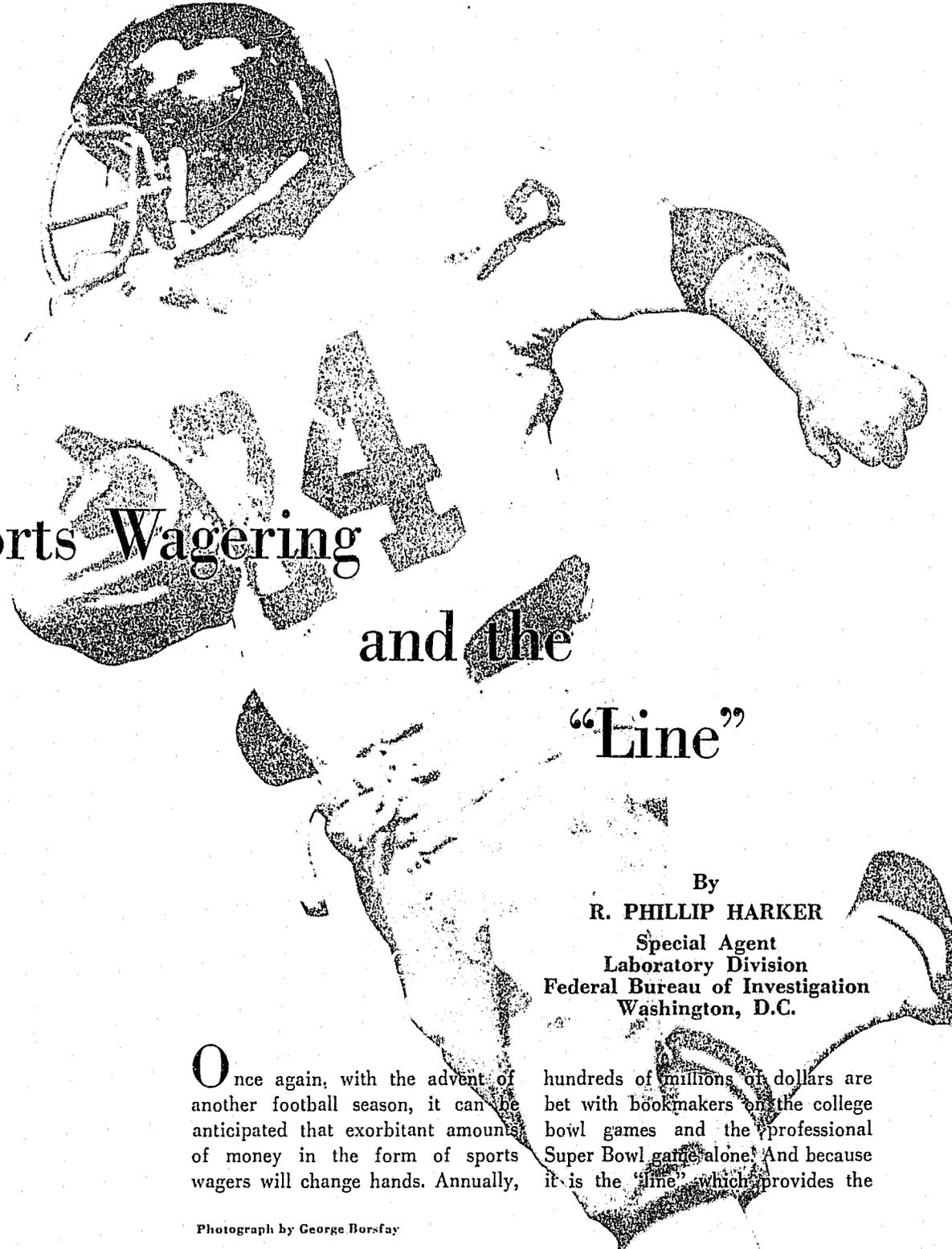


ORGANIZED CRIME



Sports Wagering and the "Line"

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Once again, with the advent of another football season, it can be anticipated that exorbitant amounts of money in the form of sports wagers will change hands. Annually, hundreds of millions of dollars are bet with bookmakers on the college bowl games and the professional Super Bowl game alone. And because it is the "line" which provides the

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TEAM A SCORES			
Game	A Score	Opponent Score	Difference
A vs D	31	26	+ 5
A vs E	24	10	+14
A vs F	17	19	-2
Final Total Differential			+17
Average Differential For 3 Games			+5% (17:3)

Figure 1.

basis for taking these bets, law enforcement officers should familiarize themselves with its function.

The line theoretically functions as a handicap to balance the relative strengths of the opposing teams. It consists of points either added to the underdog teams' final scores or subtracted from the favorite teams' final scores. Then again, theoretically having balanced the relative strengths of the teams, wagers are accepted by bookmakers usually at 11-10 odds. Thus, for instance, if a bettor desires to bet \$500 on the Washington Redskins at -6 (meaning Washington is favored by 6 points, and 6 points are subtracted from Washington's final score to determine the result of the wager), he would actually risk \$550 to the bookmaker's \$500.

As stated above, the line is only *theoretically* a balancing of the strengths of the teams. However, as a practical matter, the line is really a number of points, either added to the underdogs' scores or subtracted from the favorites' scores, which the bookmakers feel will tend to attract rela-

tively even amounts of wagering on both sides of the contest. If the bookmaker achieves an even balance of wagering on a game and he has no gamble or risk, his profit is assured of being 10 percent, the "juice" or "vigorous" of the losing wagers. In many

cases, a true handicap line or power rating line will approach or approximate the bookmaker's wagering line, *but not necessarily.*

Power Rating Lines

There are several nationally known power rating "lines" or systems. In these systems, the starting point is a comparison of the points scored by and against Team A, which is now playing Team B, with the points scored by and against Team B. This is illustrated in figures 1 and 2, which chart the scores of Teams A and B and their previous opponents.

"There are several nationally known power rating 'lines' or systems."

As illustrated, Team A would have won its games by an average $5\frac{2}{3}$ points, while Team B would have lost its games by an average 8 points. Therefore, on the average, Team A would be considered $13\frac{2}{3}$ points better than Team B ($5\frac{2}{3} + 8$).

Figure 2.

TEAM B SCORES			
Game	B Score	Opponent Score	Difference
B vs G	13	33	-20
B vs H	14	10	+ 4
B vs I	6	14	-8
Final Total Differential			-24
Average Differential For 3 Games			-8 (24:3)

A power system would then further refine the point spread by weighing additional factors. For instance, 6 points might be added to B's rating for being the home team, 2 points added because of the injury to A's star wide receiver, 5 points added because the opponents of B were stronger than A's, but 3 points subtracted because of an internal dispute between B's quarterback and center. By combining these refinements ($13\frac{2}{3}-6-2-5+3$), the final rating, Team A favored by $3\frac{2}{3}$ points, is determined.

This example greatly oversimplifies these often complex, computerized systems, but it serves to illustrate the general theory. Our rating could theoretically be used as a wagering line, and depending on the accuracy of the weighing of the various factors, such as home-field advantage, weather conditions, injuries, etc., would be a true handicap. In practice, however, this is never used as a line by bookmakers, although they have reason to be interested in such ratings. Bookmakers are interested because they anticipate their bettors will be aware of the ratings and may follow them. Furthermore, if the bookmaker places reliance on the system, he may decide to allow his book to become unbalanced on a game simply because, though he is forced to adopt generally the bookmaking line (as discussed below), he may feel the betting line is bad and the game will in fact turn out otherwise. For example, if the betting line has Team A favored by 12 points, whereas our power rating shows A to be only about 4 points better, the bookmaker may decide to allow an imbalance of betting on A or even "lay off"—rebet with another bookmaker on B—to create an imbalance in his favor.

Frequently, a rather substantial variance between the betting line and

power ratings occurs when a popular team plays a relatively unknown team, when a team from an area where wagering is often huge plays a team from an area where little betting occurs, or when a tremendously strong team plays a very weak one. These instances reemphasize the actual use of a betting line—to attract betting on both sides without necessarily weighing the true strengths of the teams. If, for instance, the power ratings show a team is 50 points stronger than its opponent and if 50 were used as a line, it might completely shut off the betting on the favorite. Many bettors would feel that the favorite would win substantially, but to give up 50 points might be too dangerous. On the other hand, many bettors would bet on any team if they received a 50-point handicap. However, it could be that if the bookmaker used a line of 40 rather than 50, he might now attract favorite-team betting, as well as underdog betting.

Necessity and Development of the National Line

To a great extent, the line is developed in Las Vegas, Nev. Not only may the line be formulated legally there and posted publicly in legal bookmaking establishments, but Las Vegas is the recognized hub of wagering and the clearing house for much of the intelligence information used to develop the line. Persons there, who are instrumental in line development, have vast sources of information about the games, as well as knowledge of major trends or "moves" in game wagering, especially by the so-called "smart" or knowledgeable bettors. Each week in Las Vegas, the football line is developed, legally printed, and published. Thereafter, line information is disseminated almost instantaneously, usually via telephone, to various persons throughout the country.

Some bookmakers send a trusted associate to stay in Las Vegas and to call out the line regularly. Others merely pay a small salary to someone already residing in Las Vegas for performing this service. Although gambling in general is thought to be legal in Nevada, there is still a goodly amount of illegal gambling activity among many, including bookmakers. And these bookmakers may be inclined to disseminate personally, or through agents, line information from Nevada. Whichever of the above means is used, this line information is then relayed nationwide to the local bookmakers or their associates. The bookmakers characteristically share in the cost of the line service.

"Every bookmaker, by necessity, has a source for the Las Vegas line."

Every bookmaker, by necessity, has a source for the Las Vegas line. The line may come directly from Nevada, from Nevada indirectly through one or more other cities, or from other local bookmakers who obtain it from sources ultimately obtaining it from Las Vegas. This accessibility is necessary for several reasons: First, as indicated above, the Las Vegas gambling community is considered extremely knowledgeable in all aspects of line development; and second, since other bookmakers and bettors are also aware of this line, the individual must start out using the Las Vegas line as his basis lest he become immediately out of balance, and hence, unable to lay off. For example, if the bookmaker felt the proper line on a game should be Team A favored by 4 points and used this line for taking bets, and if other bookmakers used the Las Vegas line of 12 points, our bookmaker would find immediately that no one would bet with him on the underdog getting only 4 points;

whereas everyone would bet with him on the favorite giving up only 4 points rather than 12. Thus, he would experience a tremendous imbalance of betting on the favorite, which we have indicated is not a desirable situation. Moreover, he could not lay off with other bookmakers, since he must lay off with them at *their* line, which would be 12 rather than 4. And if he should lay off with the other bookmakers on the favorite giving up 12 points when his imbalance is at 4 points, and if the final score showed Team A winning by more than 4 points but less than 12 points, he would then lose not only his imbalance of bets on the favorite at 4 points, but his layoff bets at 12 points—a very dismal situation generally referred to as being “middled.”

When the bookmaker obtains the line, he then often adjusts it to suit his needs or makes up *his* line. (See fig. 3.) He may well know his usual bettors and be able to anticipate what volume on various games he can expect. If the line he receives is 4 and he knows that his bettors are likely to bet heavily on the underdog (the hometown favorite, perhaps), he might decide to use 3 or 3½ as his line. Then, as wagering progresses during the wagering period, such as often from Tuesday until Sunday on professional football games, he may vary his line upwards or downwards one-half point at a time to tend to attract betting, or conversely, to discourage betting on the other side, in order to balance the betting. The traditional thought is that the use of half points stems from the bookmakers' desires to eliminate “pushes” (or ties) when the bet is a draw. Although half points do have this effect, the real purpose is to facilitate varying the line by small increments. There is a tremendous difference between a line of 3 and 3½ points, but very little practical difference between 25 and 25½ points.

Thursday, January 1, 1976					
COTTON BOWL (Dallas, Texas)					
5	GEORGIA	2:00	1	2	3
6	ARIZONA		4	5	6
ROSE BOWL (Pasadena, California)					
7	OHIO ST.	5:00	1	2	3
8	UCLA		4	5	6
ORANGE BOWL (Miami, Florida)					
9	OHIO	8:00	1	2	3
10	MICHIGAN		4	5	6
Saturday, January 3					
HULA BOWL (Honolulu, Hawaii)					
11			1	2	3
12			4	5	6
Sunday, January 4					
ALL-AMERICAN BOWL (Tampa, Florida)					
13			1	2	3
14			4	5	6
AMERICAN FOOTBALL CONF. DIVISIONAL					
15	OAKLAND	1:00	1	2	3
16	PITTSBURGH		4	5	6
NATIONAL FOOTBALL CONF. DIVISIONAL					
17	DALLAS	4:00	1	2	3
18	LOS ANGELES		4	5	6
Saturday, January 10					
SENIOR BOWL (Mobile, Alabama)					
1			1	2	3
2			4	5	6
Sunday, January 18					
SUPER BOWL X (Miami, Florida)					
1	DALLAS		1	2	3
2	PITTSBURGH		4	5	6

Figure 3.

The bookmaker must know not only the Las Vegas opening line, but he must get frequent updates in the line. A change in the Las Vegas line does not mean that Las Vegas has changed its collective mind as to the anticipated final score (as if the line were a true power rating); it means that there has been an influx of wise money on the game. The bookmaker must be wary of the same influx. Also, the Las Vegas books may either “scratch” a game or “circle” it. To scratch a game means to eliminate further betting or to take it off the board. To circle it means literally to draw a circle around

the game on the line sheet, resulting in a limitation of wagering on the game. Bookmakers may take no betting on a circled game or may accept only a limited amount of wagers on it, such as a maximum of \$100. In either case, scratching or circling arises because of some unusual factors developing after the opening of betting. These factors include critical injuries, rumors of a fix in the game, or extremely unusual patterns of wagering. This type of information is of vital importance to every bookmaker because by the time he learns of the scratching or circling, he frequently will have been besieged with bets by bettors who have also been privy to the information.

It is worth noting that contrary to popular thought, a crucial injury occurring *after* the opening of betting cannot effectively be handicapped. Bookmakers cannot change the line enough to reflect the value of the loss of a good quarterback, such as possibly 6 or 7 points, or else the bookmaker would be in the position of possibly being “middled,” as indicated above. All he can then do is stop further betting and hope for the best.

Likewise, other changes in factors, such as weather and internal disputes, cannot affect the line *after* its opening. These things only cause the game to be scratched or circled. The only factor affecting the line after opening is solely the volume of the wagering.

The question frequently arises as to why a bookmaker cannot use line information published fairly regularly in many newspapers. He cannot for two reasons. First, the bookmakers only trust money. If they could go to the newspapers and bet on the line appearing in it, then they could trust it. However, as far as a bookie is concerned, a line is only a line if he can place bets on it. And second, whatever appears in the newspaper is not timely enough for the bookmaker;

he must be able to learn of the changes in the line immediately and not the next day, at which time he may have already been inundated by smart money.

Cooperation Among Bookmakers

A local bookmaker will remain in almost constant contact with other bookmakers for purposes other than obtaining the national line. Movement by area bookmakers of their lines often indicates the volume of wagering, which the bookie may in turn expect himself. Furthermore, if a bookie expects to lay off to any other bookmaker, he must do so at the latter's line. Consequently, there is a constant exchange of line information among bookmakers, even though technically they are in competition with one another.

Bookmakers also discuss regularly the general volume of betting they are experiencing on various games and transmit hints or rumors about the games, abilities, and financial conditions of certain bettors and the results of contests. This merger of cooperative spirit and competitive effort is a feature unique to bookmaking which, in precise terms, cannot be compared to another form of business activity. Often comparisons are made to insurance companies reinsuring their risks or the Federal Reserve System's movement of money about the system; but since bookmaking is truly unique, these comparisons are inadequate.

Line Changes vs. Layoffs

The two ways a bookmaker tends toward the balance of wagering he desires are either to change his line or to lay off. As stated previously, he often changes the line before opening it, simply in anticipation of the volume of wagering on one side. Thereafter, as the betting progresses, he

may choose to vary the line by more than one-half point at a time. Thus, if he is receiving too much wagering on Team A at -4 , he may then change the line to Team A at $4\frac{1}{2}$. This will have a tendency to discourage wagering on A and encourage wagering on B. Some bookmakers vary the line only on their judgment; others vary it automatically whenever a certain predetermined imbalance occurs on the game, such as a \$500 imbalance.

However, the bookie can accomplish only so much by line changes and may still have what he feels is a dangerous imbalance. Additionally, if he varies his line as much as one-half point, he may run the risk of being "sided," meaning he may lose one side and push or tie the other. If he varies the line one point or more, he may risk being middled or losing both sides, if the final point spread falls in the middle of the two lines. If he cannot achieve a desirable balance by line changes, he can only reach the balance by laying off. The facility of laying off when necessary is a vital feature of bookmaking. Some bookmakers lay off constantly, others only occasionally; but all have the means of laying off when needed. Further, whether a bookmaker lays off or not often depends on his educated opinion as to who will win the game (con-

sidering the point spread, of course). The decision may also be affected by his opinion as to the bettors, the respected "smarts," or merely the hometown grads urging their team along with their bets, who are causing the imbalance.

As an example of how a bookie might lay off to achieve an even balance, consider the incoming bets illustrated in figure 4.

It can be seen that the bookmaker's imbalance would be \$1,200 on Team A or \$1,800—\$600. He would, therefore, lay off or bet with another bookmaker on Team A at -4 for \$1,200 and be assured of a \$60 profit, whichever team won. If Team A won, he would pay his winning bettors \$1,800 and collect \$660 from his losing bettors, for a loss of \$1,140; but he would have won his layoff of \$1,200, leaving a net profit of \$60. If Team B won, he would collect \$1,980 from the Team A bettors, less \$600 payoff to the Team B bettors for a gain of \$1,380; but he would have lost his layoff of \$1,320, leaving again a net profit of \$60.

Furthermore, many bookmakers feel that if they have a fairly wide assortment of bettors, they will profit in the long run without laying off, at least on every imbalanced game. This is because they are taking bets on a theoretically even game, including the

Figure 4.

TEAM A-4	TEAM B+4
\$500.00	
\$300.00	\$100.00
<u>\$1,000.00</u>	<u>\$500.00</u>
\$1,800.00	\$600.00

1974 COLLEGE FOOTBALL BOWL GAMES

GAME	BETTING LINE	POWER RATING	ACTUAL POINT SPREAD
ASTRO-BLUEBONNET BOWL North Carolina State vs. Houston	2½	3	0
SUN BOWL North Carolina vs. Mississippi State	6½	13	2
PEACH BOWL Texas Tech vs. Vanderbilt	1	10	0
FIESTA BOWL Brigham Young vs. Oklahoma State	10	14	10
GATOR BOWL Texas U. vs. Auburn	7	3	24
SUGAR BOWL Florida vs. Nebraska	12½	17	3
COTTON BOWL Penn State vs. Baylor	3½	3	21
ROSE BOWL Ohio State vs. Southern California	6½	3	1
ORANGE BOWL Alabama vs. Notre Dame	10½	13	2

Figure 5.

handicap, but one in which the bookmaker gets 11-10 odds. For example, if a bookmaker were taking all bets on the flip of a coin characterized by true even odds, but the bettors risked \$11 for each \$10 the bookie put up, he would not really care how many people bet on heads or how many on tails, even though on any one throw he might lose substantially. However, in the long run, probabilities tell us he would profit almost 5 percent of all money wagered on this even-money proposition at 11-10 odds.

On the other hand, the bookmaker by paying close attention to other bookies' lines can often middle the other bookmakers and win both sides of a game by laying off.

The laying off to achieve an exactly balanced book is fine in theory, but frequently impossible to attain as a practical matter. For just about the time the bookie lays off and reaches the even ratio of bets, he may get a bet on the other side of the game from a regular customer. A bookie will seldom refuse a bet lest he lose

his good customer, but rather will just "eat it" or take a gamble, especially in a favorable situation, giving him 11-10 odds.

How Good Are The Oddsmakers?

People often scoff at the "odds-makers" when a game turns out far differently than the odds. "What do *they* know about it?" they say. But what the public often fails to understand is that the outcome of the game is of small consequence to the line-makers. Their concern is whether the line has stimulated an approximately even amount of betting. It is felt that the most predictable teams to handicap are the professional football teams. Yet, several statistical studies have shown that of the 13 professional games each week, seldom is the line ever within a point of the final score, and only an average of about 4 of the 13 games are within even 6 points of the line.

As an example of comparing the wagering line, a well-known power rating, a predicted final spread from a news media source, and the actual final spread, figure 5 indicates what occurred in the 1974 college football bowl games.

It can be seen that only in the Peach Bowl and Fiesta Bowl games did the betting line come within two points of the final spread. The power rating was within two points only in the Rose Bowl Game. On the other hand, the betting line was off an average of 9.5 points and the power rating 12.4 points.

"The line achieves its overall purpose—to attract hundreds of millions of dollars of wagers annually."

Still the bookmakers are not going hungry. The line achieves its overall purpose—to attract hundreds of millions of dollars of wagers annually.