance masks.

These heraldic dice are also amulets which may help their owner gratify his least desire. He does not generally keep them at home, but in the woods, enclosed in a sack and hanging from a tree. On occasion they may be used to communicate messages.

As for the game itself, it is relatively simple. In principle, it is comparable to the game of heads or tails. All players take equal risk. The outcome is decided by means of seven calabash fragments thrown with the dice. If fewer pieces of calabash have fallen "tails," the players whose dice have also fallen "tails" win the game, and vice versa. The game has caused such addiction that it had to be forbidden by the authorities. It precipitated most serious disturbances. Husbands wagered their wives, chiefs played for the men under their command, brawls were frequent, and clan warfare even arose from the hot disputes engendered.⁶⁷

It is a simple game, without refinements or continuity. In addition, one easily perceives at what point it has important repercussions for culture and collective behavior, wherever it is highly regarded. All in proper proportion, the symbolic and encyclopedic richness of the emblems is comparable to that of the capitals of Roman columns; at least it fulfills an analogous function. It is also born of the necessity to carve in relief, on the side of each die, a design that will serve to differentiate the plastic arts of each tribe in the region. Above all, the ravages provoked by the passion for gambling, sometimes reaching disastrous proportions, must be stressed.

These characteristics are not at all unique. They are also found in even more complex games of chance which exercise an analogous fascination in mixed societies, and with just as serious consequences.

A striking example is furnished by the success of the "Chinese charade" (*Rifa Chiffá*) in Cuba. This lottery, described by Lydia

Cabrera as "an incurable cancer of the economy," is played by means of a Chinese figure divided into thirty-six parts, to which are assigned an equal number of symbols—human, animal, or allegorical—e.g. horses, butterflies, sailors, nuns, tortoises, snails, dead men, steamships, precious stones (which may represent beautiful women), shrimp (also, the male sex), she-goats (also, a sordid affair or the female genitalia), monkeys, spiders, pipes, etc.⁶⁸ The banker places a corresponding series of designs in a carton or box. One of these is drawn by lot, wrapped in a piece of cloth, and shown to the players. The operation is called "hanging the animal." Next, he proceeds to sell tickets, each of which bears the Chinese character standing for one or another figurine. Meanwhile, his confederates go through the streets taking bets. At a designated time, the emblem is unwrapped, and the winners receive thirty times what they have wagered. The banker gives ten per cent of his profits to his agents.

The game thus turns out to be a more embellished version of roulette. However, while in roulette all numerical combinations are possible, the symbols of *Rifa Chiffá* are assembled according to mysterious affinities. In effect, each possesses or does not possess one or more companions and valets. Thus, the horse has the precious stone for a companion and the peacock for a servant; the big fish has the elephant for a companion, but the tortoise is his valet. Conversely, the shrimp has the deer for a companion, but no servant. The deer has three companions—the shrimp, the goat, and the spider—but has no valet, etc. Naturally, it is necessary to play the chosen symbol, his companion, and his valet at the same time.

In addition, the thirty-six lottery emblems are grouped in seven unequal series (*cuadrillas*)—merchants, gentlemen, drunkards, priests, beggars, cavaliers, and women. Moreover, the principles dominating the division now seem more obscure. For example, the priest series is composed of the big fish, tortoise, pipe, eel, cock, nun, and cat. The drunkard series contains the dead man, snail, peacock, and little fish. The universe of the game is ruled by this strange classification. At the beginning

of each game, after having "hung the animal," the banker announces a charade (*charada*) intended to guide (or mislead) the participants. What is involved is an intentionally ambiguous statement such as the following: "A man on horseback is riding very slowly. He is not stupid, but drunk, and he and his companion make a lot of money."⁶⁹ As a result, the player imagines that he ought to play the drunkard or cavalier series. He can also bet on the animal commanded by one or the other. However, there is no doubt another, less clearly expressed word which provides the clue to the charade.

Another time the banker declares, "I want to do you a favor. The elephant kills the pig. The tiger suggests it. The deer goes to sell it and carries the package." An experienced player explains his reasoning:

The toad is a sorcerer, the deer is the sorcerer's helper. He carries the evil package which contains the black magic that an enemy has contrived against someone. In this case, the tiger against the elephant. The deer leaves with the package in order to place it where the sorcerer told him to. Quite clever, isn't it? Very clever! Thirty-one, the deer, will win, because the deer starts off at a run.

The game is Chinese in origin.⁷⁰ In China, an enigmatic allusion to the traditional texts takes the place of the charade. A scholar, after the drawing, was charged with justifying the true solution, supported by citations. In Cuba, a comprehensive knowledge of Negro beliefs is needed for the correct interpretation of the charades. The banker announces: "A bird pecks and goes away." Nothing is more transparent. The dead fly. The soul of a dead man is comparable to a bird because it can go anywhere at will, in the form of an owl. These are souls in pain, famished and vindictive. "Pecks and goes away," i.e. causes the sudden death of a living person who was suspicious. It is therefore necessary to play 8, the dead man.

The "dog that bites everybody" is the language of attack and calumny; the "light that shines everywhere" is 11, the cock that crows at dawn; the "king who can do everything" is num-

ber 2, the butterfly who is also money; the "clown who paints himself in secret," 8, the dead man covered with a white shroud. This time the explanation is valid only for laymen. In reality, initiation is required (*ñampe* or *ñañigo muerto*). In fact, the priest, in a secret ceremony, draws ritualistic signs with white chalk on the face, hands, chest, arms, and legs of the initiate.⁷¹

A complicated and fantastic system of dream interpretation is also of help in guessing the lucky number. Its combinations are infinite. The facts of experience are assigned prophetic numbers. These go up to 100, thanks to a book kept at the Charade bank, which can be consulted by telephone. This repertory of orthodox concordances gives rise to a symbolic language considered "very valuable for penetrating life's mysteries." In any case, the result is that the image frequently replaces the number. At the home of his wife's uncle, Alejo Carpentier sees a young black boy adding

$$2 + 9 + 4 + 8 + 3 + 5 = 31$$

The boy does not enunciate the numbers but says, "Butterfly, plus elephant, plus cat, plus dead man, plus sailor, plus nun equals deer." Again, to indicate that 12 divided by 2 equals 6, he says, "Whore by butterfly equals tortoise." The signs and concordance of the game are extrapolated to all knowledge.

The Chinese Charade is widely diffused, even though forbidden by Article 355 of the Cuban Penal Code. Since 1879, numerous protests against its evils have been made. Above all, there are workers who risk not only what little money they have but also what is needed to feed their families. Of necessity, they do not play much, but persistently, since they hang "the animal" four to six times daily. It is a game in which fraud is relatively easy. Since the banker is familiar with the list of bets, nothing prevents him from cleverly changing, at the moment of such discovery, the symbol on which bets have dangerously accumulated for another which has been almost completely ignored.⁷²

In any event, whether honestly or dishonestly, the bankers rapidly grow rich. It is said that, in the last century, they earned

up to 40,000 pesos daily. One of them returned to his country with a capital of 200,000 pesos in gold. It is estimated that today [1957] in Havana there are five large and more than twelve small Charade organizations. More than \$100,000 *per day* is bet there.⁷³

On the neighboring island of Puerto Rico, the Planning Board estimated the sums invested in various games in 1957 at \$100 million per annum, about half the island's budget, of which \$75 million was for legal gambling (state lottery, cockfighting, horse-racing, roulette, etc.). The report said: "When gambling reaches these proportions it undoubtedly constitutes a serious national social problem . . . [It] injures personal savings, adversely affects business operations, and stimulates the person to put more trust in gambling than in constructive work . . ." Impressed by these conclusions Governor Luis Muñoz Marin decided to re-enforce the gambling laws, in order to keep gambling expenditures during the next decade to proportions less disastrous to the national economy.⁷⁴

In Brazil, the *Jogo do Bicho* or animal game has the same characteristics as the Chinese Charade in Cuba. It is a semi-clandestine lottery utilizing symbols and multiple combinations, with an enormous organization and daily bets absorbing an important part of the little money at the disposal of the lower strata of the population. In addition, the Brazilian game has the advantage of being a perfect illustration of the relationship between *alea* and superstition. It also has such important effects upon the economic order that I feel justified in reproducing the description of it that I once published for another purpose.

In its present form this game goes back to about 1880. Its origin is attributed to Baron de Drummond's custom of each week affixing the effigy of some animal to the entrance of the zoological garden. The public was invited to guess which animal would be chosen each time. A pari mutuel was thus born which survived its source and which permanently associated the figures of the posted animals with a series of numbers. The game was soon integrated with the pari mutuel on the winning numbers of the federal lottery, analogous to

the *quiniela* of neighboring countries. The first hundred numbers were divided into groups of four and attributed to twenty-five animals ranged fairly close in alphabetical order, from the eagle (*aigle*), numbers 1 to 4, to the cow (*vache*), numbers 97 to 100. Thenceforth, the game no longer underwent appreciable modification.

The combinations are infinite. It is played as a unit or by the dozen, hundred, or thousand, i.e. by the last digit or the two, three, or four last digits of the winning number in the daily lottery. (Since the federal lottery is no longer daily but weekly, a false, wholly theoretical lottery, without tickets or prizes, is drawn, and serves only for the purposes of the *Bicho* players). Several animals may also be played simultaneously, i.e. several groups of four numbers, and each combination may be inverted or reshuffled, i.e. one may bet not only on the number itself but on any number composed of the same digits. For example, to play 327 *inverted* means that one may win just as well with 372, 273, 237, 723, and 732. One can easily imagine that calculating one's winnings, always rigorously proportionate to the risk involved, is not a simple matter. As a result, a subtle knowledge of the laws of arithmetic is spread through the population. A person who can scarcely read or write solves, with disconcerting accuracy and rapidity, problems that would demand the sustained attention of a mathematician untrained in this kind of calculation.

Jogo do Bicho not only favors the usual arithmetic exercises but also encourages superstition. In fact, it is bound to a system of forecasting the future through dream interpretation, with its own code, classics, and expert interpreters. The dreams instruct the player which animal he should choose. However, the animal of which one has dreamt is not always the one to play. It is prudent first to leaf through an appropriate manual, a key to special dreams, with a title such as *Interpretação des sonhos para o Jogo do Bicho*. Here one learns the proper correspondences. Whoever dreams of a flying cow must play the eagle, not the cow. If one dreams of a cat falling off a roof, he must bet on the butterfly (because a real cat does not fall off a roof). To dream of a stick means to play the cobra (who rears up like a stick). Whoever sees a mad dog in his dreams will play the lion (equally brave), etc. Sometimes the relationship is obscure, e.g. to dream of a dead man means to play the elephant. It may happen that the connection is derived from satiric folklore, e.g. to dream of a Portuguese is to play the ass. The more conscientious are not content with a mechanical correspondence. They consult soothsayers and witches who apply their gifts and

knowledge to the particular case in question and act as infallible oracles.

Frequently the dream goes beyond the animal level and furnishes the desired number directly. A man dreams of one of his friends and plays his telephone number. He witnesses a traffic accident and plays the car's license number, that of the police car, or a combination of the two. Rhyme and rhythm are no less important than chance signs. According to one significant anecdote a priest, in giving absolution to a dying man, pronounces the ritualistic words: "Jesus, Mary, and Joseph." The dying man sits up and shouts: "Eagle, ostrich, crocodile," *Bicho* animals which in Portuguese (*Aguia, Avestruz, Jacaré*) have a vague connection with the former sequence. Examples can easily be multiplied almost to infinity. A servant upsets a vase and the water spills on the ground. The shape of the puddle of water is interpreted as resembling a *Bicho* animal. The ability to discover useful connections is regarded as a precious gift. More than one Brazilian cites a case in which a domestic, having become indispensable to his masters by his skill in analyzing *Bicho* combinations or by his knowledge of omens, has come to dominate the household.⁷⁵

Theoretically the game of animals is forbidden in all the states of Brazil. In fact it is more or less tolerated according to the mood of the governor of the state or the caprice and policies of local officials, the chief of police in particular. Whether the game be mildly disapproved or secretly protected, it savors of forbidden fruit and remains clandestinely organized, even when such discretion is not justified by official attitudes. Even better, public opinion, though continuously obsessed with the game, nevertheless seems to regard it as a sin—no doubt venial and pardonable, analogous to tobacco, for example—and regards indulgence in it as a reprehensible activity. Politicians often organize, exploit, or profit from the game, and yet do not fail to fulminate against it in their speeches. The army, which is quite moralistic and has kept alive the influence of Auguste Comte and positivism, regards *Bicho* as evil. During the *macumbas*, seances involving possession by spirits and esteemed by the Negro population as well as in spiritualist circles, those who demand prognostications for *Bicho* from those possessed or from the turning tables are expelled. From one pole to the other, in the Brazilian spiritual world, there is general condemnation of the game.

The constantly precarious situation of the game, the general disapproval to which it is subjected by those addicted to it, and above all, the fact that it cannot be officially recognized, has a consequence that rarely fails to surprise its clientele—viz. the scrupulous honesty

of those who take the bets. Not one of them, we are assured, has ever diverted even one penny entrusted to him. Except for the wealthy players who telephone their orders, one slips a folded piece of paper containing the amount—sometimes considerable—of the bet into the hand of the bookie on a street corner, together with the combination to be played and a code name chosen specifically for this occasion. The receiver passes the slip of paper to a colleague, and the latter passes it to a third man, so that in case of a police search nothing may be found on the person of the man caught red-handed. That evening or the next day, each winner returns to the place agreed upon and utters the code name that he used in placing his bet. The bookie at once discreetly passes him an envelope so labeled, containing the exact sum due the elated bettor.

The player would have no recourse against the dishonest *Bichero*, if he did not find him there, but that does not occur. It is astonishing and admirable to find more honesty in this equivocal game in which tempting sums continuously pass through so many poor hands than in other domains where Brazilians are currently complaining of a degree of moral laxity. However the reason for this is obvious. Without trust, this kind of traffic would absolutely fail to survive. If the system were broken, it would crumble. Where neither control nor complaint is conceivable, good faith is no longer a luxury, but a necessity.

According to relatively modest estimates, 60 to 70 per cent of the Brazilian population plays *Bicho*, and each one spends about 1 per cent of his monthly income per day on the game, so that at the end of the month, *if he never won*, he would have lost about 30 per cent of his income. This applies only to the average player. For the inveterate player the percentage is much greater. In extreme cases the gambler devotes almost all his resources to the game, and for the rest lives as a parasite upon others or resorts to out-and-out begging.

It should therefore be no cause for surprise if, despite the legal ban, the animal game represents a force or resource that the powers that be must take into consideration. On one occasion political prisoners demanded and obtained the right to play *Bicho* in the jail where they were being detained. The Department of Social Welfare of the state of São Paulo, created in 1931 without a budgetary appropriation, for a long time functioned solely with the subsidies allotted to it by the local *Bicho* chiefs. These subsidies were sufficient to support a large staff and minister to the incessant demands of the needy. The organization of gambling is very hierarchical.

Those at the top reap enormous profits and subsidize politicians regardless of party, so that they may expect in return a benevolent attitude toward their activities.

However important the moral, cultural, and even political consequences of the game may be, it is primarily its economic significance that should be analyzed. The game practically immobilizes an appreciable part of disposable income, *by causing it to circulate too quickly*. It is thus unavailable for the nation's economic development or for improving the standard of living of its inhabitants. Money spent on gambling is not used for buying furniture, household utensils, tools, clothing, or dietary supplements, any one of which would result in hastening the growth of agriculture, commerce, or industry. It is expended wastefully, retired from general circulation, and merely circulates rapidly and constantly in a closed circuit, for winnings are rarely withdrawn from the vicious circle. They are put back into play, except when a part is deducted to pay for a victory dinner. Only the profits of the bankers and organizers of *Bicho* may return to general circulation. Nevertheless, it is possible that this is not the most productive means of accomplishing this economic purpose. Moreover, a continuous influx of new money maintains or augments the total amount bet, and to that degree reduces the possibilities for savings or investment.⁷⁶



It has been seen that, under certain conditions, games of chance have a cultural importance that is ordinarily the monopoly of competitive games. Even in societies supposed to be ruled by pure merit, the attractions of chance have been shown to be strong. Even though viewed with suspicion, they still play an important role—more spectacular than decisive. As far as games are concerned, *alea* in competition and sometimes in co-operation with *agôn* is quite prevalent. It balances the *Tour de France* with the national lottery, constructs casinos just as organized sports builds stadia, initiates associations and clubs, free-masonries of initiates and devotees, supports a specialized press, and stimulates equally important investments.

Indeed, a strange symmetry is evident. While sports are frequently the object of government subsidy, games of chance, to the degree that they are state-regulated, contribute to the state's revenues. At times they are even its principal resource. Even

though reproached, humiliated, and condemned, chance in this way retains status in the more rational and bureaucratized societies, which in principle are furthest removed from the combined spells of simulation and vertigo. The reason for this is easy to find.

Vertigo and simulation are in principle and by nature in rebellion against every type of code, rule, and organization. *Alea*, on the contrary, like *agôn* calls for calculation and regulation. However, their essential solidarity in no way prevents their competing with each other. The principles they represent are too strictly opposed not to tend toward mutual exclusion. Work is obviously incompatible with the passive anticipation of chance, just as is the unfair favor of fortune with the legitimate rewards of effort and merit. The abandonment of simulation and vertigo, mask and ecstasy, has never meant the departure of an incantational universe and the arrival of the rational world of distributive justice. Problems remain to be resolved.

In such a situation, *agôn* and *alea* no doubt represent the contradictory and complementary principles of a new social order. Moreover, they must fulfill parallel functions which are recognizably indispensable in one or the other situation. *Agôn*, the principle of fair competition and creative emulation, is regarded as valuable in itself. The entire social structure rests upon it. Progress consists of developing it and improving its conditions, i.e. simply eliminating *alea*, more and more. *Alea*, in fact, seems like the resistance posed by nature against the perfect equity of human institutional goals.

In addition, chance is not only a striking form of injustice, of gratuitous and undeserved favor, but is also a mockery of work, of patient and persevering labor, of saving, of willingly sacrificing for the future—in sum, a mockery of all the virtues needed in a world dedicated to the accumulation of wealth. As a result, legislative efforts tend naturally to restrain the scope and influence of chance. Of the various principles of play, regulated competition is the only one that can be transposed as such to the domain of action and prove efficacious, if not irreplaceable. The

others are dreaded. They are regulated or even tolerated if kept within permitted limits. If they spread throughout society or no longer submit to isolation and neutralizing rules, they are viewed as fatal passions, vices, or manias.

Alea is no exception to this. Insofar as it symbolizes passive acceptance of natural conditions, it is admitted, even if reluctantly. Everyone knows that heredity is a lottery and regrets its scandalous consequences. Except in very rare cases, such as the drawing by lot of magistrates in Ancient Greece, or in modern times, juries in courts of assizes, chance is not accorded the least institutional function. It seems improper, in serious matters, to submit to its domination. Opinion is unanimous on indisputable evidence that work, merit, and competence, not the capricious roll of the dice, are the foundations necessary both to justice and to the proper evolution of social life. As a result, work tends to be considered the only honorable source of income. Inheriting wealth, the result of the *alea* basic to birth, is debated, sometimes abolished, more often submitted to important restrictions, in the interest of the general welfare. As for money won in games or in a lottery, it ought in principle to constitute only a supplement or a luxury, which augments the salary or wages regularly collected by the player in payment for his professional activity. To draw one's entire subsistence through chance or gambling is regarded by nearly everybody as suspect and immoral, if not dishonorable, and in any case, asocial.



The Communist ideal for governing society carries this principle to an extreme. It may be debated whether it is proper, in dividing the revenues of the state, to pay each according to his merit or according to his need, but it is certain that payment would not be according to birth or chance. The reason is that equality of effort must be unitary. The criterion of justice is work performed. It follows from this that a regime that is Socialist or Communist in character tends naturally to rest entirely upon *agôn*. In this, it satisfies not only its principles of abstract

equality but also is deemed to stimulate—through the best possible, rational, and efficient utilization of abilities and skills—the accelerated production of goods, which it regards as its principal, if not exclusive, vocation. The whole problem is therefore to know whether the complete elimination of the grand chance, unexpected, irregular, and fantastic, is economically productive, or whether the state, in suppressing this instinct, is not depriving itself of a generous and irreplaceable source of revenue, which may be transformable into energy.

In Brazil, where gambling is king, savings are small. It is the land of speculation and chance. In the U.S.S.R., games of chance are forbidden and persecuted, while thrift is encouraged in order to permit expansion of the home market. It is a matter of pressing the workers to save enough to buy automobiles, refrigerators, television sets, and everything that will stimulate the development of industry. A lottery of any kind is regarded as immoral. It is all the more significant to observe that the state, while forbidding it in private, has grafted it upon the savings system itself.

In Soviet Russia there are about 50,000 savings banks with total deposits of about 50 billion rubles. These deposits pay 3 per cent interest if not withdrawn for at least six months, and 2 per cent if withdrawn during the lesser period. But if the depositor is willing, he may waive the accumulated interest and participate in a semiannual drawing, in which lots varying with the accrued totals are drawn, paying twenty-five winners per thousand participants on an unmerited basis. This is a strange and modest resurgence of *alea* in an economy committed to its exclusion. Even more, loans to the state, to which each salaried employee was for a long time practically forced to subscribe, involved prizes representing 2 per cent of the total expendable capital thus recovered. . . .⁷⁷



Such is no doubt the tenacious seduction of chance, that economic systems which abominate lotteries must grant them a

place, even if restricted, disguised, and almost disreputable. The arbitrariness of the lottery remains, in effect, the necessary counterpart of regulated competition. The latter indisputably establishes the decisive triumph of measurable superiority. The prospect of unearned fortune consoles the loser and leaves him a last hope. He has been defeated in legal combat. To explain his failure, he cannot invoke injustice. The conditions at the outset were the same for all. He can only blame his own inability. He can look forward to nothing to compensate for his humiliation except the very unlikely reward of the gratuitous favor of the fantastic powers of chance. The lottery is inaccessible, blind, and implacable, but luckily, is capricious and not just.

Psychological and Mathematical Approaches

The world of games is so varied and complex that there are numerous ways of studying it. Psychology, sociology, anecdote, pedagogy, and mathematics so divide its domain that the unity of the subject is no longer perceptible. Not only are such works as *Homo Ludens* by Huizinga, *Jeu de l'Enfant* by Jean Chateau, and *Theory of Games and Economic Behavior* by von Neumann and Morgenstern not aimed at the same readers, but they don't even seem to be discussing the same subject. One may finally ask to what extent semantic problems cause different and nearly incompatible researches to be viewed as at heart concerning the same specific activity. It has even been doubted that there are any common characteristics on the basis of which play may be defined in order to facilitate a cooperative approach to studying it.

If, in ordinary experience, the domain of play remains auton-

omous despite all these attempts, it is manifestly lost to scientific investigation. It is not merely a question of different approaches arising from the diversity of disciplines. The facts studied in the name of play are so heterogeneous that one is led to speculate that the word "play" is perhaps merely a trap, encouraging by its seeming generality tenacious illusions as to the supposed kinship between disparate forms of behavior.

It may be of some interest to show the stages, or on occasion the hazards, that have led to so paradoxical a subdivision of the subject. In fact, this is apparent from the very beginning. The player of leapfrog, dominoes, or kite-flying knows in all three cases equally that he is playing. However, only child psychologists concern themselves with leapfrog (or the game of prisoner's base or marbles), only sociologists analyze kite-flying, and only mathematicians study dominoes (or roulette or poker). I find it normal that the latter have no interest in blindman's buff or tag, which do not lend themselves to equations. I find less comprehensible Jean Chateau's ignoring dominoes and kite-flying. I ask myself in vain why historians and sociologists in fact refuse to study games of chance. To be more precise, if in this latter case I am puzzled about the reason for such avoidance, I can compensate by speculating as to the motives involved. As will be shown, these hold for a large part of the biological or pedagogical reservations of the scholars who have devoted themselves to the study of games. If anecdotal accounts are excepted, referring, as they do, to playthings rather than games, the study of games has profited most notably from work in such independent disciplines as psychology and mathematics, the principal contributions of which it is fitting to examine.

1. *Psychological Approaches*

Schiller is surely one of the first, if not the first, to stress the exceptional importance of play for the history of culture. In the fifteenth of his "Aesthetical Letters and Essays" he writes:

"For, to speak out once for all, man only plays when in the full meaning of the word he is a man, and *he is only completely a man when he plays.*" Even more significantly, further on in the same text, he even suspects that it may be possible to deduce the character of different cultures from their play. He holds that in comparing "the race tracks of London, the bull fights in Madrid, the exhibitions in Paris, the regattas in Venice, the animal fights in Vienna, and the revelry on the Roman Corso," it ought not be difficult to determine "the various nuances of taste among these different nations."⁷⁸

However, occupied as he is with isolating the essence of art from play, he goes on, and is content merely to foreshadow the sociology of games implicit in his sentence. It does not matter, because the question has at least been posed, and play taken up in earnest. Schiller emphasizes the joyous exuberance of the player and his latitude of choice. Play and art are born of a surplus of vital energy, not needed by the adult or child for the satisfaction of his immediate needs, and therefore available for the free and pleasant transformation into dancing. According to Spencer, "Play is a dramatization of adult activity." Wundt, decidedly and emphatically in error, states, "Play is the child of work. There is no form of play that is not modeled upon some form of serious employment, which naturally precedes it in time."⁷⁹ This view was very influential. Misled by it, ethnographers and historians devoted themselves, with varying degrees of success, to showing that various religious practices or obsolete magic rituals had survived in children's games.

The idea of free and spontaneous play was taken up by Karl Groos in his work, *The Play of Animals*.⁸⁰ The writer distinguishes play as joy of being from play as motive for culture. He explains it through its power of suddenly and freely interrupting an activity that has already begun. Lastly, he defines it as pure activity, without past or future, and freed of worldly pressures and constraints. Play is a creation of which the player is master. Removed from stern reality, it seems like a universe that is an end in itself, and only exists as long as it is voluntarily

accepted as such. However, because Groos first studied animals (although he was already thinking of man), he was led, several years later, when he studied human play (*The Play of Man*⁸¹), to insist upon its instinctive and spontaneous aspects, and neglect its purely intellectual possibilities, possibilities which can be illustrated in numerous cases.

Moreover, he too conceived of the games of a young animal as a kind of joyous training for its adult life. Groos came to see in play the guarantor of youth: "Animals also do not play because they are young; they are young because they have to play."⁸² Accordingly, he tried to show how play activity assures young animals greater skill in hunting their prey or escaping their enemies and accustoms them to fighting among themselves, in anticipation of the moment when they will have to battle over females. From this he derived an ingenious classification of games, very appropriate for his purpose but with the unfortunate consequence of inflicting a parallel dichotomy upon his study of human games. He therefore distinguished play activity involving (a) the sensory apparatus (the sense of touch, heat, taste, odor, hearing, color, shape, movement, etc.); (b) the motor apparatus (feeling about, destruction and analysis, construction and synthesis, games involving patience, throwing, throwing and striking or pushing, rolling, turning, or sliding movements, throwing at a target, catching moving objects); (c) intelligence, emotion, and will power (games of recognition, memory, imagination, attention, reason, surprise, fear, etc.). He then went on to what he called secondary drives, those which are derived from the instincts of fighting, sex, and imitation.

This long repertory is a wonderful demonstration of how all the sensations or emotions that man can experience, all his movements and thoughts, give rise to games, but Groos sheds no light upon the nature or structure of games. He does not concern himself with grouping them according to their proper affinities, and does not seem to perceive that they involve for the most part several senses or functions at the same time. Basically, he is content to classify them according to the table

of contents of the type of psychological treatise popular in his time, or rather he confines himself to showing how man's senses and faculties also permit a kind of activity that is disinterested and without immediate utility and which, therefore, belongs to the domain of play and serves the unique purpose of preparing man for his future responsibilities. The author also omits reference to games of chance, and has no qualms about this, since they do not exist among animals, and they do not prepare one for any serious task.

After reading the works of Karl Groos, it is possible to go on ignoring or minimizing the fact that play frequently, perhaps necessarily, involves rules and even rules of a very special kind—arbitrary, imperious, and valid for a time and space determined in advance. One is reminded that Huizinga's special merit was to have stressed this last characteristic and to have shown how exceptionally fruitful it is for the development of culture. Jean Piaget before him, in two lectures delivered in 1930 at the Jean-Jacques Rousseau Institute in Geneva, had strongly emphasized the opposition of imaginary and regulated games in the child. One is also reminded of the significance he very properly attributed to regulated play for the moral development of the child.

Then again, neither Piaget nor Huizinga leaves any room for games of chance, which are also excluded from the noteworthy researches of Jean Chateau.⁸³ To be sure, Piaget and Chateau only discuss children's games,⁸⁴ and even more precisely, games of West European children in the first half of the twentieth century, games that are played mostly by school children during their recreation periods. It is understandable that games of chance are almost fated to be sidetracked, for they are certainly not encouraged by educators. However, aside from dice, teetotums, dominoes, and cards, which Chateau omits as adult games which children could be taught to play by their families, there is still the game of marbles which is not always a game of skill.

In fact, marbles are especially peculiar in that they are both medium of exchange and game. Players win or lose them. They also quickly become a true monetary system. They are exchanged for candy, penknives, slingshots,⁸⁵ whistles, school supplies, help with homework, a service to be rendered, and all kinds of valuable items. Marbles even differ in value according to whether they are made of steel, earthenware, stone, or glass. For it so happens that children bet them on games of "odds or evens," such as morra, which on a children's level involve true reversals of fortune. Chateau cites at least one of these games,⁸⁶ yet he does not hesitate to explain its chance element—i.e. risk, *alea*, betting—as the result of a children's game, in order better to stress the essentially active character of the pleasure in the game.

This approach would not have unhappy consequences if Jean Chateau had not, at the end of his book, attempted a classification of games which resulted in a serious omission. In deliberately ignoring games of chance, it begs an important question, i.e. whether the child is or is not aware of the lure of chance, or whether he seldom plays games of chance in school because such games are not tolerated there. I believe that there is little doubt as to the answer. The child becomes aware of chance very early.⁸⁷ It remains to be determined at what age he does so, and how he accommodates the verdict of chance, which is unjust in principle, to his very positive and stern sense of justice.

Chateau's aim is genetic and pedagogic at the same time. First, he is concerned with the eras in which each type of game originated and spread. Simultaneously he tries to determine the positive influence of each kind of game. He applies himself to showing to what degree they contribute to the formation of the future adult personality. From this point of view he has no trouble in demonstrating, contrary to Karl Groos, how play is a test rather than an exercise. The child does not train himself for a definite task. Thanks to play, he acquires a more extensive capacity to surmount obstacles or face up to difficulties. Thus, while there is nothing in real life like the game of "winner-take-

all," there is an advantage in possessing quick and controlled reflexes.

In a general way, play is like education of the body, character, or mind, without the goal's being predetermined. From this viewpoint, the further removed play is from reality, the greater is its educational value. For it does not teach facts, but rather develops aptitudes.

However, pure games of chance do not develop any physical or mental aptitude in the player, since he remains essentially passive. Their moral consequences are also quite formidable, because they detract from work and effort in creating hope of sudden and considerable wealth. That—if so desired—is a reason for banning them from school (but not from a classification system).



I sometimes ask myself whether logic has not been pushed to an extreme. Play is not exercise, it is not even a test or activity, except by accretion. The faculties developed by it surely benefit from this supplemental training, which in addition is free, intense, pleasing, inventive, and protected. However, the proper function of play is never to develop capacities. Play is an end in itself. For the rest, the aptitudes it exercises are the very same as are used for study and serious adult activities. If these capacities are dormant or feeble, the child can neither study nor play, for he is then unable to adapt to a new situation, concentrate, or apply himself to study. The observations of A. Brauner⁸⁸ are more convincing in this respect. Play is in no way a refuge for the defective or the abnormal. It repels them just as much as work does. These deviant children are revealed to be equally incapable of absorbing themselves with some degree of continuity or application in play activity as in a real-life apprenticeship. For them, play is reduced to a simple, occasional prolongation of movement, a pure, uncontrolled propulsion, disproportionate and unintelligent (pushing the marble or the ball with which others play, getting in the way, annoying, jostling, etc.). At the moment

the educator succeeded in giving them respect for rules—or better still, the desire to make up rules—they were cured.

There is scarcely any doubt that the desire to freely respect an agreed-upon rule is essential. In fact, Chateau, following Piaget, recognizes the importance of this point as well, in that he begins by dividing games into two classes, those with rules and those without. For the latter he condenses Groos' contribution without adding anything new. For regulated games he proves much more instructive. The distinction he establishes between figurative games (imitation and illusion), objective games (construction and work), and abstract games (arbitrary rules, prowess, and competition) no doubt corresponds to reality. It is also possible to agree with him that figurative games lead to art, objective games anticipate work, and competitive games foreshadow sports.

Chateau completes his classification with a category that combines those competitive games requiring a certain amount of cooperation with the dances and mock ceremonials in which the movements of the participants must be coordinated. Such a grouping seems hardly homogeneous and directly contradicts the previously established principle which opposes games involving illusion to games with rules. Playing laundress, grocer, or soldier is always an improvisation. To make believe that one is a sick patient, a baker, aviator, or cowboy involves continuous inventiveness. To play prisoner's base or tag, to say nothing of football, checkers, or chess, presupposes, on the contrary, respect for precise rules that allow the winner to be decided. To classify representational and competitive games under the same rubric, merely because both require players on the same side to cooperate, is basically explained by the writer's preoccupation with distinguishing various levels and age grades of play. Sometimes a complex of games based upon simple rivalry or competition is indeed involved, and at other times a symmetrical complex of figurative games founded upon simulation.

Both these complications result in the intervention of the team spirit, which obliges players to cooperate, coordinate their

movements, and play assigned parts in a maneuver of the whole. The more basic relationships remain no less manifestly vertical. Chateau always goes from the simple to the complex, because he is primarily trying to establish categories compatible with the time of childhood. However, the latter merely complicate essentially independent structures.

Figurative and competitive games correspond almost exactly to those I have classified in terms of *mimicry* and *agôn* respectively. I have stated why Chateau's classification makes no mention of games of chance. At least there is some space devoted to games of vertigo, described as "games of passion,"⁸⁹ examples of which are descending a slope, spinning a top, and running (until out of breath).⁹⁰ To be sure, there is in this activity a hint of vertigo, but games of vertigo, to really merit being called games, must be more precise and determinate and better adapted to their proper goal, which is to provoke a slight, temporary, and therefore pleasant disturbance of perception and equilibrium, viz., in tobogganing, swinging, or even in the Haitian *maïs d'or*. Chateau properly alludes to swinging⁹¹ but interprets it as voluntary activity to counteract fear. To be sure, vertigo presupposes fear or, more precisely, feelings of panic, but the latter attracts and fascinates one; it is pleasurable. It is not so much a question of triumphing over fear as of the voluptuous experience of fear, thrills, and shock that causes a momentary loss of self-control.

Thus, games of vertigo are no better analyzed by psychologists than are games of chance. Huizinga, who studied adult games, pays no attention to them. He no doubt holds them in disdain, because it seems impossible to attribute a cultural or educational value to games of vertigo. Huizinga derives civilization, to whatever degree necessary, from invention, respect for rules, and fair competition, just as does Chateau for the essential qualities needed by man for building his personality. The ethical creativity of limited and regulated conflict and the cultural creativity of magical games are doubted by no one. However, the pursuit of vertigo and chance is of ill repute. These games seem sterile—if not fatal—marks of some obscure and contagious malediction.

They are regarded as destructive to the mores. According to a popular view, culture ought to defend itself against seduction by them, rather than profit from their controversial revenues.

2. *Mathematical Approaches*

Games of vertigo and games of chance have been implicitly boycotted by sociologists and educators. The study of vertigo has been left to physicians and the computation of chance to mathematicians. This new kind of research is certainly indispensable, but it distracts attention from the nature of play. The study of the functioning of the semicircular canals is an inadequate explanation of the vogue for swings, toboggans, skiing, and the vertigo-inducing rides at amusement parks. Nor is it an explanation of another order of activity that also presupposes the powers of panic involved in play, viz., the whirling dervishes of the Middle East or the spiral descent of the Mexican *vola-dores*. On the other hand, the development of the calculus of probability is no substitute for a sociology of lotteries, gambling houses, or racetracks. Mathematical studies afford no information about the psychology of the player, since they must examine all possible responses to a given situation.

Sometimes mathematical calculation is used to determine the banker's margin of security, and at other times to show the player the best way to play, or to indicate the odds on each possible alternative. It should be remembered that a problem of this kind gave rise to the calculus of probabilities. The Chevalier de Méré had calculated that in the game of dice, in a series of 24 throws, as there were only 21 possible combinations, the double six had more chances than not of turning up. However, experience proved the contrary, and he posed this problem to Pascal. This resulted in a long correspondence between Pascal and Fermat, who was to open a new mathematical path. This was incidentally to show Méré that it was indeed scientifi-

cally advantageous to bet against the appearance of two sixes in a series of 24 throws.

Paralleling their work on games of chance, mathematicians have for a long time been conducting research of a very different kind. They applied themselves to the calculus of numbers in which chance plays no part, but which can be made part of a complete, generalized theory. What are specifically involved are the many difficult puzzles known as mathematical recreations. Studying them has more than once put mathematicians on the road to important discoveries. For example, there is the problem (unsolved) of the four colors, the problem of the bridges of Koenigsberg, the three houses and the three springs (unsolvable on a plane, but solvable on an enclosed surface, such as in a ring), and the problem of the fifteen girls out walking. Certain traditional games such as sliding-part puzzles or ring puzzles are also based upon problems or combinations of the same kind, from which the theory of topology, as established by Janirewski at the end of the nineteenth century, has arisen. Recently, by combining the calculus of probabilities with topology, mathematicians have founded a new science, with many varied applications—the theory of strategic games.⁹²

Here the point is for players who are adversaries to defend themselves; i.e. in successive situations they are required to make a rational choice and appropriate decisions. This type of game serves as a fitting model for questions that commonly arise in economic, commercial, political, or military domains. It originates out of the desire to find a necessary, scientific solution beyond empirical dispute but at least approximately quantifiable. They began with the simplest situations: heads or tails, paper-rock-scissors (the paper beats the rock in enveloping it, the rock beats the scissors in breaking them, the scissors beat the paper in cutting it), extremely simplified poker, airplane duels, etc. Psychological elements such as ruse and bluff enter into the calculations. Ruse is defined as "the perspicacity of a player in predicting his adversaries' behavior," and bluff is the response to this ruse, i.e. "sometimes the art of disguising our information

from an adversary, deceiving him as to our intentions, or finally, making him underestimate our ability."⁹³

Nevertheless doubt remains with regard to the practical implications of such speculation, and even as to its utility outside of pure mathematics. These calculations are based upon two postulates that are indispensable for rigorous deduction, and which, by definition, are never encountered in the continuous and infinite universe of reality. The first is the possibility of total information, using all the relevant data. The second is the competition between adversaries who always take the initiative with full knowledge of causes, in anticipation of an exact result, and are supposed to choose the better solution. In reality, however, on the one hand, the relevant data cannot be enumerated *a priori*, and on the other hand, the role of error, caprice, dumb luck, arbitrary and inexplicable decisions, preposterous superstition, and even a deliberate desire to lose, on the part of the enemy, cannot be eliminated. There is no motive that can absolutely be excluded from the absurd human universe. Mathematically, these anomalies do not engender new difficulties; they merely lead back to a prior case, already resolved. Humanly, however, for the concrete player, it is not the same, because the entire interest of the game lies precisely in this inextricable concatenation of possibilities.

Theoretically, in a pistol duel, where both adversaries are walking toward each other, if one knows the range and accuracy of the weapons, the distance, visibility, relative skill of the duelists and their degree of calm or nervousness, and provided it is possible to quantify these varied elements, it can be calculated at what moment it is best for each of them to squeeze the trigger. It is a matter even for aleatory speculation, in that the facts are outside of agreed-upon limits. However, in practice, it is clear that calculus is impossible, because what is needed is the complete analysis of an inexhaustible situation. One of the adversaries may be nearsighted or suffer from astigmatism. He may be distraught or neurotic; a wasp may sting him; he may stumble over a root. Finally, he may want to die. Analysis is

never adequate, except for the bare bones of the problem. Reasoning becomes fallacious as soon as the problem's original complexity is discovered.

In some American stores, during sales, the articles are sold the first day at 20 per cent off list, 30 per cent the second, and 50 per cent off the third day. The longer the customer waits, the more he saves on his purchase. But at the same time his possibility of choice is diminishing, and the desired commodity may no longer be available. In principle, if the facts to be taken into account are limited, it is possible to calculate on what day it is better to buy such and such an article in terms of its relative desirability. However, it is likely that each customer makes his purchase consistent with his character—without waiting, if he regards obtaining the desired object as primary, and at the last moment, if he is trying to spend as little as possible.

Herein lies the irreducible element in play, inaccessible to mathematics. For one does not play to win as a sure thing. The pleasure of the game is inseparable from the risk of losing. Whenever calculation arrives at a scientific theory of the game, the interest of the player disappears together with the uncertainty of the outcome. All variables are known, as are conceivable consequences. In card-playing, the game ends as soon as there is no longer any uncertainty about the cards dealt. In chess, the player gives up as soon as he becomes aware that the outcome is inevitable. In the games that they are addicted to, African Negroes calculate events as carefully as von Neumann and Morgenstern calculate structures requiring a peculiarly more complex mathematical system.

In the Sudan the game of *Bolotoudou*, analogous to tipcat,⁹⁴ is very popular. It is played with twelve little sticks and twelve pebbles, which each player places in turn on thirty boxes arranged in five rows, six to each row. Each time a player manages to place three of his pieces in a straight line, he takes⁹⁵ one of his adversary's. Champions have their own equipment, which as part of the family inheritance is transmitted from father to son. The initial disposition of the pieces is of great importance.

The possible combinations are not infinite. Furthermore, an experienced player frequently stops the game whenever he recognizes that he is virtually beaten, before his defeat is apparent to the uninitiated.⁹⁶ He knows that his opponent must beat him, and the moves needed to bring this about. No one takes much pleasure in profiting from the inexperience of a mediocre player. On the contrary, he is eager to teach him the winning maneuver, if he does not know it. For the game is above all a demonstration of the superiority and pleasure derived from testing one's powers. There must be a feeling of danger.

Mathematical theories that seek to determine with certainty, in all possible situations, which piece to move or which card to put down, are not promoting the spirit of the game but rather are destroying its reason for being. The game of "wolf,"⁹⁷ played on an ordinary checker board of sixty-four squares with one black piece and four white pieces, is a simple game with innumerable possible combinations. The object of the game is simple. The "sheep" (the four white pieces) must necessarily win. What pleasure can the player continue to feel, if he knows this? Such mathematical analyses, as destructive as they are perfect, also exist for other games, e.g. the sliding-part puzzles and the ring puzzles mentioned earlier.

It is not probable, but it is possible and perhaps theoretically necessary that there should be such a thing as an absolute chess game, i.e. one in which from the first move to the last no stratagem should work, since the best possible move is automatically neutralized. It is not too farfetched to suppose that an electronic computer, having exhausted all conceivable combinations, could construct this ideal game. However, one would no longer be playing chess. The first move alone would determine the winner or perhaps the loser⁹⁸ of the game.

The mathematical analysis of games thus turns out to be a game in itself which has only an incidental relationship to the games analyzed. It would exist even if there were no games to analyze. It can and must develop independently, gratuitously inventing ever more complex situations and rules. It does not

have the least effect upon the nature of the game itself. In effect, mathematical analysis either ends in certainty, and the game loses interest, or it establishes a coefficient of probability which merely leads to a more rational appreciation of the risks assumed or not assumed by the player, depending upon his prudence or temerity.

Play is a total activity. It involves a totality of human behavior and interests. Various approaches—from psychology to mathematics and, in passing, history and sociology—by reason of their special biases have been unable to contribute anything too fruitful to the study of play. Whatever the theoretical or practical value of the results obtained by each of these perspectives, these results are still without true meaning or impact, unless they are interpreted within the context of the central problem posed by the indivisibility of the world of play. This is the primary basis for interest in games.

Notes

1. J. Huizinga, *Homo Ludens* (English translation; New York: Roy Publishers, 1950, p. 13). On p. 28 there is another definition not quite as eloquent, but less restricted: "Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy, and consciousness that it is different from ordinary life."

2. Paul Valéry, *Tel quel*, II (Paris, 1943), p. 21.

3. Karl Groos, *The Play of Animals* (English translation; New York: D. Appleton & Co., 1898, p. 151).

4. For example, in the Balearic Islands for jai-alai, and cock-fights in the Antilles. It is obvious that it is not necessary to take into account the cash prizes that may motivate jockeys, owners, runners, boxers, football players, or other athletes. These prizes, however substantial, are not relevant to *alea*. They are a reward for a well-fought victory. This recompense for merit has nothing to do with luck or the result of chance, which remain the uncertain monopoly of gamblers; in fact it is the direct opposite.

5. Terrifying examples of mimicry or structural dissimulation among insects (the spectral attitude of the mantis and the fright offered by *Smerinthus ocellata*) will be found in my study entitled

"*Mimétisme et psychasténie*," in *Le Mythe et L'Homme* (Paris, 1938), pp. 101–143. Unfortunately, this study treats the problem with a perspective that today seems fantastic to me. Indeed I no longer view mimetism as a disturbance of space perception and a tendency to return to the inanimate, but rather, as herein proposed, as the insect equivalent of human games of simulation. The examples utilized in *Le Mythe et L'Homme* nevertheless retain their value [translated by M.B. from French text]:

"In order to protect itself, an inoffensive animal assumes the appearance of a ferocious animal, for example the bee-shaped butterfly *Trochilium* and the wasp *Vespa crabro*: even to the smoky wings, brown feet and antennae, yellow-and-black striped abdomens and thoraxes, and the same impressive noisy flight in broad day. Sometimes the mimetic animal has a further goal. The caterpillar *Choerocampa elpenor*, for example, has two eyelike black-bordered spots on its fourth and fifth segments. When disturbed it retracts its anterior segments. The fourth swells enormously. The effect obtained is the illusion of a snake's head, a frightening apparition to lizards and small birds (L. Cuénot, *La génèse des espèces animales*, Paris, 1911, pp. 470 and 473). According to Weismann (*Vorträge über Descendenztheorie*, Vol. 1, pp. 78–79) *Smerinthus ocellata*, which like all sphinxes at rest hides its lower wings, when in danger suddenly masks them with two large blue eyes on a red background, thus unexpectedly frightening the aggressor. [This terrifying transformation is automatic. It is approximated in cutaneous reflexes which, although they do not extend as far as a change of color designed to transform the animal, sometimes result in lending it a terrifying quality. A cat, confronted by a dog, is frightened; its hair stands on end, thus causing the cat to become frightening. Le Dantec by this analogy (*Lamarckiens et Darwiniens*, 3rd ed.; Paris, 1908, p. 139) explains the human phenomenon known as "goose pimples," a common result of extreme fright. Even though rendered dysfunctional by the comparative hairlessness of man, the reflex still persists.] This act is accompanied by a kind of nervousness. At rest, the animal resembles a thin, dessicated leaf. When disturbed, it clings to its perch, extends its antennae, inflates its thorax, retracts its head, exaggerates the curve of its abdomen, while its whole body shakes and shivers. The crisis past, it slowly returns to immobility. Standfuss' experiments have demonstrated the efficacy of this behavior in frightening the tomtit, the robin, the common nightingale and frequently the grey nightingale. [Cf. Standfuss, "Beispiel von Schutz und Trutzfärbung," *Mitt. Schweiz. Entomol. Ges.*, XI (1906), 155–157; P. Vignon, *Introduction à la biologie expéri-*

mentale, Paris, 1930 (*Encycl. Biol.*, Vol. VIII), p. 356]. The moth, with extended wings, seems in fact like the head of an enormous bird of prey. . . .

"Examples of homomorphism are not lacking: the *calappes* and round pebbles, the *chlamys* and seeds, the *moenas* and gravel, the prawns and fucus. The fish *Phylopteryx* of the Sargasso Sea is only an 'alga cut into the shape of a floating lanner' (L. Murat, *Les merveilles du monde animal*, 1914, pp. 37-38) like *Antennarius* and *Pterophryne* (L. Cuénot, *op. cit.*, p. 453). The polyp retracts its tentacles, crooks its back, and adapts its color so that it resembles a pebble. The white and green lower wings of *catocala nupta* resemble the umbelliferae. The embossments, nodes, and streaks of the pieridine, *Aurora*, make it identical with the bark of the poplars on which it lives. The lichens of *Lithinus nigrocristinus* of Madagascar and the Flatides cannot be distinguished (*ibid.*, Fig. 114). The extent of mimetism among the mantidae is known. Their paws simulate petals or are rounded into corollae, which resemble flowers, imitating the effects of the wind upon the flowers through a delicate mechanical balance (A. Lefèvre, *Ann. de la Soc. entom. de France*, Vol. IV; Léon Binet, *La vie de la mante religieuse*, Paris, 1931; P. Vignon, *op. cit.*, pp. 374 ff.). *Cilix compressa* resembles a type of bird dung, and the *Ceroxeylus laceratus* with its foliated, light olive-green excrescences resembles a stick covered with moss. This last insect belongs to the phasmidae family which generally 'hang from bushes in the forest and have the bizarre habit of letting their paws hang irregularly thus making the error even easier' (Alfred R. Wallace, *Natural Selection and Tropical Nature*, London: Macmillan, 1895, p. 47). To the same family belong even the bacilli which resemble twigs. *Ceroys* and *Heteropteryx* resemble thorny dessicated branches; and the membracides, hemiptera of the Tropics, resemble buds or thorns, such as the impressive thorn-shaped insect, *Umbonia orozimbo*. Measuring worms, erect and rigid, can scarcely be distinguished from bush sprouts, equipped as they are with appropriate tegumentary wrinkles. Everyone is familiar with the insect of the genus *Phyllium* which resembles leaves. From here, the road leads to the perfect homomorphism of certain butterflies: *Oxydia*, above all, which perches perpendicularly from the tip of a branch, upper wings folded over, so that it looks like a terminal leaf. This guise is accentuated by a thin, dark line continuing across the four wings in such a way that the main vein of a leaf is simulated (Rabaud, *Éléments de biologie générale*, 2nd ed., Paris, 1928, p. 412, Fig. 54).

"Other species are even more perfected, their lower wings being

provided with a delicate appendix used as a petiole, thus obtaining 'a foothold in the vegetable world' (Vignon, *loc. cit.*). The total impression of the two wings on each side is that of the lanceolate oval characteristic of the leaf. There is also a longitudinal line, continuing from one wing to the other, a substitute for the median vein of the leaf; 'the organic driving force has had to design and cleverly organize each of the wings so that it should attain a form not self-determined, but through union with the other wing' (*ibid.*). The main examples are *Coenophlebia archidona* of Central America (Delage and Goldsmith, *Les théories de l'évolution*, Paris, 1909, Fig. 1, p. 74) and the various types of *Kallima* in India and Malaia."

Additional examples: *Le Mythe et L'Homme*, pp. 133–136.

6. As has been aptly remarked, girls' playthings are designed to imitate practical, realistic, and domestic activities, while those of boys suggest distant, romantic, inaccessible, or even obviously unreal actions.

7. O. Depont and X. Coppolani, *Les confréries religieuses musulmanes* (Algiers, 1887), pp. 156–159, 329–339.

8. Description and photographs in Helga Larsen, "Notes on the Volador and Its Associated Ceremonies and Superstitions," *Ethnos*, 2, No. 4 (July, 1937), 179–192, and in Guy Stresser-Péan, "Les origines du volador et du comelagatoazte," *Actes du XXVIII^e Congrès International des Américanistes* (Paris, 1947), 327–334. I quote part of the description of the ceremony from this article [translated by M.B. from French text]:

"The chief of the dance or *K'ohal*, clad in a red and blue tunic, ascends in his turn and sits on the terminal platform. Facing east, he first invokes the benevolent deities, while extending his wings in their direction and using a whistle which imitates the puling of eagles. Then he climbs to the top of the mast. Facing the four points of the compass in succession, he offers them a chalice of calabash wrapped in white linen just like a bottle of brandy, from which he sips and spits some more or less vaporized mouthfuls. Once this symbolic offering has been made, he puts on his headdress of red feathers and dances, facing all four directions while beating his wings.

"These ceremonies executed at the summit of the mast mark what the Indians consider the most moving phase of the ritual, because it involves mortal risk. But the next stage of the "flight" is even more spectacular. The four dancers, attached by the waist, pass underneath the structure, then let themselves go from behind. Thus suspended, they slowly descend to the ground, describing a

grand spiral in proportion to the unrolling of the ropes. The difficult thing for these dancers is to seize this rope between their toes in such a way as to keep their heads down and arms outspread just like descending birds which soar in great circles in the sky. As for the chief, first he waits for some moments, then he lets himself glide along one of the four dancers' ropes."

9. [Toton in the French text. M.B.]

10. Groos, *op. cit.*, p. 208.

11. *Ibid.*, p. 259.

12. Observation cited by Groos, *ibid.*, pp. 92-93:

"I notice that the love of mischief is very strong in him. Today he got hold of a wineglass and an egg cup. The glass he dashed on the floor with all his might and of course broke it. Finding, however, that the egg cup would not break when thrown down, he looked round for some hard substance against which to dash it. The post of the brass bedstead appearing to be suitable for the purpose, he raised the egg cup high above his head and gave it several hard blows. When it was completely smashed he was quite satisfied. He breaks a stick by passing it down between a heavy object and the wall and then hanging onto the end, thus breaking it across the heavy object. He frequently destroys an article of dress by carefully pulling out the threads (thus unraveling it) before he begins to tear it with his teeth in a violent manner.

"In accordance with his desire for mischief he is, of course, very fond of upsetting things, but he always takes great care that they do not fall on himself. Thus he will pull a chair toward him till it is almost overbalanced, then he intently fixes his eyes on the top bar of the back, and when he sees it coming over his way, darts from underneath and watches the fall with great delight; and similarly with heavier things. There is a washstand, for example, with a heavy marble top, which he has with great labor upset several times, but always without hurting himself." (G. J. Romanes, *Animal Intelligence*, New York, D. Appleton & Co., 1897, p. 484.)

13. This had already been observed by Kant. Cf. Y. Hirn, *Les jeux d'enfants* (French translation; Paris, 1926), p. 63.

14. [Olorimes (in French) are two lines of poetry in which each syllable of the first line rhymes with the corresponding syllable of the second line. Caillois suggested the following couplet from Victor Hugo as an example:

Gal, amant de la reine, alle, tour magnanime

Galamment de l'urène a la Tour Magne, a Nîmes

From correspondence with Caillois. M.B.]

15. The development of slot machines in the modern world and

the fascination or obsessive behavior that they cause is indeed astonishing. The vogue for playing slot machines is often of unsuspected proportions. It causes true obsessions and sometimes is a contributing factor to youth's entire way of life. The following account appeared in the press on March 25, 1957, occasioned by the investigation conducted by the United States Senate that same month:

"Three hundred thousand slot machines manufactured by 15,000 employees in 50 factories, most of which are located in the environs of Chicago, were sold in 1956. These machines are popular not only in Chicago, Kansas City, or Detroit—not to speak of Las Vegas, the capital of gambling—but also in New York. All day and all night in Times Square, the heart of New York, Americans of all ages, from schoolboy to old man, spend their pocket money or weekly pension in an hour, in the vain hope of winning a free game. At 1485 Broadway, 'Playland' in gigantic neon letters eclipses the sign of a Chinese restaurant. In an immense room without a door dozens of multicolored slot machines are aligned in perfect order. In front of each machine a comfortable leather stool, reminiscent of the stools in the most elegant bars on the Champs-Elysées, allows the player with enough money to sit for hours. He even has an ash tray and a special place for his hot dog and Coca Cola, the national repast of the poor in the United States, which he can order without budging from his place. With a dime or quarter, he tries to add up enough points to win a carton of cigarettes. In New York State it is illegal to pay off in cash. An infernal din muffles the recorded voice of Louis Armstrong or Elvis Presley which accompanies the efforts of the small-time gamblers. Youths in blue jeans and leather jackets rub shoulders with old ladies in flowered hats. The boys choose the atomic bomber or guided-missile machines and the women put their hand on the 'love meter' that reveals whether they are still capable of having a love affair, while little children for a nickel are shaken, almost to the point of heart failure, on a donkey that resembles a zebu. There are also the marines or aviators who listlessly fire revolvers." [D. Morgaine, translated by M.B.]

The four categories of play are represented: *agôn* and *alea* involved in most of the machines, *mimicry* and illusion in the imaginary maneuvering of the atomic bomber or guided missile, *ilinx* on the shaking donkey.

It is estimated that Americans spend \$400 million a year for the sole purpose of projecting nickel-plated balls against luminous blocks through various obstacles. In Japan, after the war, the mania was worse. It is estimated that about 12 per cent of the national budget was swallowed up annually by slot machines. There were

some installed even in doctors' waiting rooms. Even today, in the shadow of the viaducts, in Tokyo, between the trains "is heard the piercing noise of the *pachencos*, the contraptions in which the player strikes a steel ball which gropingly traverses various tricky obstacles and then is lost forever. An absurd game, in which one can only lose, but which seduces those in whom the fury rages. That is why there are no less than 600,000 *pachencos* in Japan. I gaze at these rows of dark heads fascinated by a ball that gambols against some nails. The player holds the apparatus in both hands, no doubt so that his will to win shall pass into the machine. The most compulsive do not even wait for one ball to run its course before hitting another. It is a painful spectacle." [James de Coquet, *Le Figaro*, Feb. 18, 1957, translated by M.B.]

This seduction is so strong that it contributes to the rise of juvenile delinquency. Thus, in April of 1957, the American newspapers reported the arrest in Brooklyn of a gang of juveniles led by a boy of ten and a girl of twelve. They burglarized neighborhood stores of about one thousand dollars. They were only interested in dimes and nickels, which could be used in slot machines. Bills were used merely for wrapping their loot, and were later thrown away as refuse.

Julius Siegal, in a recent article entitled "The Lure of Pinball" [*Harper's* 215, No. 1289 (Oct. 1957), 44-47] has tried to explain the incredible fascination of the game. His study emerges as both confession and analysis. After the inevitable allusions to sexual symbolism, the author especially stresses a feeling of victory over modern technology in the pleasure derived from slot machines. The appearance of calculation that the player reflects before projecting the ball has no significance, but to him it seems sublime. "It seems to me that when a pinballer invests his nickel he pits himself—his own skill—against the combined skills of American industry (p. 45)." The game is therefore a kind of competition between individual skill and an immense anonymous mechanism. For one (real) coin, he hopes to win (fictive) million, for scores are always expressed in numbers with multiple zeros.

Finally, the possibility must exist of cheating the apparatus. "Tilt" indicates only an outer limit. This is a delicious menace, an added risk, a kind of secondary game grafted onto the first.

Curiously, Siegal admits that when depressed, he takes a half-hour's detour in order to find his favorite machine. Then he plays, confident that the game ". . . assumes positively therapeutic proportions—if I win (p. 46)." He leaves reassured as to his skill and

chances of success. His despair is gone, and his aggression has been sublimated.

He deems a player's behavior at a slot machine to be as revealing of his personality as is the Rorschach test. Each player is generally trying to prove that he can beat the machine on its own ground. He masters the mechanism and amasses an enormous fortune shown in the luminous figures inscribed on the screen. He alone has succeeded, and can renew his exploit at will. ". . . He has freely expressed his irritation with reality, and made the world behave. All for only a nickel (p. 47)." The responsibility for such an ambitious conclusion is the author's. What is left is that the inordinate success of slot machines (in which nothing is won but the possibility of playing again) appears to be one of the most disconcerting enigmas posed by contemporary amusements.

16. The Chinese also use the word *yeou* to designate idling and games in space, especially kite-flying, and also great flights of fancy, mystic journeys of shamans, and the wanderings of ghosts and the damned.

17. Game analogous to ring puzzles: nine links form a chain and are traversed by a rod attached to a base. The point of the game is to unlink them. With experience, one succeeds at it, careful not to call attention to a quite delicate, lengthy, and complicated manipulation where the least error makes it necessary to start again from the beginning.

18. From data provided by Duyvendak in *Huizinga* (*op. cit.*, p. 32), a study by Chou Ling, the valuable observations of Andre d'Hormon, and Herbert A. Giles' *Chinese-English Dictionary*, 2nd ed. (London, 1912), pp. 510-511 (*hsı*), 1250 (*choua*), 1413 (*teou*), 1452 (*wan*), 1487-1488 (*tou*), 1662-1663 (*yeou*).

19. For example, here are the recommendations of Mithuna in a randomly chosen issue of a woman's weekly [*La Mode du Jour*, Jan. 5, 1956, translated by M.B.].

"When I advise you (with all reasonable precautions) to favor, if possible, one number over another, I do not merely speak of the last digit, as is customary . . . I also mean the number reduced to its parts. For example 66,410 reduced to its parts becomes

$$6 + 6 + 4 + 1 = 17 = 1 + 7 = 8$$

Although it does not contain an 8, this number can be picked by those whom I indicate are favored by the 8. You have to reduce a number to its parts, except for 10 and 11, to which the procedure does not apply. And now I don't say "Good Luck" to you. But if (by chance) you win, be kind enough to let me know the good news by telling me your birth date. Sincere good wishes . . ."

Notice the precautions taken by the signer of the article. Moreover, given the variety of procedures, the large number of clients, and the small number of digits, she is assured of a substantial percentage of winners, which will be remembered by her following.

In this area, the highest success was reached by the regular horoscope of the weekly, *Intimité (du foyer)*. Like the others, it advises the natives of each decan for the current week. Then, since this periodical is intended for the country, where the mail or news vender may be late, *the horoscopes and numbers are not dated*.

20. Henri Piéron, "Les instincts nuisibles à l'espèce devant les théories transformistes," *Scientia*, Vol. IX (1911), 199–203.

21. William M. Wheeler, *Social Life among the Insects* (New York: Harcourt, Brace and Co., 1923), pp. 344–345.

"That the trichomal gland secretions may not only attract but in exceptional cases even narcotize the ant that imbibes them, is shown by Jacobson's important observations on *Ptilocerus ochraceus*, a peculiar Javanese bug which possesses a gland with golden trichomes in the midventral line of the second abdominal segment (see G. W. Kirkaldy, 'Some Remarks on the Reduviid Subfamily Holoptilinae, and on the Species *Ptilocerus ochraceus* Montandon,' *Tijdschr. Ent.*, 54 (1911), 170–174, 1 pl., and E. Jacobson, 'Biological Notes on the Hemipteron *Ptilocerus ochraceus*', *ibid.*, 175–179). Jacobson found this insect frequenting the trails of a common East Indian ant, *Dolichoderus bituberculatus*, on the rafters of houses, and describes the behavior of both insects:

"The way in which the bugs proceed to entice the ants is as follows. They take up a position in an ant-path, or ants find out the abodes of the bugs and, attracted by their secretions, visit them in great numbers. On the approach of an ant of the species *Dolichoderus bituberculatus* the bug is at once on the alert; it raises halfway the front of the body, so as to put the trichome in evidence. As far as my observations go the bugs only show a liking for *Dolichoderus bituberculatus*; several other species of ants, e.g. *Crematogaster difformis* Smith and others, which were brought together with them, were not accepted; on the contrary, on the approach of such a stranger, the bug inclined its body forwards, pressing down its head —the reverse therefore of the inviting attitude taken up towards *Dolichoderus bituberculatus*. In meeting the latter the bug lifts up its front legs, folding them in such a manner that the tarsi nearly meet below the head. The ant at once proceeds to lick the trichome, pulling all the while with its mandibles at the tuft of hairs, as if milking the creature, and by this manipulation the body of the bug is continually moved up and down. At this stage of the proceedings the bug does not yet attack the ant; it only takes the head and thorax

of its victim between its front legs, as if to make sure of it; very often the point of the bug's beak is put behind the ant's head, where this is joined to the body, without, however, doing any injury to the ant. It is surprising to see how the bug can restrain its murderous intention, as if it were aware that the right moment had not yet arrived.

"After the ant has indulged in licking the tuft of hair for some minutes the exudation commences to exercise its paralyzing effect. That this is brought about solely by the substance which the ants extract from the trichome, and not by some thrust from the bug, is proved by the fact that a great number of ants, after having for some time licked the secretion from the trichome, leave the bug to retire to some distance. But very soon they are overtaken by the paralysis, even if they have not been touched at all by the bug's proboscis. In this way many more ants are destroyed than actually serve as food to the bugs, and one must wonder at the great prolificness of the ants, which enables them to stand such a heavy draft on the population of one community. As soon as the ant shows signs of paralysis by curling itself up and drawing in its legs, the bug at once seizes it with its front legs, and very soon it is pierced and sucked dry. The chitinized parts of the ant's body seem to be too hard for the bug to penetrate, and it therefore attacks the joints of the armor. The neck, the different sutures on the thorax, and especially the base of the antennae are chosen as points of attack. Nymphs and adults of the bug act in exactly the same manner to lure the ants to their destruction, after having rendered them helpless by treating them to a tempting delicacy."

"These interesting observations by a very competent naturalist are important in connection with the probable significance of the trichomes in some other ant-guests and predators, and especially in connection with Wasmann's lucubrations in regard to *Lochemusa*. To assume that *D. tuberculatus* has acquired through 'natural selection' a peculiar *Ptilocerus*-licking instinct would be absurd. We are obviously confronted with a flagrant example of appetite perversion."

22. This thesis is most prevalent and popular, reinforcing popular belief. It is even in the mind of a writer as little experienced in this domain as Jean Giraudoux. He improvises an imaginary account, fantastic in detail but, as a total, significant. According to him, men "imitate in play the physical—and sometimes even mental—activities which modern life has compelled them to give up." Aided by the imagination, everything can now be easily explained:

"The runner, while being pursued by his rival, is pursuing game

or an enemy in his imagination. The gymnast climbs the ropes to gather prehistoric fruits. The fencer is in conflict with Guise or Cyrano, as is the javelin-thrower with the Medes and the Persians. The child playing tag is at the lair of the dinosaur. The hockey player is polishing mosaics and the poker player uses the last reserves of sorcery vested in people in order to hypnotize and influence. Play is a witness to all dead occupations. It is the story in pantomime of primeval times; and sports, which mimics eras of suffering and struggle, is therefore specially chosen to preserve the body's original health and powers." [Jean Giraudoux, *Sans Pouvoirs* (Monaco, 1946), pp. 112-113. Translated by M.B.]

23. Needless to say, these opposing attitudes are rarely pure. Champions protect themselves with fetishes (nevertheless trusting no less in their own muscles, skill, or intelligence) and players engage, before betting, in shrewd though almost always vain calculations (but they suspect without having read Poincaré or Borel that chance has neither heart nor memory). Man cannot be wholly devoted to *agôn* or *alea*. In choosing one, he also agrees that the other is its surreptitious counterpart.

24. Y. Hirn, *Les jeux d'enfants* (French translation; Paris, 1926), pp. 165-174.

25. [It is felt that in American usage Caillois' term "*sociétés à tohu bohu*" can be more idiomatically rendered as "Dionysian" societies (cf. Spengler, Mead, *et al.*), and "*sociétés à comptabilité*" as "rational" in the Weberian sense. M.B.]

26. For the description of shamanism I have utilized the work by Mircea Eliade, *Le Chamanisme et les Techniques archaïques de l'Extase* (Paris, 1951), in which may be found a notably comprehensive survey of the phenomenon in various parts of the world.

27. On the effects of *Agaricus muscarius*, macropsy in particular: "His pupils dilated, the subject sees all objects before him as monstrously enlarged. . . . A little hole seems to him a terrifying abyss and a spoonful of water is like a lake." Cf. L. Lewin, *Les Paradis artificiels* (French translation; Paris, 1928), pp. 150-155. On the parallel effects of peyote and its use in the festivals and cults of the Huichol, Cora, Tepehuane, and Tarahumare of Mexico and the United States, the classic descriptions of Carl Lumholtz (1851-1922) (cf. bibliography of A. Rouvier, *Le Peyotl*, Paris, 1927) are very informative.

28. C. G. and B. Seligmann, *The Veddas* (Cambridge, 1911), p. 135, cited by T. K. Oesterreich, *Les Possédés* (French translation; Paris, 1927), p. 310. This latter work contains a remarkable collection of original descriptions of combined states of *mimicry-ilinx*.

In the text I refer to Tremearne on the Bori cult. It is appropriate to add those of J. Warnek for the Batak of Sumatra, W. W. Skeat for the Malays of the Malacca Peninsula, W. Mariner for the Tonga, Codrington for the Melanesians, J. A. Jacobsen for the Kwakiutl of the American Northwest. The tales of observers, which T. K. Oesterreich has fortunately been inspired to cite *in extenso*, present most persuasive analogies.

29. On this subject, it is very instructive to read in Robert Houdin (*Magie et Physique amusante*, Paris, 1877, pp. 205–264) the explanation of the miracle and the reaction of the spectators and the press. There are cases in which it is important, in interpreting ethnographic field work, to engage a professional magician, since the credulity of scientists is unfortunately infinite and even biased and bewitched.

30. Franz Boas, *The Central Eskimo* (Sixth Annual Report of the Bureau of Ethnology, 1884–1885, Washington, 1888), pp. 598 ff., cited by M. Eliade, *op. cit.*, p. 265.

31. Cf. M. Eliade, *op. cit.*, p. 231. We conclude with G. Tchoubinov, *Beiträge zum psychologischen Verständniss des sibirischen Zaubers* (Halle, 1914), pp. 59–60: "The sounds produced seem far off, then come nearer and seem to pass like a hurricane across the walls and finally vanish into the depths of the earth" [cited by T. K. Oesterreich, *op. cit.*, p. 380, translated by M.B.]

32. Deliberate and organized deception can be observed among peoples where it is least expected, among African Negroes for example. In Nigeria especially, bands of professionals confront each other in what seem to be tournaments of virtuosity at the time of the initiation ceremonies. A colleague's head is cut off and then glued on again (cf. A. M. Vergiat, *Les rites secrets des primitifs de l'Oubangui*, Paris, 1936, p. 153). Percy Amaury Talbot, in his *Life in Southern Nigeria* (London, 1923), p. 72, reports a curious trick which M. Jeanmaire stressed as resembling the myth of Zagreus-Dionysus:

"Many rites which according to native ideas come under the heading of 'magic' would seem more properly to fall under that of conjuring tricks. To give a few examples, as described in the words of Abassi Ndiya:

"There is so much magic in our town that medicine men who are strong in the knowledge of secret things can take a small baby from its mother, throw it into a fu-fu mortar, and beat it to a pulp before the eyes of all the people. Only the mother is not allowed to look upon the sight, but is led far away into the bush, lest she should weep too much and so disturb the ceremony."

"Next, three men are chosen out and bidden to stand before the mortar. To the first is given a little of the pulp to eat, to the second considerably more; while the third man is made to swallow the rest, even to the last morsel.

"When all is eaten the three move forward, facing the spectators, the one who ate the most standing in the middle. After a while they begin a dance, in the course of which the central figure pauses suddenly, and extending his right leg, shakes it violently. Then, from out of his thigh, the babe appears to be reborn and is carried round for all men to see."

33. Arthur J. N. Tremearne, *Hausa Superstitions and Customs* (London, 1913), pp. 534-540, and *The Ban of the Bori* (London, 1919). Cf. T. K. Oesterreich, *op. cit.*, pp. 321-323.

34. This is the ritualized procedure for driving out the demon.

35. Alfred Métraux, "Dramatic Elements in Ritual Possession," *Diogenes*, No. 11 (1955), 18-36.

36. G. Buraud, *Les Masques* (Paris, 1948), pp. 101-102 [translated by M.B.].

37. The process for turning tables on the elders is very well described by Henri Jeanmaire, *Couroi et Courêtes* (Lille, 1939), pp. 172-223. On pp. 221-222 he describes the initiation procedures of the Bobo:

"The Bobo of the upper Volta present a system of religious institutions comparable to the Bambara, though in somewhat hybrid form. *Do* is the generic name in this region for the religious societies in which disguises are made out of leaves, vegetable fibers, and wooden masks representing animal heads, just like the head of the divinity that presides over these ceremonies and to which they are consecrated in the various villages or compounds, i.e. a tree adjacent to a sacred well. The masks (*Koro*, plural *Kora*; *Simbo*, plural *Simboa*) are made and worn by the youths of a certain age-grade. The right to plumb the mystery, wear the costume, and have special privileges in encounters with noninitiates is attained at an appointed time by the next age-grade of boys, who have grown bigger and, tiring of being chased and flogged by the masked ones, ask to learn 'the things of *Do*.' counseled by the village elders, and after parleys with the chiefs of the older age-grades, they win their demands, on condition that they previously entertain the elders. The acquisition of *Do*, i.e. the revelation of the secret of the masks, thus plays a role in the puberty rituals. Usages naturally vary in different localities. Two descriptions, somewhat vague but picturesque and extremely impressive, have been selected from Dr. Cremer's informants.

"In one, both accounts of which are in agreement, the ceremony in which the revelation takes place is reduced to a symbolism the crude character of which is not lacking in a certain grandeur. If, in a certain compound, there are many children of the same age and stature, the elders say that the moment has come to get out the masks. The chief of *Do* informs the youths previously initiated that they are to fabricate and don the costumes of foliage, designed according to ritual requirements. This is done in the morning. At the end of the day the masked ones set out for the village, stopping just outside it to wait for nightfall. They are surrounded by the elders. At night, the *Do* priest calls the neophytes and their parents, who have provided them with traditional offerings and chickens for the sacrifice. When the children have been assembled, the priest appears with an axe that he bangs on the ground several times in order to summon the masked men. The children are made to lie down and cover their heads. A masked dancer runs in, leaps among the children, and terrifies them with sounds produced by a kind of whistle called "little mask." After this, the old man tells the children to rise and catch the masked one who tries to escape. They pursue and finally capture him. The elder interrogates them. Do they know what this leaf-covered creature is? To learn the answer, they bare the face of the masked character, whom they at once recognize. But at the same time they have been warned that they will die if they reveal the secret to those who do not know it. For this purpose a deep ditch has been dug under them, in which they will be thrown if they betray their promise. It is also the place where they will also probably bury the child's personality that has just been shed. Each child must symbolically throw into the hole several leaves taken from the costume of the masked person. When the trench is refilled, he seals it by striking it with his hand. At the rites celebrated upon leaving the place of initiation and returning to the village, climaxing the sacrifice, the ritual is reduced to a minimum. As each child passes by, he plunges his hand into a vessel of water. The next day, the new initiates are led by the youths into the brush and taught how to plait and put on the costume.

"When the secret is revealed to someone he comes *alive*. A person who does not know the secret is not regarded as *alive*."
Matériaux d'Ethnographie et de Linguistique soudanaises, Vol. IV, 1927 [from documents collected by J. Cremer and published by H. Labouret, translated by M.B.].

38. Cf. Hans Himmelheber, *Brousse* (Leopoldville, 1939), No. 3, 17-31.

39. Cf. L. Frobenius, "*Die Geheimbünde u. Masken Africas*,"

Abhandl. Leop. Carol. Akad. Naturforsch. Vol. 74 (Halle, 1898); H. Webster, *Primitive Secret Societies* (New York, 1908); H. Schwartz, *Alterklassen und Männerbünde* (Berlin, 1902). It is certainly proper to distinguish in principle between tribal initiation of youth and the membership rites of secret societies, which on occasion are intertribal. However, when a fraternity is powerful, it succeeds in encompassing nearly all the adults in the community, so that the two initiation rites are finally fused (H. Jeanmaire, *op. cit.*, pp. 207–209). The same writer (pp. 168–171), following Frobenius, describes how among the Bosso, a fishing and agricultural community on the Niger river southwest of Timbuktu, the Kumang masked society exercises supreme power that is simultaneously implacable, secret, and institutionalized. M. Jeanmaire likens the principal ceremony of the Kumang to the joint government of the ten kings of Atlantis in Plato's *Critias* (*Plato: The Timaeus and Critias or Atlanticus*, the Thomas Taylor translation, New York, Pantheon Books, 1944, pp. 246–249) which involves the capture and sacrifice of a bull tied to a pillar of orichalch.

"Authority here was exercised less by the hereditary village chiefs than by the directors of the 'secret societies,' the elders. The Kumang (analogous to the Bambara *Komo*), now in decline, has perpetuated curious, legendary rites, celebrated every seven years. Only the elders who had attained the highest grade in the society were admitted, and the place where the ceremony took place was forbidden to women, boys, and even young men. The elders allowed to participate in the ceremony had to supply, in addition to beer, a black bull for the sacrifice. The animal was slaughtered, dressed, and suspended from the trunk of a palm tree. The celebrants also had to provide themselves with a ceremonial costume comprising a headdress, trousers, and yellow blouse. The convocation took place at the behest of the president of the secret society, and his announcement caused great excitement throughout the territory. The participants assembled in a clearing of the forest, the members seating themselves around the president (*mare*) who himself sat on a black sheepskin which covered a human skin. Each participant remembered to bring poison and magical drugs (*Korti* among the Bambara). The first seven days were occupied with sacrifices, banquets, and conferences. It is likely that the discussions that took place at this time were mainly intended to reach agreement on the subject of which persons were to be made to vanish. At the end of seven days the important part of the secret ritual began. It was celebrated at the foot of a sacred tree, supposed to be the 'mother of Kumang,' and the wood of which is used to make masks for the

Kumang. At the foot of the tree a hole was dug and a masked man in a feathered headdress crouched inside it, impersonating the secret society's god. Toward the end of the afternoon on the appointed day, while his colleagues remained seated in the circle with faces averted, he started to emerge. The rest of the group provided background for the apparition with a chant that was taken up by the masked man with responses by the members of the fraternity. The masked man began to dance, at first slowly, then gradually moving faster. Leaving the hole, he danced around the circle of participants whose backs were turned to him. They accompanied the maniacal creature's dance by clapping their hands. Whoever turned toward him would be struck dead. Moreover, as the mask loomed larger and the dancing continued into the night, death struck at the general population. The dance went on for the next three days, during which the masked dancer oracularly answered such questions as were put to him. The answers were valid for seven years until the next ceremony took place. After this three-day period was over, he told the fortune of the president of the secret society, foretelling whether or not he would participate in the following festival. If the answer were negative, he had to die soon, i.e. at least during the intervening seven-year period, and immediate provision was made for his replacement. In various ways many victims perish during this time, among the general population as well as in the circle of elders." [H. Jeanmaire, *op. cit.*, adapted from L. Frobenius, *Atlantis, Volksmärchen und Volksdichtungen Afrikas*, Vol. VII, *Dämonen des Süden*, 1924, pp. 89 ff. Translated by M.B.]

40. The *poro* of the Temne, cf. Jeanmaire, *op. cit.*, p. 219.
41. [Translated by M.B.]
42. [Translated by M.B.]
43. [Translated by M.B.]
44. Texts in Mircea Eliade, *op. cit.*, pp. 359, 368, 383, 387, 396–397, where by contrast they are utilized to assure the value of shamanistic experiences.
45. The Weberian concepts of rational and charismatic are equivalent to Dumézil's concepts of *legiste* and *frénétique*.
46. G. Dumézil, *Mitra-Varuna* (Essay on two Indo-European views of sovereignty), (2nd ed.; Paris, 1948), esp. chap. 2, pp. 38–54; there is a comparable reference in his *Aspects de la Fonction guerrière chez les Indo-Européans* (Paris, 1956); Stig Wikander, *Der arische Männerbund* (1938); M. Eliade, *op. cit.*, pp. 338, 342, 348, on the resurgence in the twentieth century of a kind of charismatic leadership.
47. H. Jeanmaire, in *Couroi et Courêtes* (Lille, 1939), has as-

sembled an impressive dossier on this point, from which I have taken the facts cited in the text. Jeanmaire's entire citation on lycanthropy in Sparta can be found on pp. 540–568 of his work, and pp. 569–588 cover Lycurgus and the Arcadian cults.

48. [Translated by M.B.]

49. I reproduce the literal translation that M. Achena made at my suggestion of an abridged Persian edition of the work of Narshakhî (written in the 574th year of the Hegira). In Gholam Hossein Sadighi's thesis, *Les mouvements religieux iraniens au II^e et III^e siècles de l'Hégire* (Paris, 1938), pp. 163–186, is an exhaustive and critical collation of the source-materials on Hakim. [Translated from the French by M.B.]

50. E. Brehier, *Histoire de la Philosophie*, Vol. I, Part 1 (5th ed.; Paris, 1948), pp. 52–54.

51. Marcell Mauss, "Une catégorie de l'esprit humain: la notion de personne, celle de moi," *J. Roy. Anthropological Inst.*, LXVIII (July–Dec. 1938), 263–281.

52. From an unpublished study of E. Michael Mendelson.

53. Cf. Georges Friedmann, *Où va le travail humain?* (Paris, 1950), pp. 147–151. In the United States people bet on the "numbers," i.e. "the three last numbers of the total shares traded daily on Wall Street" [translated by M.B.]. This has resulted in "rackets" and many fortunes regarded as of dubious origin (*ibid.*, p. 149, n. 1; *Le Travail en miettes*, Paris, 1956, pp. 183–185).

54. The influence of games of chance becomes extreme when the great majority of a group works little and gambles much of the time, or even all of the time. For this condition to occur, an exceptional juxtaposition of climate and social system is needed. The general economy must be modified and special cultural forms allied to superstitious beliefs must emerge concomitantly.

I have described examples of this in some detail. Cf. *supra*, n. 14, and also Appendix I, "The Importance of Games of Chance."

55. Some figures are relevant. A young college professor, described as timid, won \$129,000 for answering, over a fourteen-week period, questions on baseball, antiquity, great symphonies, mathematics, natural science, exploration, medicine, Shakespeare, and the history of the American Revolution. [The more recent "payola" investigations, sparked by the Van Doren case, are a sardonic commentary. M.B.] Children occupy an important place on the prize list. Lenny Ross, 11, won \$64,000 thanks to his knowledge of the Stock Exchange. Several days later Robert Strom, 10, won \$80,000 for answering questions on electronics, physiology, and astronomy. In Stockholm in February of 1957 the Swedish television system

contested 14-year-old Ulf Hannetz's answer naming *Umbra krameri* as a fish with eyelids. The Stuttgart Museum immediately flew them two living specimens and the British Institute of Natural Science sent a film taken underwater, thus confounding the child's detractors. The young hero received 700,000 francs, and American television interests brought him to New York. Public opinion has been quite excited, and the fever is cleverly exploited. "Thirty seconds to win a fortune," announce the newspapers, which frequently reserve special space for these contests and publish the photograph of the winner, with the fabulous sum won so quickly, in large, prominent type. The most ingenious and dedicated thinker could hardly conceive of such remarkable resources for the preparation and attraction of the challenge.

56. On the characteristics, extent, and intensity of identification, see the excellent chapter by Edgar Morin in *Les Stars* (Paris; 1957), pp. 69–145, especially the answers to the questionnaires and inquiries in Great Britain and the United States on the fetishism of which stars are the object. The phenomenon of identification has two possibilities: idolatry of a star of the opposite sex and identification with a star of the same sex and age. The latter is more frequent, about 65 per cent, according to statistics of the Motion Picture Research Bureau (*op. cit.*, p. 93).

57. Numerous suicides followed the death of Rudolf Valentino, the actor, in 1926. In the vicinity of Buenos Aires, in 1939, several years after the tango vocalist Carlos Gardel was burnt to death in an airplane crash, two sisters wrapped themselves in sheets drenched in gasoline and set themselves on fire in order to die as he had. American teen-agers, in order to pay collective homage to their favorite singer, organized themselves into rowdy clubs with names such as "Those Who Swoon at the Sight of Frank Sinatra." One year after the premature death of James Dean in 1956, when his cult began, the Warner Brothers studio was still receiving about 1,000 letters daily from mourning admirers. Most began thus: "Dear Jimmy, I know that you are not dead . . ." A special office was set up to handle the extravagant posthumous correspondence. Four magazines were founded, devoted exclusively to the actor's memory. One of them was called *James Dean Is Back*. One rumor circulated was that no photo of his burial was published, claiming that the actor had to go into seclusion because he had become disfigured. Numerous spiritualistic séances have conjured up the fugitive. To a Prisunic [Paris chain store—M.B.] salesgirl named Joan Collins he dictated a long memoir in which he stated that he was not dead

and that those who said he was not were right. This work sold 500,000 copies.

Writing in one of the more important Parisian dailies a well-informed historian, aware of the revelatory symptoms of changing mores, was impressed by the phenomenon. Specifically, he writes: "The procession to James Dean's tomb cries for him, just as Venus wept over the tomb of Adonis." He fittingly recalls that eight record albums, each selling between 500,000 and 600,000 copies, have already been consecrated to him, and his father has written his official biography. "Psychoanalysts have been probing his subconscious through the meager record of his conversations. There is no city in the United States without its James Dean Club where the faithful commune with his memory and venerate his relics." It is estimated that these associations have about 3,800,000 members. After the hero's death, ". . . his clothes were cut into tiny pieces and sold for several dollars per square inch." The automobile in which he was accidentally killed while speeding at about 60 miles per hour ". . . has been restored and exhibited in many cities; an admission fee of twenty-five cents was charged to look at it. For fifty cents one could sit at the wheel for a few moments. When the tour ended it was cut up with an acetylene torch, and the pieces were sold to the highest bidders" (Pierre Gaxotte in an article in *Le Figaro* entitled "From Hercules to James Dean"). The women's weeklies, it goes without saying, published lengthy articles, illustrated with photographs, on the analysis of this phenomenon in Edgar Morin's *Les Stars*. [Excerpts translated by M.B.]

58. Nothing is more significant in this regard than the almost unbearable enthusiasm excited in Argentina by Eva Peron, who in addition combined three basic reasons for prestige, as a star (of music hall and the movies), a person of power (being the wife and inspiration of the president of the republic), and as a kind of providence incarnate for the lowly and the exploited (a role that she loved to play, to the success of which she diverted public monies in the guise of private charity). Her enemies, in order to discredit her, reproached her for her furs, pearls, and emeralds. I heard her answer this accusation during a huge meeting at the Colon theater in Buenos Aires, crowded with thousands of her followers. She did not deny the furs and diamonds, even going so far as to wear them. She said: "Don't we poor have as much right as the rich to wear fur coats and pearl necklaces?" The crowd burst into long and ardent applause. Each of the innumerable working girls felt herself vicariously clad in the most costly attire and most precious jewels.

59. P. de Felice has assembled an incomplete but impressive

documentation on this point in his work *Foules en délire, Extases collectives* (Paris, 1957).

60. These outbursts can probably be correlated with the popular success of such American films as *The Wild Ones* and *Rage to Live*. The Stockholm riots were described in an article by Eva Freden in the *Monde* for January 5, 1957. The incident shows at what point the established order is fragile, to the degree that it is strict, and how the powers of vertigo are always ready to take over. The account of the Swedish correspondent of the *Monde* follows:

"On the evening of December 31, 5,000 youths invaded Kungs-gaten—Stockholm's main artery—and for nearly three hours ruled the street, molesting passers-by, overturning cars, breaking windows, and finally trying to erect barricades with iron grills and posts taken from the nearest store. Other groups of young vandals upset old tombstones in a neighboring churchyard, and threw paper bags filled with burning gasoline from the top of the bridge that crosses Kungs-gaten. All the police strength that could be mobilized was hastily brought to the area. But their ridiculously small number—scarcely 100 men—made their task difficult. It was only after several charges, with drawn sabers and ten-against-one hand-to-hand combat that the police were able to gain control of the terrain. Several of them, who were almost lynched, had to be taken to the hospital. About forty rioters were arrested. They were between 15 and 19 years of age. 'It's the worst riot that ever took place in the capital,' declared the Stockholm chief of police.

"These events aroused the press and responsible citizenry to a confused indignation and disquiet that has not been allayed. Pedagogues, educators, the church, and the numerous community organizations that are active in Sweden anxiously sought for the causes of this strange explosion. The acts in themselves are nothing new; every Saturday evening the same rowdy scenes take place in the center of Stockholm and in the principal provincial cities. However, this is the first time that these incidents reached such proportions.

"They have an almost Kafkaesque quality of anxiety. For these movements are neither organized nor premeditated. The riot is not 'for' or 'against' anyone or anything. Inexplicably, dozens, hundreds, and on Monday, thousands of youths found themselves there. They did not know each other, had nothing in common but their age, and were not subject to either orders or a leader. They are, in every tragic sense of the term, 'rebels without a cause.'

"To the stranger who, under other conditions, has seen children kill for a cause, this purposeless brawling is as incredible as it is incomprehensible. If it were even a question of an exuberant cathar-

sis, albeit in bad taste, in order to impress the citizenry, one would feel reassured. But the faces of these adolescents are sullen and evil. They are not being frivolous. They suddenly burst out into a rage of silent destructiveness. In fact their silence is perhaps their most impressive quality. In his excellent little work on Sweden, François-Régis Bastide has described '. . . these birds of prey terrified by solitude [who] assemble, crowd close together like penguins, settle, snarl, hurl insults through clenched teeth, heap blows upon each other without crying out, without a single understandable word. . . .'

"Apart from the famous Swedish solitude and animal anguish that has been described many times and which is stimulated by the long winter night lasting from 10 P.M. to 10 A.M., may another type of explanation be sought in the European or American antisocial gangs that engage in violence? Because in Sweden the facts are more clearly isolable than elsewhere, the explanation of the local riots is no doubt also valid for 'rock 'n roll' vandals, American motorcycle hipsters, and of course the London 'teddy-boys.'

"First of all, to what social group do these young rebels belong? Dressed like their American counterparts in leather jackets on which are depicted death's heads and cabalistic inscriptions, they are for the most part of working-class or lower middle-class background. As apprentices or clerks, they earn at their age salaries that are fantastic by previous generations' standards. This relative prosperity and, in Sweden, the certainty of an assured future eliminates their concern for the future, and at the same time makes it unnecessary for them to struggle for existence or status. In other places it is an excess of difficulties to overcome in a world in which routine work is undervalued, by contrast to the glamorization of movie actors and gangsters, that leads to despair. In both cases combativeness, deprived of a legitimate battleground, suddenly explodes in a blind and senseless eruption." [Translated by M.B.]

61. About the year 1700 in France the masquerade was a court diversion, promoting pleasant dalliance. But, according to as realistic a historian as Saint-Simon, it was still disturbing and unpredictable, capable of being transformed in a most disconcerting way into a chimera worthy of Hoffmann or Edgar Allan Poe.

"Bouligneux, Lieutenant General, and Wartigny, *maréchal-de-camp*, were killed in Italy [at the siege of Verua]; both of them very brave men but both very eccentric. The previous winter several wax masks had been made, representing persons well known at Court; they were worn under other masks so that, when the wearer unmasked himself, the spectators were taken in, thinking they saw his face, whereas his real one, which was quite different, was under-

neath; this joke caused a good deal of amusement. This winter these masks were again brought out; they were all quite fresh and in good order, just as they had been put away at the time of the Carnival, but to the surprise of everybody those of Bouligneux and Wartigny, though retaining their perfect resemblance, had the pallor and drawn appearance of persons just dead. They were brought out at a ball and caused such horror that an attempt was made to freshen them up with rouge; but the colour disappeared at once and the drawn appearance could not be remedied. At last these two masks were thrown away. It seemed such an extraordinary portent that I think it worth recording; though I certainly should not venture to do so if the whole Court had not witnessed it as well as myself." (*Memoirs of the Duke de Saint-Simon*, Vol. 2, *The Silver Age of Louis XIV*, trans. Francis Arkwright, New York: Brentano's, 1915, pp. 233-234.)

In the eighteenth century Venice was in part a masked society. The mask served all kinds of uses, which were regulated. According to Giovanni Comisso, the *bautta* was used as follows (*Les agents secrets de Venise au XVIII^e siècle*, documents selected and published by Giovanni Comisso, Paris, 1944, p. 37, n. 1):

"The *bautta* consisted of a kind of short cloak with a black hood and mask. The origin of this name is the cry *hau, bau*, used to frighten children. Every Venetian, beginning with the Doge, wore one when he wished to come and go through the city freely. It was worn by the nobility, by both men and women, in public places in order to check displays of luxury and to prevent the patrician class from being subjected to the indignity of contact with the masses. At the theater, the doormen saw to it that the nobles wore the *bautta* well over their faces, but once inside the auditorium they kept them on or off at will. When for reasons of state the patricians had to confer with ambassadors, they had to wear the *bautta*, and it was also ceremonially prescribed for ambassadors on such occasions."

The black mask is the *volto*, the *zendale* is a black veil enveloping the head, and the *tabarro* is a light cloak worn over other clothing. They were worn for conspiracies and in keeping evil assignations. They were often scarlet in color. In theory, the nobility was legally forbidden to wear them. Finally, with regard to carnival disguises, G. Comisso notes the following:

"Among the different kinds of disguises used at carnivals there were: the *gnaghe*, men impersonating women, imitating the shrill timbre of certain female voices; the *tati*, supposed to represent overgrown, stupid children; the *bernardoni*, disguised as beggars afflicted with deformities or diseases; the *pitocchi*, dressed in rags. It was

Giacomo Casanova who had the original idea of a masquerade of *pitocchi* at a carnival in Milan. He and his companions were clad in very beautiful and expensive clothing, which they slashed in different places with a pair of scissors, patching the holes with pieces of equally costly but different-colored material." (Comisso, *op. cit.*, Vol. V, chap. 11.)

The ritualistic, stereotyped side of the masquerade is very evident. It was still observable in 1940 at the Rio de Janeiro carnival.

Among the modern writers who have had the opportunity to analyze the trouble emanating from the use of masks, Jean Lorrain may claim an eminent place. The reflections in the introduction to the story entitled *L'un d'eux* in his anthology of short stories *Histoires de Masques* (Paris, 1900) is worth reproducing:

"The fascinating and yet repulsive mystery of the mask, its techniques and motives—who can logically explain the imperious need to which certain people yield on set occasions to paint their faces, disguise themselves, change their identities, cease being what they are, and, in a word, escape from themselves?

"What instincts, appetites, hopes, lusts, or diseases of the spirit are concealed under the crudely colored façade of false chins, noses, and beards, under the shiny satin black masks or the white monks' cloaks? To what intoxication of hashish or morphine, to what oblivion, to what equivocal and evil adventure are these lamentable and grotesque ranks of dominoes and penitents rushing so precipitously on the days of the masquerades?

"These masked ones are noisy, their movements and gestures are rowdy, and moreover, their gaiety is forced. They are living ghosts. Like phantoms, most of them move shrouded in long-pleated robes, and like phantoms, their faces are invisible. Why aren't there vampires under these large cloaks framing visages concealed in velvet and silk? Why is there no void or nothingness under these huge mummers' blouses draped like shrouds over the angle of tibia and humerus? Isn't their humanity, hiding under cover of the crowd, already outside nature and law? They are evidently bent on evil because they wish to remain incognito, and are wicked and culpable because they seek to deceive reason and instinct. In sardonic and macabre fashion they fill the hesitant stupor of the streets with jostling, buffoonery, and shouting, cause women to shudder in delight, throw children into convulsions, and stimulate men, suddenly disturbed by the indeterminate sex of the masked ones, to shameless thoughts.

"The mask is the troubled and troubling face of the unknown, the smile of deceit, the very soul of the perversity that can corrupt

and terrify. It is luxury spiced with fear, the anguished and delicious feat of a challenge to sensory curiosity: 'Is she ugly? Is he handsome? Is he young? Is she old?' It may be gallantry seasoned by the macabre and set off by a taint of the ignoble and a taste for blood—for who knows where the adventure may end? In a furnished room or in the apartment of a notorious demimondaine, in the police station perhaps, because robbers also disguise themselves in order to commit their crimes. With their impressive and terrifying false faces, masks are as suitable to cutthroats as to the graveyard, to robbers, prostitutes, and ghosts." [*Histoires de Masques*, pp. 3–6. Above excerpts translated by M.B.]

62. [The French word *loup* means "wolf" as well as mask. M.B.]

63. Y. Hirn, *op. cit.*, pp. 213–216; Hugues Le Roux and Jules Garnier, *Acrobats and Mountebanks* (London: Chapman and Hall, Ltd., 1890).

64. For the description of the Navajo and Zuni rites I have followed Jean Cazenave, *Les Dieux dansent à Cibola* (Paris, 1957), pp. 73–75, 119, 168–173, 196–200.

65. [Translated by M.B.]

66. This is illustrated in Jorge Luis Borgès, *La Lotería de Babylone*, in *Fictions* (French translations; Paris, 1951), pp. 82–93.

67. Simone Delarozière and Gertrude Luc, "Une Forme peu connue de l'Expression artistique africaine: l'Abbia," *Études camerounaises*, Nos. 49–50 (Sept.–Dec. 1955), 3–52. Also, in the Songhai territory of the Sudan where cowry shells are used both as dice and as money, each player throws four dice, and if they all fall on the same side, he wins 2,500 of them. They play for money, property, and wives. Cf. A. Prost, "Jeux et Jouets," *Le Monde noir* (Nos. 8–9 of *Présence africaine*), 245.

68. The same symbols are also found in a Mexican card game played for money, and which, in principle, resembles lotto.

69. Rafael Roche, *La Policía y sus Misterios en Cuba* (Havana, 1914), pp. 287–293 [translated by M.B.].

70. It is well known that Havana, like San Francisco, has one of the larger Chinese populations outside of China itself.

71. From a communication of Lydia Cabrera.

72. Rafael Roche, *op. cit.*, p. 293.

73. From a communication of Alejo Carpentier and documents supplied by him.

74. *New York Times*, Oct. 6, 1957, sec. 1, p. 10.

75. In addition, since domestics are almost exclusively black or mulatto, they are regarded as the natural intermediaries between the sorcerers or priests of the African cults and those who, while believ-

ing in the efficacy of their magic, are still loath to enter into direct relationships with them.

76. Roger Caillois, "Economic quotidienne et Jeux de Hasard en Amérique ibérique," in *Quatre Essais de Sociologie contemporaine* (Paris, 1951), pp. 27–46 [translated by M.B.].

77. Cf. Gunnar Franzen, "Les Banques et l'Epargne en U.R.S.S.," in *l'Epargne de Monde* (Amsterdam, 1956), No. 5, 193–197, reprinted from *Svensk Sparbankstidskrift* (Stockholm, 1956), No. 6.

78. Friedrich Schiller, *Works—Aesthetical and Philosophical Essays*, ed. Nathan H. Dole (Boston: The Wyman-Fogg Company, 1902). The quotations are from letter 15 (p. 56) and also letters 14, 16, 20, 26, and 27.

79. Wilhelm Wundt, *Ethics: An Investigation of the Facts and Laws of the Moral Life*, Vol. 1, trans. Julia Gulliver and Edward B. Titchener (New York: The Macmillan Company, 1902), p. 208.

80. New York: D. Appleton & Co., 1898.

81. New York: D. Appleton & Co., 1901.

82. *Op. cit.*, pp. xx and 73–76.

83. *Le Réel et l'Imaginaire dans le Jeu de l'Enfant* (2nd ed.; 1955); *Le Jeu de l'Enfant, Introduction à la Pédagogie* (new enlarged ed.; Paris, 1955).

84. Complicated adult games have also attracted the attention of psychologists. Studies are especially numerous on the psychology of champion chess players. For football, it is appropriate to cite the studies of G. T. W. Patrick (1903), M. G. Hartgenbusch (1926), R. W. Pickford (1940), and M. Merleau-Ponty (in *La Structure du Comportement*, 1942). Their conclusions are discussed in F. J. J. Buytendijk's study, *Le Football* (Paris, 1952). Like those works devoted to the psychology of chess players (which explain, for example, that what chess players see in the bishop or castle are not determinate figures but oblique or rectilinear forces), these studies explain the player's behavior insofar as it is determined by the game, but not the nature of the game itself. In this respect, cf. the impressive article by Reuel Denny and David Riesman, "Football in America," *Perspectives U.S.A.*, No. 13 (Autumn 1955), 108–129. It demonstrates cogently how a "mistake" in adaptation to new needs or a new milieu may result in a new rule, or even a new game.

85. Slingshots are absent from Chateau's works. Perhaps he confiscated them, instead of observing the psychology of their utilization. Also, the children studied by Chateau do not play croquet or fly kites, since these games require space and special equipment, and

they do not wear disguises. Here again, it is because they have been observed only in school situations.

86. *Le Jeu de l'Enfant*, pp. 18-22.

87. I shall cite only one example: the success of lotteries-in-miniature, observed in the vicinity of schools, which candy stores offer to pupils when school lets out. For a fixed price the children draw lots for a ticket on which the number of the prize candy is written. Needless to say, the merchant delays as long as possible the moment when the ticket corresponding to the prize candy is mixed in with the others.

88. A. Brauner, *Pour en faire des Hommes études sur le jeu et le langage chez les enfants inadaptés sociaux* (Paris: S.A.B.R.I., 1956), pp. 15-75.

89. (*Jeux d'emportement* in the French text. M.B.)

90. The examples cited are from Chateau's index (pp. 386-387). To compensate, in the corresponding chapter (pp. 194-217), the author uses both senses of the word "passion" (*emportement*), frenzy and anger, chiefly in order to study the disorder engendered in the course of a game by excessive enthusiasm, exhilaration, intensity, or simply an accelerated rhythm. The game ends in disorganization. In this way, his analysis defines a modality or rather a danger of play which threatens it in certain cases. However, this is in no way a specific category of games.

91. Chateau, *op. cit.*, p. 298.

92. J. J. von Neumann and O. Morgenstern, *Theory of Games and Economic Behavior* (Princeton, 1944); Claude Berge, *Théorie des Jeux alternatifs* (Paris, 1952).

93. Claude Berge, cf. *supra*. [Translated by M.B.]

94. [*Moulin* in the French text. M.B.]

95. [*Mange* in the French text. M.B.]

96. A. Prost, "Jeux dans le Monde noir," *Le Monde Noir* (Nos. 8-9 of *Présence africaine*), pp. 241-248.

97. [*Loup* in the French text. M.B.]

98. It is generally believed that to make the opening move is a real advantage. This has not been proven.

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