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DOME-INATING THE GAME

The big story of last year's World Series was noise. Sports-writers seemed to write more about the deafening roar at the enclosed Metrodome in Minneapolis than about the games themselves, in which the underdog Minneapolis Twins won the series by taking all four games played in the Metrodome. The St. Louis Cardinals won the three games played at their home field, Busch Stadium.

Bill Clark, a hearing researcher at the Washington University School of Medicine, believes the noise played a major role in the Twins' success. "At times," he says, "it was impossible to hear the person screaming right next to you [in the Metrodome]." Because the noise level depended so much on what was happening in each game, Clark measured the sound during the first 40 minutes of each game, before anything crucial happened. Noise in the Metrodome during this period averaged 92 decibels, twice as loud, perceptually, as the 83-decibel average in Busch Stadium.

Clark believes that the deafening roar hurt the Cardinals in two ways. First, it interfered with normal communication between the players and masked sounds, such as the crack of the bat, that players normally use as a guide. Second, unpredictable noise throws off the nervous system, producing physical and mental errors. The Twins weren't affected as much because they had adapted to the conditions after playing more than 80 home games during the regular season and in the playoffs that preceded the World Series.

To check on his theory, Clark looked at how visiting teams fared in the 14 American League Stadiums. He found that in the 13 other parks, visiting teams made from 43 to 71 errors during the year. In the Metrodome, they made 85.

Sociologists Richard Zeller and Tim Jurkovac of Bowling Green State University looked at domed stadiums from another angle. Analyzing more than 35,000 major-league games from 1969 through 1986, they discovered that teams playing under domes – which now include the Montreal Expos, Houston Astros and Seattle Mariners, as well as the Twins – won 10.5 percent more games at home than on the road. Teams that played in regular open-air parks won only 7.2 percent more at home than away. Without these differences, which Zeller estimates gave the domed teams an average of three victories more a year, there might have been "20 different division champions [in the two major leagues] over the past two decades."

Zeller attributes much of the difference to fan support. "Team's perform better and win more games when they receive more enthusiastic crowd support. Since the domed stadium holds the noise ... in the stadium, teams that play under domes ... win more games."

– JACK C. HORN

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