Do New Ballparks Affect The Home-Field Advantage?

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New things are made familiar, and familiar things are made new.

— Dr. Samuel Johnson

In their first season (1992) at Camden Yards, the Baltimore Orioles jumped out to a 10-1 record in their first 11 games at home, the best start ever by a team playing in a new ballpark. In their inaugural season playing on Jacobs Field, the Cleveland Indians posted the best home record (35-16) in baseball in 1994. These auspicious beginnings suggest that the novelty of a new ballpark might have a favorable effect on the team's home performance. If a new facility attracts fans because of its greater comfort or because it affords a better view of the game, resurgent fan interest may be key to winning at home. Moreover, the home team should be able to take advantage of its own new park's peculiarities better than any visiting team can.

To test the hypothesis of a new ballpark's added home-field advantage, we begin by examining the home records of five teams, one season before and after their move into a new stadium. The five teams are as follows (with the names of the old stadium; new stadium; and the date the first game was played in the new stadium in parentheses): Baltimore Orioles (Memorial Stadium; Oriole Park at Camden Yards; April 6, 1992); Cleveland Indians (Cleveland Stadium; Jacobs Field; April 4, 1994); Texas Rangers (Arlington Stadium; The Ballpark in Arlington; April 11, 1994); Colorado Rockies (Mile High Stadium; Coors Field; April 26, 1995); and Atlanta Braves (Atlanta-Fulton County Stadium; Turner Field; April 4, 1997).

The assumption that there is no relationship between the two classification criteria — winning and home site — can be put in the form:

H₀: Winning and home site are independent

H_A: H₀ is false

To illustrate, let's consider an example. The Baltimore Orioles won 33 games and lost 48 games at home in 1991.¹ Despite their 10-1 start, the team's 1992 overall home record was 43-38. These results are summarized in the following contingency table:

	GAMES		
	WON	LOST	
OLD HOME	33	48	
NEW HOME	43	38	

The calculated chi-square (χ^2) statistic on these data is 2.48. The probability that chi-square will be as large as this is .115, and therefore H₀ cannot be rejected. That is, although the Orioles' home record in 1992 was a 10-game improvement over the year before, there is no conclusive evidence (with $\alpha = .05$) that Baltimore enjoyed an added home-field advantage in its first season at Camden Yards than it did at home the year before the move.

Table 1 summarizes the results of comparisons involving (1) three seasons before v. one season after the move, (2) one season before v. one season after the move, and (3) first two months in new ballpark v. rest of season in new ballpark. When the combined home records three seasons before the move are compared to the home record one season after the move, it would appear that Cleveland and Colorado benefited from their new digs. Yet, the comparison involving home records one season before to one season after reveals that the quality of team performance in Cleveland and to a lesser extent in Colorado improved before their move into a new facility. Surprisingly, the final set of comparisons in Table 1 suggest that there is not even an early season added home-field advantage for teams playing in new ballparks.

Concluding Remarks

The home team playing in a brand new ballpark should know how, for example, to play the fences and the caroms in the corners and foul territory better than any visiting team can. Yet, examination of the home records of five major league baseball teams which moved into a new stadium this decade reveals no discernible added home-field advantage. The building of a new stadium might be a hit with fans, but the impact on a club's home win percentage appears to be remarkably small.

Table 1. Home-Field Records, Before and After Move

		Teams				
		Baltimore Orioles	Cleveland Indians ^a	Texas Rangers ^a	Colorado Rockies	Atlanta Braves
	Home-Field Records					
<i>(1)</i>	Three seasons before	120-122	117-127	132-111	64-74	131-77
	One season after	43-38	35-16	31-32	44-28	50-31
		No difference	Better $(p = .007)$	No difference	Better $(p = .043)$	No difference
(2)	One season before	33-48	46-35	50-31	25-32	56-25
	One season after	43-38	35-16	31-32	44-28	50-31
		No difference	No difference	No difference	Slightly better (p = .051)	No difference
(3)	First two months	15-8	15-7	12-12	9-5	20-8
	Rest of season at home	28-30	20-9	19-20	35-23	30-23
		No difference	No difference	No difference	No difference	No difference

^aThe first season at Jacobs Field and The Ballpark in Arlington was the strike-shortened 1994 season.

FOOTNOTES

- 1. Home records for all five teams are from various editions of *The Sporting News Baseball Guide* [1].
- 2. The Colorado Rockies' first season was 1993. Hence, data were collected for two, not three, seasons before their move in 1995.