

In the
United States Court of Appeals
For the Seventh Circuit

Nos. 04-1635 & 04-1790

ZENITH ELECTRONICS CORP.,

Plaintiff-Appellee, Cross-Appellant,

v.

WH-TV BROADCASTING CORP.,

Defendant-Appellant, Cross-Appellee.

Appeals from the United States District Court for
the Northern District of Illinois, Eastern Division.
No. 01 C 4366—**George W. Lindberg**, *Judge*.

ARGUED DECEMBER 6, 2004—DECIDED JANUARY 20, 2005

Before EASTERBROOK, KANNE, and EVANS, *Circuit Judges*.

EASTERBROOK, *Circuit Judge*. WH-TV broadcasts a digital television signal in San Juan, Puerto Rico, competing with cable and direct-broadcast satellite services. Seeking to expand its business, it purchased set-top boxes from Zenith Electronics. These boxes, which broadcasters furnish to subscribers, convert the digital input into an analog output that TV sets can display. Boxes may have other functions, such as presenting a programming grid from which sub-

scribers can choose their favorites, and descrambling pay-per-view shows. WH-TV wanted boxes that use the digital video broadcasting (DVB) standard, so that it could mix equipment from different vendors and upgrade its broadcasting gear to take advantage of the latest features. Zenith assured WH-TV that its boxes conform to the DVB standard. By this Zenith meant the 1995 version of that standard—though WH-TV thought that Zenith meant the 1998 version, which had been adopted a year before the sales, and planned its operations on that assumption. A trier of fact could find that Zenith misled WH-TV or at least withheld material information and that the consequences were unhappy for WH-TV and its customers: the broadcaster lost business when customers encountered problems in using the boxes, and it was unable to substitute other vendors' boxes, because they did not speak the same dialect of the DVB standard. We must assume, given the posture of the case, that serious problems existed and were Zenith's fault.

Zenith filed suit to collect unpaid bills for boxes it delivered; WH-TV filed a counterclaim seeking to recover for profits it says it lost because of defects in Zenith's merchandise. After extended proceedings that we need not recount, the district court granted summary judgment in Zenith's favor, holding that it had a right to payment under the contract while WH-TV would be unable to establish damages at trial. 2003 U.S. Dist. LEXIS 11037 (N.D. Ill. June 25, 2003), 2003 U.S. Dist. LEXIS 13819 (N.D. Ill. Aug. 6, 2003), 2003 U.S. Dist. LEXIS 17661 (N.D. Ill. Oct. 1, 2003). WH-TV proposed to rely on the testimony of Peter Shapiro that its business would have grown rapidly, and its profits ballooned, had Zenith's boxes been as promised. The district judge excluded this projection under Fed. R. Evid. 702 as unreliable, knocking out this theory independent of any limitations on the recovery of lost profits specified by Zenith's sales documents and the doctrine of *Hadley v. Baxendale*, 9 Ex. 341, 156 Eng. Rep. 145 (1854). Although WH-TV might have been

able to show loss based on defects in the boxes Zenith actually provided, that route was closed, the judge concluded, by WH-TV's failure to provide a responsive answer to Zenith's contentions interrogatory. WH-TV was left with no evidence about damages.

Shapiro proposed to testify that, with set-top boxes meeting the 1998 DVB standard and otherwise up to snuff, WH-TV would have experienced rapid growth paralleling that of DirecTV, the leading satellite broadcaster. Shapiro's estimate had two components: first the number of customers in San Juan who would have subscribed to DirecTV during the period 2002 through 2008, and second the percentage of those customers who would have used WH-TV instead, had WH-TV been able to offer customers service better than Zenith's equipment allowed. Shapiro might have based at least the former on DirecTV's actual sales in other markets, but he did not do so. Instead he proposed to testify that San Juan is "unique" and that all experience in other markets is irrelevant. He took the same approach to the second task, estimating WH-TV's potential share of the digital-broadcasting business. WH-TV uses a technology known as multipoint multichannel digital system or MMDS. Other markets have MMDS service using equipment that meets the 1998 DVB standard, and Shapiro might have used data from these to gauge the potential for such a service in San Juan, relative to the number of potential subscribers (principally hotels plus households that lack access to cable TV service). Again, however, Shapiro made no effort to calculate the potential subscriber base or use data from other markets (other than one in Mexico, which he eyeballed but did not analyze) to inform his projection about San Juan. Each market is unique, Shapiro insisted, making experience elsewhere irrelevant.

Expert evidence is admissible under Rule 702 when "(1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods,

and (3) the witness has applied the principles and methods reliably to the facts of the case.” See also *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), which interpret an earlier version of Rule 702. The district judge thought that Shapiro’s failure to look outside San Juan, even for a reality check, meant that he lacked “sufficient” facts. Shapiro himself all but conceded that he had not applied “reliable principles and methods”. Asked repeatedly during his deposition what methods he *had* used to generate projections, Shapiro repeatedly answered “my expertise” or some variant (“my industry expertise”, “[my] awareness,” and “my curriculum vitae”)—which is to say that he either had no method or could not describe one. He was relying on intuition, which won’t do. See, e.g., *McMahon v. Bunn-O-Matic Corp.*, 150 F.3d 651, 658 (7th Cir. 1998); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996).

Appellate review of a decision under Rule 702 is deferential, see *General Electric Corp. v. Joiner*, 522 U.S. 136 (1997), and the judge did not abuse his discretion. The supposed “uniqueness” of a market does not justify substituting a guess for careful analysis. Cities differ in size, average income, levels of education, availability of over-the-air TV signals, and other factors that might affect the demand for MMDS service. But social science has tools to isolate the effects of multiple variables and determine how they influence one dependent variable—here, sales of MMDS service. Perhaps the leading tool is the multivariate regression, which is used extensively by all social sciences. Regression analysis is common enough in litigation to earn extended treatment in the Federal Judicial Center’s *Reference Manual on Scientific Evidence* (2d ed. 2000). Regression has its own chapter (*Reference Guide on Multiple Regression*, prepared by Daniel L. Rubinfeld, at *Reference Manual* 179-228) and plays a leading role in two more: David H. Kaye & David A. Freedman, *Reference Guide on Statistics*, at *Reference Manual*

83-178, and Robert E. Hall & Victoria A. Lazear, *Reference Guide on Estimation of Economic Losses in Damages Awards*, at *Reference Manual* 277-332. Shapiro neither employed any of the methods covered in the *Reference Manual* nor explained why he hadn't.

Judges asked to determine whether an approach is “reliable” by the standards of science encounter the problem that we are lawyers rather than scientists. See *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 43 F.3d 1311 (9th Cir. 1995). It will not do to stop with lawyers' arguments pro and con, for these may fail to appreciate the difficulties that bona fide experts encounter. Scientific decisions must be made by scientific rather than rhetorical means. See *DePaepe v. General Motors Corp.*, 141 F.3d 715, 720 (7th Cir. 1998). But even a lawyer knows enough to insist that experts follow scientific approaches normal to their disciplines. See *Frymire-Brinati v. KPMG Peat Marwick*, 2 F.3d 183, 186 (7th Cir. 1993). Rule 702 uses words such as “sufficient” and “reliable” to describe these norms. An expert must offer good reason to think that his approach produces an accurate estimate using professional methods, and this estimate must be testable. Someone else using the same data and methods must be able to replicate the result. Shapiro's method, “expert intuition,” is neither normal among social scientists nor testable—and conclusions that are not falsifiable aren't worth much to either science or the judiciary.

On this record one cannot exclude the possibility that some problem blocked the use of multivariate regression and other statistical tools. But that would be surprising, and as proponent of the testimony WH-TV had a burden of production on the subject. See *Maryland Casualty Co. v. Therm-O-Disc, Inc.*, 137 F.3d 780 (4th Cir. 1998). Neither Shapiro nor any of WH-TV's lawyers discussed statistical or econometric means of coping with variance across markets; the record contains nothing suggesting that these would have been inadequate if tried. Indeed, the record does not

contain any hint why Shapiro preferred intuition to the empirical toolkit of the social sciences. And if Shapiro did not use these devices because he does not know how: that would just demonstrate that he's not an "expert" in the first place.

A witness who invokes "my expertise" rather than analytic strategies widely used by specialists is not an expert as Rule 702 defines that term. Shapiro may be the world's leading student of MMDS services, but if he could or would not explain how his conclusions met the Rule's requirements, he was not entitled to give expert testimony. As we so often reiterate: "An expert who supplies nothing but a bottom line supplies nothing of value to the judicial process." *Mid-State Fertilizer Co. v. Exchange National Bank*, 877 F.2d 1333, 1339 (7th Cir. 1989). See also, e.g., *Bucklew v. Hawkins, Ash, Baptie & Co.*, 329 F.3d 923, 933 (7th Cir. 2003); *Huey v. United Parcel Service, Inc.*, 165 F.3d 1084, 1087 (7th Cir. 1999); *Burns Philp Food, Inc. v. Cavalea Continental Freight, Inc.*, 135 F.3d 526, 530-31 (7th Cir. 1998); *Navarro v. Fuji Heavy Industries, Ltd.*, 117 F.3d 1027, 1031 (7th Cir. 1997); *People Who Care v. Rockford Board of Education*, 111 F.3d 528, 537-38 (7th Cir. 1997); *Braun v. Lorillard Inc.*, 84 F.3d 230, 235 (7th Cir. 1996). WH-TV observes that experts sometimes must extrapolate from existing data, as Shapiro did, but this cannot justify his lack of discipline. "[E]xperts commonly extrapolate from existing data. But nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert." *General Electric*, 522 U.S. at 146. That's a fair description of Shapiro's proposed testimony.

What we have said about Shapiro's approach goes double for WH-TV's internal projections, which rest on its say-so rather than a statistical analysis. Like many other internal projections, these represent hopes rather than the results of scientific analysis. See *Target Market Publishing, Inc. v.*

ADVO, Inc., 136 F.3d 1139, 1145-46 (7th Cir. 1998). Rule 701, which allows managers to offer the facts underlying such projections without the need to qualify as an expert, see *Securitron Magnalock Corp. v. Schnabolk*, 65 F.3d 256, 265 (2d Cir. 1995); *Lightning Lube, Inc. v. Witco Corp.*, 4 F.3d 1153 (3d Cir. 1993), does not assist WH-TV, because its claimed losses depend on the inferences to be drawn from the raw data, rather than these data (or their internal appreciation) themselves. Reliable inferences depend on more than say-so, whether the person doing the saying is a corporate manager or a putative expert. See *Lifewise Master Funding v. Telebank*, 374 F.3d 917, 928 (10th Cir. 2004). And per-subscriber valuations prepared in connection with potential sales of the business don't provide a reliable estimate of the number of subscribers that WH-TV could have secured with better set-top boxes. See *TK-7 Corp. v. Estate of Barbouti*, 993 F.2d 722, 735 (10th Cir. 1993).

That leaves only the possibility of damages based on defects in the units Zenith actually furnished (as opposed to lost growth and future profits). The district judge banned evidence on that subject after WH-TV failed to respond to Zenith's contentions interrogatory with a description of its damages theory and the proof to be employed. The judge's sanction is one of those named by the federal rules for failure to cooperate in discovery. See Fed. R. Civ. P. 37(b)(2)(B). His decision was not an abuse of discretion.

WH-TV does not otherwise contest Zenith's demand for payment on its invoices. Because WH-TV's defense and counterclaim fail, it is unnecessary to discuss third-party claims and disputes involving Motorola, Inc., and General Instrument Corporation. These derivative issues are of no moment given the outcome of the principal suit.

AFFIRMED

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Teste:

*Clerk of the United States Court of
Appeals for the Seventh Circuit*