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Radio Intelligence: 1988-1990

by David Giovannoni
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RADIO INTELLIGENCE

1988-1990

An Anthology of Essays
on the Meaning, Design, Management,
and Use of Public Radio's Audience
and Programming Research

David Giovannoni

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PREFACE

This book is a compilation, merging, and embellishment of more than 30 essays that first appeared in *CURRENT*, public broadcasting's biweekly newspaper, between January 1988 and February 1991.

In preparing this compilation, I worked from the essays as they were provided to the paper — not as they were published. A lot of original material never made it into *CURRENT*'s pages for reasons of space. Other materials appeared as unintended by the author for reasons of production errors or editorial inclination at the paper.

The versions herein bear the author's full endorsement. They are dated so that the reader may mark the time at which each was first published. This is relevant because, although the numbers cited in the essays were the best available at the time, they may have been superseded by new information.

The *Radio Intelligence* series began in January 1987 as part of a CPB-funded effort to increase the awareness and application of public radio's audience and programming research. The twenty-two essays published in the first year were the foundation for *The Personal Importance Of Public Radio* (1988, CPB), *Appeal And Public Radio's Music* (1988, CPB), and *Programming Economics* (1989, CPB).

From the beginning, *Radio Intelligence* has striven to make new and existing knowledge accessible to the players who had the most to gain from it. Reports from the field are gratifying; by advancing the information available to its professionals, the profession itself has advanced.

As the proponents of recycling remind us, once is not enough. Recycling is a well-known concept among radio programmers, who understand that any rebroadcasting of materials increases both their reach and their frequency. This collection continues in this parsimonious spirit.

Although the Corporation for Public Broadcasting funded these reports, opinions expressed are the author's and do not necessarily reflect opinions or policies of the corporation.

My thanks go to Ted Coltman and the staff of CPB's Policy Development & Planning for their continued backing and oversight of this endeavor; to George Bailey, Tom Thomas, Rick Madden, and the many others who have generously contributed ideas and commented upon drafts under the duress of deadlines; to Max Wycisk for his insights into management and for his column on managing research; to the staff and management teams at KCFR, WKSU, and WPKT for sharing results of their proprietary studies; and to my wife, Katherine Sheram, for the understanding, support, and care that have graced home and office while this work was being done, and for suggesting that this volume be set in large type so that the aging public radio work force could read it more easily.

David Giovannoni

Derwood, Maryland

March, 1991

SECTION I

MANAGING RESEARCH

Attitudes towards audience and programming research have changed greatly during the last decade — public radio professionals have come to accept it as the indispensable decision-making tool that it is. We've successfully modified the techniques developed in the commercial sector to address the problems faced in the not-for-profit side. We understand that within the context of public radio's mission, ratings reflect how well our programming serves the public. The better our research, the more certain we can be about our programming decisions.

We've become comfortable with research. But this doesn't mean it's made our lives easier. As research gets more detailed and its results more certain, public broadcasters face some of the hardest decisions yet. Ignorance isn't the problem; indeed, it's our research-based understanding of what probably will happen that makes these decisions so difficult.

For public radio to continue growing in the 1990s, we must take control of and responsibility for the ways in which we apply and manage audience research.

TAKING RESPONSIBILITY
The Hardest Decisions
Are Yet To Be Made

Be it resolved that PRIMA “commend NPR for its interest in meaningful audience research, and urge them to continue this research, and suggest that it may be necessary to make some difficult decisions using research....”

(Passed: 16 in favor, 14 against, 10 abstentions)

— A resolution put to Public Radio In Mid-America by Howard Hill at the March 16, 1980, business meeting.

March 1988

Those not in public radio 10 years ago may find this hard to believe, but introducing audience research to public broadcasters was no picnic. Many in non-commercial radio greeted the methods, paradigms, and proponents of research with open hostility and disdain. Others embraced them wholeheartedly, but for the wrong reasons.

Detractors’ concerns centered on the commercial origins of “the numbers.” The commercial stations have their ratings; public stations have their missions; best not to mix the two, son. In the other camp a few over-zealous proponents adopted the ratings as ends in themselves — scores to be boosted by whatever means.

Time has tempered our feelings toward research and deepened our understanding of its meaning. The show-me attitude of those who in 1980 chose the contemporary middle ground — that research might be appropriately used to inform difficult decisions — has come to prevail.

DECISIONS, DECISIONS

Programmers, promoters, developers, managers, planners, policy makers — all public radio professionals make decisions affecting audience service. Knowledge of audience is only one in a mix of decision-making criteria. Mission is another.

Through the 1970s, concern about mission guided most decisions in public radio, with a few assumptions about effects on listeners thrown in. But in fact, public radio had little knowledge of how programming affected listeners. Access to the airwaves assumed vast numbers of listeners. That assumed too much.

Much has changed since then. Listeners contribute a larger portion of operating revenue. Managers and programmers are more sophisticated about listeners and how to serve them. Acceptance of audience research has helped spur many of these changes.

The impetus for audience data came not from stations, but from the Corporation for Public Broadcasting (CPB) and National Public Radio (NPR). A CPB research analyst named Tom Church started mailing Arbitron reports to stations in 1977. At NPR, Sam Holt, Vice President for Programming, retained Professor Lawrence Lichty to bring an audience perspective to the design of “the morning news service,” now called *Morning Edition*.

Many quickly saw that audience research connected them to an important reality. Programmers comprised the group most directly responsible for listener service, and as such they embraced audience data first. Research was the feedback they needed to better serve listeners. It showed for the first time the consequences of their programming decisions:

- Some programming served listeners; other programming did not.
- Certain programming did better at particular times of day than at others.
- Some programming types were incompatible with others.

- Some programming pledged well relative to its audience size; other programming seemed to underperform. Many programmers and managers openly shared their new knowledge and their reactions to it. As more information was amassed, more and greater truths emerged.

- Stations aspiring to serve “everybody” were among the least successful in serving audience.
- Strong morning programming seemed an important key to better audience service throughout the day.
- *Morning Edition* served many more listeners than the programming it displaced, and its listeners pledged.

Regular delivery of syndicated audience research to stations became the most reliable communications channel between public radio’s audience and its programming. As programmers saw what worked and what didn’t, they acted — or reacted — accordingly.

TRUTH AND CONSEQUENCES

Reaction was appropriate, because audience research was posing some unpleasant truths. A great deal of public radio’s programming was serving few if any listeners. Program schedules were a crazy quilt of discrete program patches threaded together with incongruent appeal. Programmers, producers, and hosts aired what they wanted when they wanted. Generally, programming was not responsive to the public, and audience data showed the public was not responding to the programming.

At this early stage it was easiest to see what was not working, so it was easiest to respond with negative solutions. The first casualties were amateur announcers, round table discussions, long-form concert hall recreations, documentaries, and reading aloud. The surviving programming was organized into blocks, stripped across the week, and fine-tuned with jingoistic maxims. “Never say goodbye.” “No vocal music before 9 a.m.” “No vocal music after 9 a.m.” “The best time for drama is 1938.” “Seams kill.”

Solutions, yes; necessary, yes; but these first reactions to audience research were not positive actions. True, a lot of programming needed to be eliminated. But as many quickly pointed out, programmers and managers were themselves in danger of becoming casualties — or at least prisoners — of their own audience research. They knew enough to see what not to do; yet their understanding of research was not sophisticated enough to create new, more exciting, more successful programming to replace what they had canceled.

Unable to channel the efforts of public radio's most creative talents — from independents to NPR — these new research reactionaries used Arbitron like a club. “Drama doesn't work.” “The only thing your program delivers is two seams.” “Stick it in your radio museum.”

FROM REACTION TO PREDICTION

Research is judgmental; it is a report card that passes some and flunks others. Rewarding performance and punishing failure is the easiest way to apply it.

Research is also predictive — a road map that shows where we can go, where our decisions can lead. Applying it in this way requires more skill. Having dealt with research for nearly a decade, many practitioners have become adept at understanding and applying its results. We have moved from a reactionary use of research to a proactive, anticipatory, or predictive use.

Today every station has access to audience research — if not for its own listeners, then for listeners to stations in similar situations. Some excellent national studies augment these data and put them in a broader context applicable to all stations. No public radio station is so different that it has nothing to learn from the experiences of its colleagues.

The body of common knowledge is substantial — so substantial, in fact, that many areas of audience knowledge have clearly reached comfortable confidence levels. Rather than thinking of Arbitron as a report card, programmers

can study the body of research and make predictions about the consequences of many of their decisions. Rather than relying on old solutions to old problems, managers and policy makers can generate new solutions based on expectations of what the audience consequences will be.

After more than a decade of experiment and experience, we can now predict the consequences of various programming decisions. But to take full advantage of this resource, we must replace the **research-as-report-card** mindset with the **research-as-road-map** mindset.

A POSITIVE RESEARCH MENTALITY

A major challenge posed by research is to apply it to initiate new enterprises. Anticipation of consequences should be a reason to act positively — to be bold, to take risks, to act — rather than to hold the status quo. It's time to replace the conservative, don't-do, **negative research mentality** of the past with an imaginative, can-do, **positive research mentality** for the future.

- A negative research mentality requires testing every piece of music, every host and reporter, every news topic. A positive research mentality understands why something has worked, so as to predict and anticipate the results of something untested.
- A negative research mentality breeds white-bread programming. A positive research mentality seeks excitement, surprise, and diversity without sacrificing accessibility, reliability, and appeal.
- A negative research mentality stifles creativity. A positive research mentality increases the possibility that imaginative, original, ingenious, and inventive programming will work.

Experience with research has made public broadcasters smarter than ever before. Our responsibility is to take what we've learned from our significant investment and apply it creatively to serve more listeners and to serve them better.

- We know enough to create new music formats that are based on appeal rather than on genre.
- We know enough to increase audience satisfaction through a new understanding and application of diversity.
- We know enough to design new outlets for programming that appeal to constituencies that do not listen regularly to our current services.

If programming is to create listeners for public radio, public radio must create programming for listeners. Moving public radio forward in this way requires building upon existing research with more sophisticated and appropriate methods. It requires creativity, willingness to take and manage risks, and an ability to absorb short-term losses.

TAKING RESPONSIBILITY

Ultimately, because research yields knowledge — the allegorical loss of innocence — we are called upon to take responsibility for our actions and inactions.

There are still a few public broadcasters, hiding comfortably in their non-responsive gardens, who see audience research as the snake bearing the apple of knowledge. And there are a few others, still stinging from the repercussions of their past decisions, finding refuge in their “never say goodbye” solutions.

But most are ready for the next step. New examinations of old data, new types of research, new ways of presenting data — these and other developments make us more knowledgeable and accountable. Responsibility is being thrust upon us; the ability to take command of that responsibility is a central role of management.

MANAGING RESEARCH

A General Manager's Experience

Max Wycisk

Experience is a hard teacher because she gives the test first, the lesson afterward.

— Vernon Law

October 1989

*A commitment to research requires a commitment to manage. Max Wycisk, KCFR-FM's General Manager, has managed the Denver Project's research for two years. His experience gives him a perspective worth sharing. His message is for anyone now using or contemplating audience and/or programming research in public radio: **managing research is not easy.** You won't find it on a shelf, packaged for immediate purchase. You must identify what you need to know, what you're willing to invest in terms of cash outlay and staff time to find out, and, most importantly, what you're willing to do with this new information.*

THE RESEARCH PROCESS

If you think that the research process simply rolls in self-contained through your front door and deposits a sheaf of answers on your desk — think again. From a station perspective, implementing the audience research activities that have been outlined in this column over the past couple of years has meant nothing but work: difficult, far-from-glamorous work.

Research is usually perceived as a set of techniques; but it's every bit as much an evaluation and planning process demanding careful management. The Denver Project has forced KCFR staff to formulate basic station direction and programming strategies, implement those strategies, and test the results with real listeners. It made us define the intent of the station: what KCFR means to be and do. It gives us a real sense of how audiences hear us: station reality from a listener point of view is often quite different from station intent from a staff point of view. And it is presenting some hard choices.

Research informs the decision-making process; it does not make decisions for you. Research delivers information — not answers. This is a critical distinction. With information in hand, general managers and program directors must face their responsibility to map the station's future, to make decisions, above all to act; and then — coming full circle — to return to the research cycle to assess the results of their decisions in the real world of radio audiences.

Research is listening to listeners. At KCFR we thought we knew what we were getting into when we began the project, but listening to listeners has changed the way we think and the way we act. Listening to listeners has resulted in a radical shift from an internal, producer/staff-oriented outlook to one that welcomes listeners as partners. This shift in station attitude has had major operational implications. For example:

- Individual staff duties, responsibilities, and reporting lines have been changed enormously over the past year at KCFR, leading one staff member to complain that this was beginning to feel like a real job.
- Station resources have been redirected to more clearly address service to listeners. For instance, when listeners told us they had never noticed KCFR's locally produced concert programming, we turned our attention elsewhere.

BUDGETARY AND TIME COMMITMENTS

We've worked with several research techniques in the Denver Project in a process that is new to public radio. This process involves detailed analysis of current information (Arbitron and AudiGraphics), thorough examination of what we need to find out (this is not as easy as it sounds — try it yourself), and careful design and implementation of the research techniques so that they provide useful information. (Information overload can be a real trap in this arena; the tendency is to order too much and end up using too little.)

We've learned that there's a big difference between research methods and research questions. The questions determine the methods; you generate the questions yourself. This requires an enormous staff input.

As General Manager I've devoted approximately 25 percent of my time over the last year to this work. KCFR Program Director Annette Griswold had devoted fully 50 percent of her time. Add to this the contributions of other KCFR staff, outside research director George Bailey's time, and other research consultants.

Out-of-pocket costs have run approximately \$125,000 per year. Although this project could not have happened on this scale without CPB funding, KCFR will spend nearly \$50,000 of its own money in this current year — and at least as much on its own to continue the project in subsequent years. If you want evidence of the value KCFR has found in this research, there it is: a major commitment of operating money to continue this work long term.

Why do we do it? With the radio and media environments changing so rapidly, public radio must change too. To do this we need an accurate assessment of how our stations are perceived and heard, as well as where the rest of the media world currently resides.

If you are looking for an entry-level cost estimate, \$50,000 is in the ballpark. For this amount of money you could

- Purchase full Arbitron data for your market every quarter,
- Purchase AudiGraphics data for your station every quarter,
- Hold two full sets of focus groups (six groups per set), and
- Field a perceptual telephone survey.

You can spend more by doing program prototype/music testing, but remember: the value of this research comes from an ongoing commitment. This is not a one-shot deal. Be prepared. And don't forget to use the techniques in the appropriate sequence.

THE ROLE OF THE RESEARCH DIRECTOR

One final caution: the role of a research director from outside the station is critical. Most of us are too close to our stations, situations, problems, and assumptions to describe them with any accuracy. Entering this work on your own can result in disaster — disaster all the more insidious because you'll probably never realize your own lack of perspective. Unchecked assumptions can be dangerous; flawed or misguided information is far worse than none at all. The research director brings not only the required technical expertise, but an outside perspective that is every bit as necessary.

Sometimes we all need a swift kick in the posterior. It's extremely difficult to administer such a kick to yourself.

NOT ALL RESEARCH IS CREATED EQUAL

Separating Science, Sales, and Slop

Never judge things by their appearance. Not even carpet bags.

— *Mary Poppins*

April 1990

How do you evaluate research?

- You're listening to a sales pitch from a national program distributor. These days more producers are citing research to claim that their programs attract new listeners and members. If you're going to pay for the show, the show had better deliver. But it can be hard to separate the science from the sales pitch.
- A research report has just landed on your desk. If you're going to take strategic action based on what appears to be science, it had better be good science. But it's difficult to distinguish quality work from work that is sub-standard.

Ours is an increasingly voracious appetite for knowledge upon which we base increasingly risky decisions. When making these decisions, public broadcasters need to know the difference among reliable science, sloppy science, and sales pitches.

CUTTING THROUGH THE HYPE

Public radio's desire to better serve listeners has changed the way producers and distributors sell their programming. Today program directors are less likely to take unwarranted programming risks on their station's air; the penalties for

failure are just too high. However, most remain open to new programming, but with the stipulation that producers and distributors demonstrate, with hard research, that the programming will serve the station's audience better than the programming it will displace.

It's a great idea in theory, but difficult to do in practice. The cost of solid research is usually prohibitive, especially given what program directors will pay for programming. Even the most inexpensive Arbitron audience estimates are beyond most producers' budgets, and no program has yet been fully auditorium tested before entering the marketplace and going on the air.

As a result, many producers and distributors are coerced into making claims for their programming that are impossible to support even under the most merciful scrutiny.

However, as techniques such as market research and program prototype testing become more accepted and widely available in public radio, more programming merchants will be using them to shape as well as sell their product. The programming that is shaped earliest and fine-tuned most often with good research techniques will be the programming that most quickly builds listener attention, listener loyalty, and listener support. This will be the programming that program directors will most want to carry.

Yet the question persists: What is a public broadcaster to believe when program producers or distributors quote research as part of the sales pitch? At minimum, if they claim phenomenal audience growth, listener response, or on-air fundraising success as a result of their programming, they should be able to back up those claims. Ethics and smart buyers demand it.

Are audience claims based on a reliable sample of Arbitron estimates across representative stations and markets? Did the programming replace successful or marginal programming? Has the producer subjected it to auditorium testing? Who was in the audience? Were

several prototypes tried? How did the producer alter the programming as a result?

When verifiable research is part of the sales story — or more telling, when it isn't — buyers should take heed.

GOOD SCIENCE, SLOPPY SCIENCE

Another result of public radio's desire to better serve listeners is our increased demand for new information. Can contests or advertising increase listening and listener support? Can we determine why no programming seems to do as well as the "tent poles?" Can we find a new midday format that will do better? Is there a palatable effective alternative to the on-air pledge drive?

These are just examples of the many questions now being explored in public radio. However, for the same reason that we hold the claims of program merchants to a high degree of scrutiny, we should also expect the work of research merchants to be of the highest scientific calibre; we simply cannot afford to base decisions on bad information.

The apparent simplicity of research is deceiving. Take, for example, a typical "Can we build audience by doing X?" study. It seems simple: measure the audience, do X, and then measure the audience again. But good science demands more than that. The most rudimentary scientific standards require systematically excluding or controlling for alternative explanations. Has programming changed? Has the competition realigned? Has listening varied by season?

Similarly, because audience estimates are based on samples, they are subject to statistical error. Formal statistical tests of certainty must be applied to ascertain whether audience growth is real or simply the result of sampling "bounce."

Design, implementation, and analysis are what separate good research from bad research. Even when research is unblemished by force of the sales pitch (or the pitch of the sales force), and even when it is intended to advance our

understanding through the pure pursuit of knowledge, it may still suffer the liabilities of poor design, inadequate implementation, or improper or biased analysis.

AUDIENCE 88 is considered by many public radio professionals to be one of public radio's best nonproprietary examples of good science. A quick look at its design, implementation, and analysis shows why:

- **Design.** The research team calculated the sample size required to measure expected results with a given degree of certainty. They addressed other design concerns to ensure a representative sample from which findings could be extrapolated to the widest range of stations.
- **Implementation.** The study's primary survey work was documented in a *Technical Report* that addressed issues such as sampling, weighting, response levels, and the correction of response bias.
- **Analysis.** At all stages of analysis, the research team formulated and formalized research questions, ruled out or controlled for alternative explanations, and tested all results with the highest statistical rigor.

Even when research is well designed, implemented, and analyzed, it will always have its limits. AUDIENCE 88 was based on a sample of NPR member stations. Therefore, non-members of NPR who orient their programming in significantly different directions were well-advised to accept the results with caution.

Knowing the limits of good science will keep us from overextending the findings. Knowing the difference between good science and sloppy science will guide our attention toward the most reliable research. Being able to make these determinations on our own will decrease our chances of basing decisions on bad information — the only thing worse than no information at all.

JUDGE THE SCIENCE, NOT THE SOURCE

Because the rigor required to increase certainty demands steps that increase cost, good science usually costs more than sloppy science or sales-driven research. In practical terms, this means that public radio's largest organizations will most likely be the funders of the potentially best science. But public radio's largest organizations are the ones that have the most to sell — membership, programs, political agendas, and so forth.

It looks like public broadcasters will be forced to accept sales along with their science for some time to come. Fortunately, knowing the difference between sales and science will help public broadcasters judge the science, regardless of its source.

For instance, in the late 1970s some of the best public radio research was done by Dr. Lawrence Lichty, research consultant for National Public Radio. Although NPR clearly had an agenda when it designed *Morning Edition*, Lichty's exhaustive analysis of the radio news marketplace stands as one of the best studies of commercial radio news from that period. Similarly, his companion survey of news story preferences was far ahead of its time, even by commercial standards. Both studies influenced elements as central as the clock's design, the show's feed time, and even its title.

In part because of this preproduction inquiry — a benefit unmatched by any public radio program since — *Morning Edition* has served public radio very well. As this example demonstrates, although it's always prudent to consider the source of the research, it's much more important to judge the research on its own merits.

Judging research on its own merits becomes much easier when it's made available for all to see. The research currently conducted by CPB's Radio Program Fund is a good example. Every quarter the Fund publishes audience estimates and programming economics analyses for each

program that it funds. Every year, when decisions are made to continue or curtail funding, the Fund applies this research to the decision-making process. The model of ongoing, open, and applied research sets a standard to which others could aspire.

INVEST IN QUALITY

No matter what the cost, all good science should be treated as an investment — intended to return more to public radio than we spend on it. Investors have the right to demand the highest technical quality, ethical standards, and returns on their investment.

When a producer, distributor, network, or station is trying to coax along an underwriter, the research they show needs only be convincing enough to “make the sale.” But the quality of information we demand when spending our own money requires good science.

The cost of making mistakes continues to rise, and the last thing we need is information well meant but wrong.

THE LIKELY FUTURE OF AUDIENCE AND PROGRAMMING RESEARCH

And How It Is Forcing Our Continued Evolution

*Things are more like they are now than they ever were
before.*

— Dwight D. Eisenhower

September—October 1988

A program director once told me that when the history of public radio is written, the 1980s would go down as the decade of the research revolution. To be sure, many in public radio are doing their jobs a lot differently than they were 10 years ago. But this has been more of an evolution than a revolution.

Public broadcasters are constantly evolving. A species evolves when it differs from others in a way that gives it a survival advantage. Public radio’s first research-related mutations appeared in the late 1970s and early 1980s. Mutants capable of digesting basic Arbitron data found that they could improve their audience service by benefitting more (and more satisfied) listeners. This ability helped the species better fulfill its mission, and helped it survive a period of fiscal drought — a competitive advantage.

It’s fascinating to consider how the evolution of public broadcasters has also caused changes in the research they consume. Audience and programming research has evolved from a simple backward-looking, number-intensive, and

often indigestion-causing fare to a more palatable foresight-furnishing fodder.

This symbiotic evolution continues today and will persist into the future. It must, because there are only two instances in which evolution ceases. The first is when a species is in total balance with a stable environment. This will not happen in our lifetimes; stability is not a word that accurately describes the radio environment. The other time a species stops evolving is when it becomes extinct.

By studying the clearly emerging evolutionary trends, we can predict with some certainty how research and the public radio professionals who use it will continue to evolve in the next few years.

FROM DESCRIPTION TO PREDICTION

The future's there for anyone to change.

— Jackson Browne

Audience research began as a purely evaluative tool. How well are we doing? How many listeners tune in each week? How many people listen to a particular program? Who are they? These are all evaluative questions that look back and describe past performance.

This research-as-report-card function has served public radio well in the past and will continue to serve it. But as our understanding and application of research mature, we will be able to use research as a road map to point us toward new destinations. Research will look forward as well as backward and give us the ability to anticipate the outcomes of various actions with increasing accuracy.

Perhaps most exciting, using research as a road map will unleash our creativity. A new understanding of appeal and diversity can help programmers create music programs based on appeal rather than genre. Knowing what people expect can help public radio invent new forms of entertainment and information. By anticipating results and increasing the chances of success, research challenges people to

take risks. In short, research encourages those who want to move their programming forward — to serve more listeners better — to **do** rather than **not do**.

Research alone doesn't make decisions — radio professionals do. Yet professionals make better decisions when armed with quality information and the capacity to use it.

INFORMATION CAPABLE, INFORMATION INCAPABLE

The future is something which everyone reaches at the rate of 60 minutes an hour, whatever he does, whoever he be.

— C. S. Lewis

Alone, knowledge gained from research is worthless without the ability to apply it appropriately. One of the most appropriate applications of research is to reduce uncertainty and minimize the risk inherent in any action.

As public radio professionals move into the future, they face challenging decisions fraught with great risk. How can they improve their programming? How can they improve their audience service? How can they increase income from listeners? These decisions are risky because each requires action that may or may not produce the expected outcome. Programming changes intended to serve more listeners may in fact serve fewer; development strategies intended to increase listener income may in fact decrease it. Managing these decisions requires managing risk.

Research — more precisely the knowledge and understanding it provides — can significantly reduce risk.

Suppose you had absolutely no understanding of radio, and no information about how or why listeners used radio programming. Every decision you made, every action you took, would be fraught with uncertainty and risk. Now assume that you have absolute understanding of radio; you know precisely how and why listeners use radio programming; you have perfect information. You can predict the

outcome of every action you take; there is no uncertainty and no risk.

Research is learning what you need to know in order to make more certain decisions. This idea is depicted by the “cone of uncertainty” (Figure 1-1). The more information one has when making a decision, the more certain one is of the outcome; the range of possible results is smaller. In this model, imperfect knowledge yields the inability to predict outcomes; perfect knowledge yields accurate prediction.

In most areas of information and decision-making, public radio is farther into the narrow part of the cone than it’s ever been. How far it has to go to the right depends on each public radio broadcaster’s ability to apply information and to manage risk.

Managing risk has never been easy. But as the research options and the information available to public broadcasters become more varied and complex, managing risk increasingly demands that professionals specify appropriate research questions, understand research information, and apply the

results. This will lead to two types of public radio professionals: those who are **information capable** and those who are **information incapable**.

An information-capable professional can use research to answer questions and make decisions. This person can focus research to explore the possible outcomes of a range of options and to reduce the uncertainty and risk inherent in any one of these.

This is not to say that creativity and inventiveness will become less important; indeed, creativity is a distinguishing characteristic of the public radio species. As the radio environment gets more competitive, creativity will play an even bigger role in the species’ survival. But so will the management of risk, information, and research.

INFORMATION RICH, INFORMATION POOR

Research is four things: brains with which to think, eyes with which to see, machines with which to measure, and fourth, money.

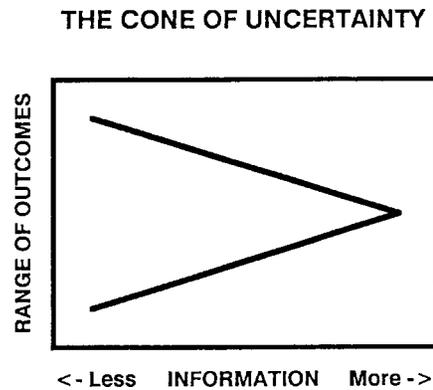
— Albert Szent-Gyorgyi

Research requires money, and more research requires more money. But as research makes public broadcasters better able to serve the public, it can — and should — more than pay for itself.

Consider the case of two stations: one can and does invest resources to gather information, the other cannot or does not. Information allows management at the first station to make programming decisions that are more likely to serve more listeners and to serve them better. In turn, the station gathers more income from listeners and underwriters. It can then reinvest this new income into better information, better programming, better development activities, and so forth.

The second station, unable or unwilling to invest in research at the beginning, is likely to have stagnated. It generates less income than the first station; as the first

FIGURE 1-1. *The “cone of uncertainty” demonstrates how, as information becomes better, the range of possible outcomes narrows; uncertainty decreases.*



station continues to invest in better information this income gap will widen.

In the future, a research-success spiral may widen the gap between public radio's richest and poorest stations. As new research techniques and more research options become available to public radio broadcasters, the rich will tend to get richer and the smart will tend to get smarter.

Also in the future, we will be called upon to assess the payoff of reducing uncertainty or the risk of not reducing it. The cost of research alternatives must be weighed against the benefits that they produce. Of course, the ability to afford information will not be the only force at work, but it will be a major contributor to what may be one of the most drastic bifurcations of the public radio system yet.

Ultimately, the ability to afford research — and the capacity to apply it — will play a major role in the survival of the public radio species. The careers of individual broadcasters may be enhanced or curtailed because of their information and risk management skills; entire stations may rise or fall because of their staff's ability and willingness to invest in appropriate information, as well as their ability and willingness to apply it appropriately.

FROM OLD WAYS OF THINKING TO NEW

The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew.

— Abraham Lincoln

Research into how listeners use public radio has changed the ways in which we think about programming and listeners, and how the two interact. For example, the AUDIENCE 88 study introduced the concept of appeal in its examination of programming's effects on listeners; identified and described the difference between core and fringe listeners; clarified how various perceptions of public radio's

importance affect listeners — particularly, how willing they are to listen and contribute; and made it possible to invent programming economics, a new way of thinking about programming as an investment in audience service.

New ways of thinking provoke new questions. New technologies and research methods will result from questions that traditional methods cannot answer. This is already happening in public radio — from the reinterview technique that the CHEAP 90 study introduced and that AUDIENCE 88 emulated, to various focus group methods, auditorium tests, and perceptual studies now being done as part of the CPB audience-building projects.

New ways of thinking also will affect the interpretation of research, which in turn will demand new ways of looking at data. The age and gender composition of a station's programming will no longer be an end in itself; it will become raw data for the ascertainment of appeal scores and the assessment of affinities. The size of a station's weekly core audience, perhaps combined with measures of how important a station is to its listeners, may soon supplant the weekly cume estimate as the best indication of a station's impact on people in the community.

Audience information firms already are changing how they present information. Arbitron has redesigned its local market and AID (Arbitron Information on Demand) reports to meet its clients' new needs. The Radio Research Consortium is reevaluating and refining its audience data tables.

But these are just the first steps. Ultimately, new thinking will increase the ease with which public broadcasters ingest and digest new information.

FROM DATA EXPLOSION TO DATA REDUCTION

It seems unlikely that more than a handful of hardy souls would be interested in learning the actual mechanics [of manipulating Arbitron data]. Some are willing to take a trip into "audience research land" so

long as they are accompanied by an experienced guide. Upon return from this foreign land they feel more secure and comfortable, but no more motivated to learn the complexities.

— Steve Symonds, memo to Mike Harris, 1977

The amount of local audience data available to public stations has exploded in the last decade. Primarily benevolent, this explosion has blown away old myths and revealed the realities of programming's effects on listeners. Knowledge is better than ignorance, and complete knowledge is better than a little knowledge — a dangerous thing.

But many public broadcasters are having trouble absorbing all of this information. A year's worth of Arbitron data for a single station, for instance, makes a stack of paper inches high. Add to this the Birch data and perhaps research done locally, and it becomes clear why managers and programmers are drowning in a deepening sea of data.

Computers have caused this explosion. During the last few years it has become easier, cheaper, and quicker to crunch numbers in more and different ways. But computers don't know that some numbers are more useful than others and that many numbers have become irrelevant.

In the next few years, research firms will gain control of computers and rescue broadcasters from this deluge. Computers will be programmed to filter out less useful numbers so that people can concentrate on the most important information. Even better, researchers will guide computers' actions with the new ways of thinking discussed above so that they produce more pertinent information.

Program- and format-specific information will replace daypart data; half-hourly information will replace today's overly broad hourly data and unstable quarter-hourly data; full-day tracking of when listeners tune in and tune out will make the turnover ratio obsolete. These are just a few examples of how more appropriate reporting measures will displace old ones.

Indeed, radio broadcasters are less likely to see numbers in the next few years. Increased computing capabilities will transform unfocused mounds of numerical data into focused pictorial information. Elegant graphics will displace tables packed with rows and columns of numbers as information users demand more refined and intelligent presentations. Research results will become more accessible — just as public radio programming has become over the last decade.

In sum, both public radio broadcasters and their research will become more intelligent.

CONCLUSIONS

These general trends — from description to prediction, from old to new ways of thinking, and from data explosion to data reduction — are forces that underlie human endeavor throughout history. These forces will change not only the decisions public radio broadcasters make, but — more importantly — the way they make decisions. In turn, this will require significant changes in the ways they function as professionals. They will evolve.

So will their research tools. But research won't make their jobs easier. Instead, it will impose new costs and demand new responsibilities that require new and different skills. Stakes will be higher; competition for listeners and their money will be fiercer. Natural selection, the survival of the fittest, will remain a significant force in this continuing evolution.

SECTION II

BUILDING AUDIENCE

“Building audience” was certainly one of public radio’s most prevalent themes of the 1980s. Speeches, seminars, task forces, and entire organizations were founded on the concept. Even today audience building remains a central focus of a maturing public radio system.

But what does it mean to “build audience?” In fact, what is “audience?” When is a person a listener? Why do some listeners count more than others? When are certain methods of counting listeners better than others, and why?

The task of building audience requires the builder to understand the relationships among programming, listeners, public radio’s missions and mandates, and audience-building techniques adapted from commercial radio. What are the most effective means of building audience? Are some reasons for attracting listeners more or less appropriate than others?

*The responsibility discussed in the previous section prompts us to think through our reasons and our methods for building audience. This section explores some of the most basic questions that anyone wanting to build audience should consider. It is based on research done after 1986. Lest one think these questions are **too** basic, consider that we didn’t have informed answers for most of them five years ago.*

ATTITUDE AND APPEAL

Their Effect on Reach and Potential Audience

*The end of all our exploring will be to arrive where we
started and know the place for the first time.*

— T. S. Eliot

May 1988

Most people who could listen to public radio don't listen to public radio. Write them off. Your audience-building efforts can affect many listeners on the margins, but most people under your signal just don't like your attitude. It's normal, it's healthy, and it's worth understanding in some detail.

WHO DOES LISTEN?

Each week about two percent of all Americans over the age of 12 listen to a public radio station more than to any other station. That's four million people whose favorite radio station is a public station. These are public radio's **core listeners**, and public radio serves them well: they spend two out of every three radio listening hours with their public station.

Each week another eight million people tune in to a public station and listen for at least five minutes. These **fringe listeners** find something worth listening to on public radio, even though they spend six hours with commercial radio for every hour they spend listening to public radio.

Over a year's time, public radio captures the attention of another six percent of all Americans for five minutes or more. These 13 million **samplers** check in to public radio's audience less frequently than once a week, and therefore are

not likely to be captured in Arbitron's weekly cume estimates. Because they tune in and listen every so often, samplers know that public radio exists; they even have a good idea of what it offers; still, they spend the vast majority of their radio time listening to commercial radio.

Adding up samplers, fringe listeners, and core listeners, we find that public radio enters the lives of roughly 25 million Americans over the age of 12 each year. This leaves 175 million Americans who **do not** use public radio. To be fair, around 35 million **cannot** listen because they live beyond a public station's signal. But this means 140 million Americans **can** listen to public radio — **but choose not to**.

Indeed, you couldn't pay these people to listen to public radio. (Well, maybe you could pay them, but once the check clears they'd go back to listening to a station they liked.)

DON'T PANIC

Public radio is not alone. Virtually every radio station serves a loyal core of listeners well and a listening fringe to some lesser extent; and while many people sample the station over long periods of time, most won't want to listen to it — ever.

In this sense a public station is no different from any other station with any other format. Every radio station has a **core audience** composed of a **certain type** of person. Listener **patterns** are the same across formats, with every format having a core, fringe, and sampler element. This doesn't mean that **listeners** are the same across formats; far from it.

Think about it. Is the core country listener a different kind of person than the core classical listener? Is either different than the core classic rock or core contemporary hit radio listener? Of course they are: Different types of people like different types of radio programming.

The number and types of people in these core audiences vary across formats, stations, and markets. Yet one thing

remains the same — a commercial station succeeds when it serves a large and commercially desirable core audience well. It attracts this core by embracing its listeners' values and lifestyles. In short, the station develops an **attitude**. This attitude drives the music it plays, the information it selects, the way its personalities talk, the topics they choose, the words they use, the jokes they make (if any) — everything purposely coincides with the values and lifestyles of a well-defined and well-understood core audience.

PUBLIC RADIO'S ATTITUDE

Although public radio may differ in its intent, it too has a core audience brought to it by the attitude inherent in its programming. Public radio has maintained a distinct attitude about itself and its listeners for decades: being "intelligent" is an attitude; being "of the highest quality" is an attitude; "reflecting the highest achievements of our culture" is an attitude; making lofty ideas and ideals accessible to all interested Americans is also an attitude.

Public broadcasters create and choose their programming based on how well it meshes with public radio's attitude or "mission." People who choose to listen to our programming share this attitude; the attitude that makes them listen also sets them apart from others. People who are attracted to public radio are different from people who are not; people who listen more to public radio are different from people who listen less; people for whom public radio is the station of choice are quite different from other Americans.

Programming causes these differences. Indeed, different formats **within** public radio serve different types of people. People don't listen out of some altruistic concept that public radio is a cause or a public good; they listen — and contribute money — because public radio's programming speaks to their values, in their language, in terms that fit their lifestyles and their attitudes.

The complex relationship between programming and the listeners it attracts is called **appeal**. Public radio can better serve the public and itself by understanding the appeals of its various programming options and the types of listeners each option might serve. Audience and programming research is the key that unlocks this understanding.

Public radio professionals and institutions are so firmly rooted in their missions that there is little danger that we'll prostrate our programming to the least common denominator of appeal. Our collective attitude just wouldn't allow it. Research can help us to enhance our services, broaden our appeal, adopt a more accessible attitude. We shall always return to our metier — but not unchanged.

THE CUME TRAP

The Underlying Mechanisms of Counting Listeners

*O infinite virtue! Com'st thou smiling from the world's
great snare uncaught?*

— William Shakespeare

June 1988

Cume is a basic measure of the number of people who listen to a station within a certain period of time. We rely on it so much that we tend to think of it as a tangible entity. But it's not.

Arbitron's diary is like a listener-catching trap. The longer you leave it open, the more people you'll catch listening. Cume is an artifact of the process of counting. **Reach and frequency** are what cume really reports. Indeed, cume, average audience, ratings, shares — all audience statistics — are simply different reflections of reach and frequency.

If you're out to build your audience, you're out to build reach and/or frequency.

REACH

Reach is number of people who **do** listen as a percentage of the number of people who **could** listen. Technical factors such as signal strength, terrain, AM or FM, and so forth, clearly affect your potential audience. Given these, your programming attracts certain listeners and repels others because of its **appeal**, or attitude. Together, technical factors and appeal determine a station's reach — that is, the number of people who choose to listen to the station at some

time or another. The previous essay dealt with appeal (and therefore reach) in some detail. Here we turn our attention to the frequency part of the equation.

FREQUENCY

In order to understand the underlying dynamic of how audience is built, put aside the aggregate concept of cume for a moment. Individuals — not cumes — listen to radio, and individuals tune in your station with varying degrees of **frequency**. Some tune it in several times every day. Others tune it in only once or twice a week. Still others tune it in every couple of months.

Most of us think of frequency as **the number of times a person tunes in** during a given period. For instance, public radio listeners tune to their public stations an average of five times per week. (In audience research jargon, “tune-ins” are called **occasions**; multiplying occasions times **duration** — the average time spent listening once tuned in — yields **time spent listening**.)

TABLE 2-1. *AUDIENCE 88’s estimates of daily frequency of public radio use show that only 1 in 10 listeners in the weekly cume listen to public radio every day of the week.*

Percent of Public Radio’s Weekly Cume Listeners Who Tune In	
1 day out of 7	29%
2 days out of 7	14%
3 days out of 7	11%
4 days out of 7	11%
5 days out of 7	14%
6 days out of 7	11%
7 days out of 7	10%

Another way to think about frequency is as **the number of days a person listens per week**. A person who tunes in every day listens seven days out of seven. A person who tunes in one day per week listens one day in seven. Table 2-1 shows the numbers for public radio’s national audience according to AUDIENCE 88.

What about people who listen **less often** than once per week — in other words, those who listen once every couple of weeks, or once or twice per month? These people are less likely to be captured by any single week’s measurement; you may have to wait two weeks, one month, even two or more months before finding them in your cume — the longer you look for them, the more likely you are to find these very infrequent listeners.

But many **are** in a single week’s cume. Once the diaries are open, **all** listeners to a station are counted regardless of the frequency with which they may have listened over the last week or month or year.

SAMPLERS

Samplers are people who listen to public radio less than once per week but who listen at least once per year. The number of samplers in any station’s audience is estimated by the number of people who would be found in the **annual** cume minus the number of people in the **weekly** cume.

The graphs on the next two pages show public radio’s annual cume to be a about twice the size of its weekly cume. The resulting rule of thumb is: your station serves as many samplers in a year as it serves listeners in a week. Any public radio station can double its audience simply by reporting a one-year cume. So can any commercial station.

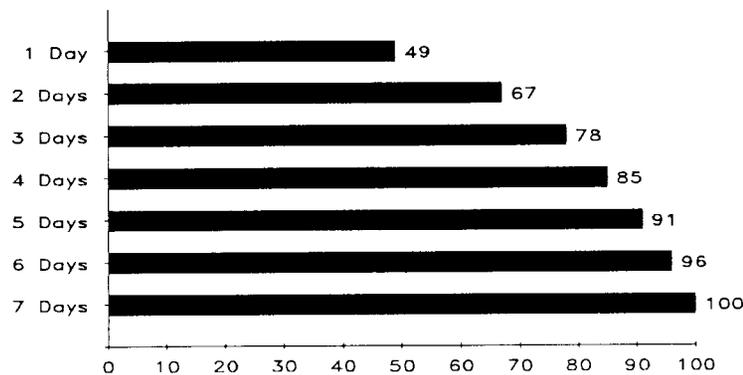
How should samplers be interpreted? You might consider them an embarrassment — they know your station exists, but they usually choose not to listen to it. Alternatively, you may be proud of their number, as it indicates that a larger audience is using your station, albeit infrequently.

CATCHING CUME

The size of your cume audience depends on how long you count listeners. On the first day of diary-keeping, a certain number of people are caught in the act of listening to your station. On the second day there will be some new people not captured on day one. As the measurement period lengthens, the number of people entering the cume each day gets smaller.

Almost half (49 percent) of public radio's weekly cume tunes in on the first day of measurement. Another 19 percent are added on the second day, so that 67 percent of the weekly cume is captured in two days. The number of people added to the cume diminishes with each passing day, so that the seventh day adds only four percent of the weekly cume. By definition, 100 percent of the weekly cume is trapped after seven days.

Graph 2-1
HOW PUBLIC RADIO'S CUME IS BUILT
OVER A SEVEN-DAY PERIOD
 Percent of Weekly Cume After:

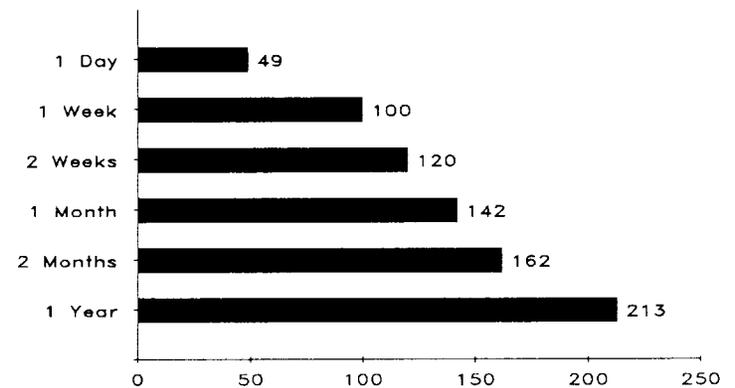


Source: AUDIENCE 88

From an audience-building perspective, samplers are an opportunity. They listen to public radio on occasion, so something about it appeals to them. They are within its reach. But their light listening does not make them susceptible to on-air promotion. Therefore, they represent the primary target — and opportunity — for off-air tune-in promotion.

Although we tend to think in terms of weekly cumes, some people — those who listen less frequently than once per week — are added to the cume on the eighth and ninth and tenth days and beyond. Extending the measurement out to two weeks increases the cume audience 20 percent above the one-week cume; leaving it open for one month increases it another 22 percent; by the end of one year the cume audience is more than double the weekly cume.

Graph 2-2
HOW PUBLIC RADIO'S CUME IS BUILT
OVER A ONE-YEAR PERIOD
 Percent of Weekly Cume After:



Source: AUDIENCE 88

SAMPLERS, SPECIES, AND SHAKESPEARE

Ever since AUDIENCE 88 estimated the number of samplers in public radio's audience, people have been asking how we calculated multi-week, monthly, and annual cume estimates. In short, we took our audience's frequency of listening in a one-week period and applied a mathematical technique based on **binomial expansion** to estimate the "expanding" cume audience over a longer period of time, such as a month or a year.

The specifics of this procedure are beyond the scope of this essay. However, the "trap" analogy used here is an especially good one because this is essentially the same procedure used by entomologists to estimate the number of as-yet untrapped species of insects, given the frequency with which known species are captured.

This technique has literary as well as scientific applications. One intriguing use has been to estimate the number of words that Shakespeare actually knew, given the frequency with which each appeared in his published writings. The number of different words he used and the frequency with which he used them are analogous to the number of cume persons in your audience and the frequency with which they listen.

Shakespeare cumed 31,534 words in his published works; public radio cumes 11.7 million persons per week. Shakespeare knew at least 66,000 words, and at least 25 million people per year listen to public radio.

I don't recall how many kinds of bugs there are on the planet.

What should be the message of this advertising? Certainly not to make people in this target "aware" of public radio — most already know it exists because they listen to it occasionally. Instead, a much more effective message would build on this awareness and marginal use to remind them that they enjoy what public radio offers, and that it is still available. This means of raising the profile is called **salience promotion**. Examples of this theme are the "I could have had a V-8" and "Come to think of it, I'll have a Heineken" campaigns.

Notice that the message isn't designed to turn non-listeners into listeners; instead, it intends to **increase the frequency with which occasional listeners tune in** — in other words, to hasten their next occasion.

Hastening the next occasion is a programming strategy that stands head and shoulders above any other. Off-air promotion is but a very small part of it (and frankly, as the "Twiddling and Diddling" essay later argues, off-air promotion is a comparatively ineffective method). Public broadcasters can hasten the next occasion through consistent, reliable presentation of alluring programming. As the following essay demonstrates, the quality and strength of the appeal of the moment, and its congruence with the appeal of the whole, are what serve listeners now, and are what can serve even more listeners in the future.

ASSESSING AUDIENCE SERVICE

The Many Ways to Count Listeners

If you are out to describe the truth, leave elegance to the tailor.

— Albert Einstein

July 1988

Three-quarters of a million persons each quarter-hour, six million each day, 12 million each week, 25 million each year — all of these numbers are accurate, but which best reports how many people public radio programming **really** serves in 1988?

Public broadcasters tend to favor the largest numbers. Ever since AUDIENCE 88 estimated the annual cume at 25 million listeners, they are finding it hard to go back to the number they once thought represented their audience — a weekly cume of 12 million. But does five minutes of listening per year constitute **service**? For that matter, is a person truly served if he or she listens only five minutes this week?

Certainly, listening is a prerequisite of service — a person who doesn't listen isn't served. But how much listening must occur before public radio has achieved its mission to serve a listener's needs?

There is no single or "right" answer to these questions; various methods of counting listeners are more relevant to certain policy and strategic concerns than are others. The truth lies not in a single elegant measure, but in the weaving together of the various threads that define "service" in their own ways.

CUME MEASURES

Cume is the big number.

— Tom Church

Weekly cume — the biggest number reported by Arbitron — is a natural starting point for reporting audience service. Nearly 12 million persons over the age of 12 listen to a public radio station for at least five minutes during a week.

But why limit ourselves to this small number when AUDIENCE 88 reports a two-week cume of 14 million and a one-month cume of 17 million and a one-year cume of 25 million? Better yet, why not calculate a lifetime cume? Throughout a lifetime of scanning the radio dial, virtually every person in your market will come across your station's signal. Does this "100 rating" mean that public radio is delivering service to all Americans?

Far from providing the ultimate answer, the lifetime cume points out two problems. First, **every** station in a market will "cume" virtually 100 percent over a lifetime. Just about every person will check out every station at some time or another, either by scanning the dial, or by being drawn by advertising or promotion. **But in most cases, they decide that most stations — both commercial and public — aren't for them.** That's how the mature and highly-segmented medium of radio works.

Second, there has to be some **threshold** of use under which a person is not counted as a user. Just as looking at merchandise in a store — even picking it up and examining it closely — does not constitute a purchase, scanning the dial and checking out stations for a few seconds each doesn't constitute **use** — even though it is a prerequisite. People "buy into" a station by investing a certain amount of time with it — five minutes in a single occasion is the industry standard.

Since it requires a five-minute stretch of listening to be counted as a listener, cume is an appropriate measure of the number of people who use public radio. But cume is tricky,

because it's an artifact of the time period measured: the longer you count listeners, the more listeners you will count.

When you get to extremes — where people in the cume listen only once or twice a year to your station — you have to ask if the station is really **servicing** these listeners. Sure, they meet the five-minutes-of-use threshold; but do they meet some sort of amount-of-use, or **salience**, threshold?

FAVORITE STATION

A great truth is a truth whose opposite is also a great truth.

— Thomas Mann

AUDIENCE 88 opened this can of worms when it estimated public radio's annual cume. Another of AUDIENCE 88's creations — the **core audience** — adds a salience threshold to the mix that may make it a much more appropriate measure of audience service.

People are counted in public radio's core audience if they listen to a public station more than (or as much as) any other station this week. By this definition, public radio is these listeners' **favorite** station. A public station is the favorite station for over one-third of public radio's weekly cume audience — over four million listeners per week.

Core audience has a lot going for it as an indicator of service. It includes people who listen at least once each week and who spend more time with a public station than with any other. But what about people for whom public radio is **not** the favorite station? Certainly they are using public radio differently than their core counterparts, yet they **are** using it. By listening to public radio they are indicating that its programming is their programming of choice at that moment. That's important.

And although it's a refinement on total cume audience, core audience suffers from the same Achilles heel — the longer you look for core listeners, the more you will find. Should we count the three million core listeners each day,

or the four million core listeners each week, or the five million people each year who, in some week or another, listen more to a public station than to any other?

AQH MEASURES

My electric razor gives out a larger rating.

— David LeRoy

One thing about using the weekly core audience as a measure of service: it reflects much better than an annual cume what is going on **now**.

Think about the fluidity of radio use. Programming changes on every station from minute to minute. People's preferences and activities also vary. To measure service over a broad period of time misses the point that radio listening is an intensely **immediate** — and **individual** — activity.

Listening to the radio is just one of many activities from which an individual can choose. Your station offers only one of many types of radio fare available. **Service** begins when a person makes the decision to stay tuned to your frequency; it ends when he or she tunes out or walks away.

Your average quarter-hour (AQH) estimates — the **small** numbers — directly report levels of audience service at any particular moment. They report how many individuals are using your station right now — not how many people **have used** it, not how many people **will use** it, but how many people **are using** it.

Although it is probably the most useful measure, average audience isn't a "better" standard than any other. Average and core audience, weekly and annual cume — each reports a different view of the reality that is radio listening.

Cume and core and average and other measures of listeners weave a rich tapestry depicting public radio's audience service; each is necessary to understanding the whole. The closer we get to the present, the clearer we see how our programming is affecting individuals. As we step

back to take in the bigger picture, more individuals enter the scene; we lose the focus on the “now” but gain insight into the longer term effects of our service.

The people who are listening now are most likely to be public radio’s heaviest, most loyal listeners. But there are also people listening now who have not tuned in for several months and who may not tune in again for several more.

Only by understanding audience service at all levels can we begin to assess the reality of public radio’s service to the public.

Not elegant, perhaps, but every rich tapestry is the product of many individual threads.

TWIDDLING AND DIDDLE

Taking Advantage of Natural Forces

The finger that turns the dial rules the air.
— Will Durant

March 1988

Fingers play an essential role in most listeners’ use of radio. Fingers have turned dials in the past; in this digital age more and more are pushing scanning buttons. Either way they rule the air. The predominance and availability of radio formats are direct results of choices made by fingers.

Audience estimates reflect finger activity. The number of fingers pushing your button within a certain period of time is your *cume*. The number of fingers that have your button pushed now is your average audience. Time spent listening is the elapsed time between a finger’s pushing your button and pushing another.

Fingers are a fiercely independent lot. They push buttons or turn dials whenever they want. Broadcasters, in their never ending search to influence this activity, have identified two basic forces controlling fingers.

“Twiddling” is the act of scanning the broadcast band for an interesting signal. A basic and **natural** phenomenon, twiddling is the strongest and most frequently occurring force affecting digital manipulation.

“Diddling” refers to a whole set of acts engaged in by broadcasters to artificially induce digital manipulation. For instance, advertising and forward promotion are exercises in **induced** digital manipulation. While advertising attempts to increase the number of fingers tuning in, forward promotion attempts to discourage fingers from pushing

another button or to invite them to push the station's button at some later time.

Twiddling occurs naturally, and broadcasters can tap into its primal energy for free. Coherent appeal, consistent presentation — all of the elements of good programming — are what bring twiddling fingers to a station on the first, second, and subsequent occasions. Good programming works hand in hand with the natural twiddling force. Provide a service that meets a need, is reliably programmed, and is worth listening to, and twiddling will deliver listeners at no charge.

Diddling can speed up this delivery process. Forward promotion is one of many programming techniques that diddle fingers back to the station. Advertising works, too, but unlike programming techniques, it's expensive. In fact, the amount of money required to advertise **effectively** in a market can easily exceed the programming budget at most public stations. **And it's probably not worth it.** In fact, research is making increasingly clear that the effect of this diddling is so weak compared to the forces of twiddling as to be a very costly mistake.

THE DREAM

Imagine your station spends as much on advertising as the biggest commercial stations in your market spend.

You hire the best creative people in town to design and produce your campaign. Your agency implements an extremely efficient and cost-effective placement schedule, formulated to maximize the number of people that view, hear, and read your message and the number of times they view, hear, and read it.

This is the **best** ad campaign public radio has ever seen. Some national organization will certainly give it an award. It will reach the eyes and ears of every finger in your target market. But to what extent will it **really** induce digital manipulation?

THE FACTS

Last year a national survey of radio listeners conducted by Strategic Radio Research found that nearly two-thirds (63 percent) of 1,500 respondents between the ages of 18 and 44 had listened to no new radio station in the last two months. Even with all the money spent on advertising by commercial stations, two out of three people remain unaffected.

The study also found that **the older people get, the less likely they are to add new stations to their routine.** Thirty-nine percent of the 18-to-24-year-olds tuned in a new station, compared to 28 percent of those aged 35 to 44.

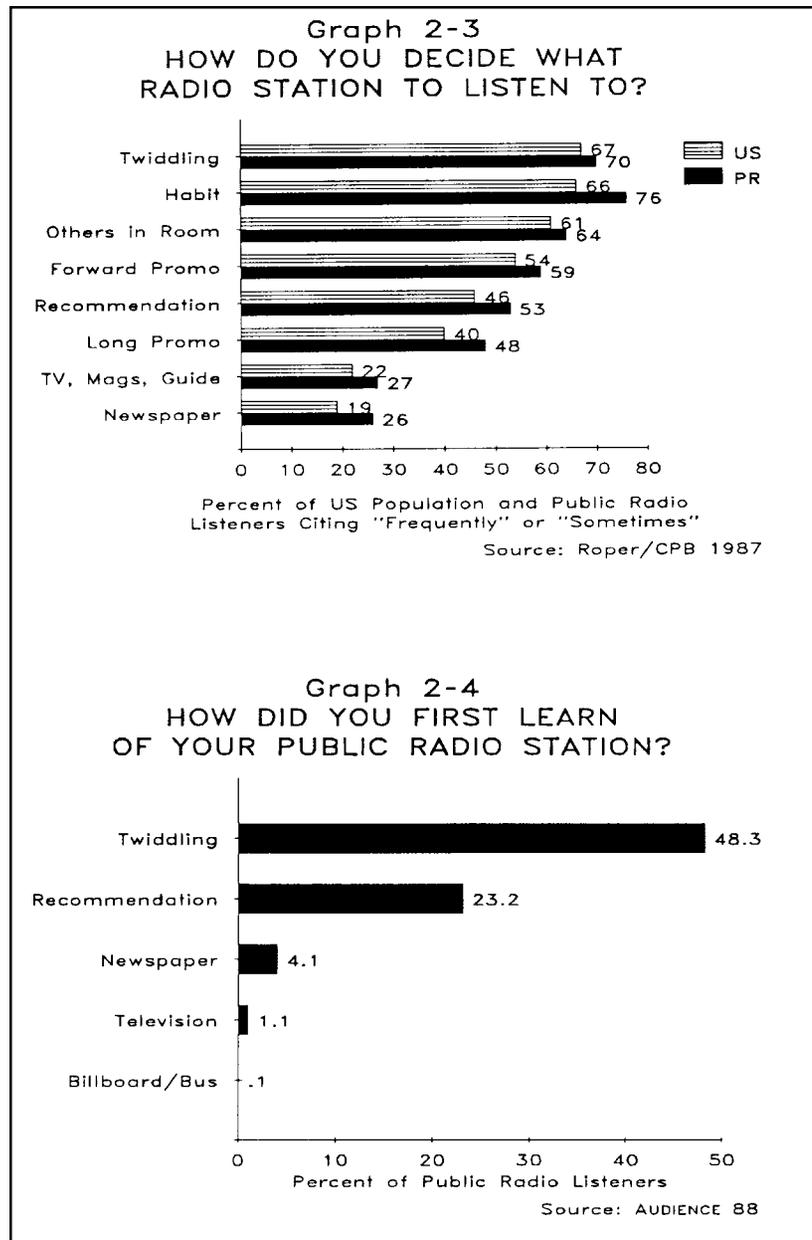
From this and similar studies we can estimate that three-quarters of the people in public radio's prime demographic group — 25-to-54-year-olds — have not listened to a new radio station in the last two months.

You may conclude that twiddling can't be all that strong a force if only a quarter or a third of all listeners haven't added a new station in two months. But think about it: Radio stations don't change that much in such a short period of time. There is no natural **reason** for people to add or switch stations.

More important, when you ask those who **have** added a new station in the last two months how they found out about that station, an incredible truth emerges. **They mention twiddling ("flipping around the dial") more often than word-of-mouth, billboards, and television advertising combined.**

This study documented again what broadcasters have known for years: **Twiddling beats advertising as the most powerful force affecting listeners' search for radio fare.**

This is true for **all** listeners — young or old, rich or poor, black or white — and all radio stations — public or commercial. Last year a Roper study commissioned by CPB found that, second to "knowing that certain things are on at certain times" (a function of reliable programming), public



radio listeners are most apt to “tune across the dial and listen to whatever sounds good” when choosing a radio station. (These two reasons are abbreviated as “habit” and “twiddling” on Graph 2-3, opposite.) As NPR’s report on the study, summarized in *Research and Evaluation*, August 1987, concluded, “Radio’s own air — the quality and appeal of its programming and...on-air promotion — is its most powerful tool for attracting listeners.”

AUDIENCE 88 also addressed this issue by asking public radio listeners how they found out about their public radio station. **Twiddling outpaced diddling by a nine-to-one margin.** (Twiddling was defined as “tuned in to station while searching for something to listen to;” diddling was defined as the combination of “read advertisement or article about station in newspaper” and “saw advertisement or feature about it on TV” and “saw billboard or bus card for it while driving.”) Graph 2-4, opposite, displays these ratios.

All indications are that a station with a very big advertising budget **may** be able to influence a few fingers for a ratings book or two — at a relatively high price per finger — but the station that can attract and maintain the most twiddlers wins in the long run.

NATURAL VS INDUCED DIGITAL MANIPULATION

There are those who argue that advertising and other forms of promotion are best done for reasons other than inducing tune-in: positioning, increasing corporate awareness, keeping the promotion director in practice for the day that you have real money for the task, that sort of thing. This analysis doesn’t address the efficacy of these arguments.

But when considering advertising, consider not only what you **hope** to accomplish, but the extent to which it really will happen, given your resources.

And consider this:

- **There is no financial mechanism in public radio that allows it to realize a direct and immediate return on an advertising investment.** Commercial stations advertise to increase their reported audience estimates so that they can charge more for time on their air. In the commercial world, advertising on other media is seen as an investment for which there is an **immediate and direct monetary return.**
- **Advertising does not contribute to your audience service.** Telling more people about your station doesn't make it a better-programmed station. Diddling through outside media will certainly cause some persons to listen to your station sooner than if you had left twiddling to work in its own time. However, advertising costs. Therefore,
- **Advertising is significantly more expensive and less efficient than the cost of riding natural twiddling forces.**

Resources spent on advertising are resources not spent on programming. In this sense your listeners — and their fingers — are the final judges.

CONTESTS

Are They Appropriate for Public Radio?

*Dick: And if CBS told you to jump off a bridge, would you do **that**?*

Tom: Not again!

— *The Smothers Brothers*

February 1989

In its most recent round, CPB's Radio Audience Building Fund awarded monies to two public stations to test whether on-air contests could increase their audiences. Years of commercial contesting activities have proven that well-designed, well-executed on-air contests can have a significant short-term impact on the ratings book. But given the differences between commercial and noncommercial radio, we must ask if contesting is an appropriate technique for public radio to adopt. The most pertinent questions are

- Do contests enhance a station's public service?
- Do contests cause real and lasting audience growth?
- Is this growth big enough to return the investment?

Before we can answer these questions, we need to have a common understanding of how and why contests work commercially.

HOW CONTESTS WORK

On-air contests work by demanding that people listen to a station for extended and/or specific periods of time in order to participate. A contest may require that a listener hear a series of clues or pieces of information given over the air; it may allow a listener to participate only upon hearing a key song or phrase over the air.

Contest events may seem to occur at random times. However, anyone who has designed or analyzed an effective contest will testify that these events are far from random. **Contests are designed to artificially extend listeners' time spent listening to the station.** When people listen to a station longer, its average audience and share increase; because people listen more frequently, cumes and ratings also increase.

Back when Arbitron sweeps were only four weeks long, no commercial station ran a major contest outside of a ratings period. Now that most Americans live in markets that are measured 48 weeks out of the year, short, high-intensity contests are much less common. But because some sweeps are more important than others (ad agencies rely more on spring and fall than winter and summer sweeps, for instance), timing is still critical. There's no use spending money to influence the ratings book if there's no book being written at the time or if no one is going to read it.

RATINGS AND REALITY

Public broadcasters use ratings as a measure of their success in serving audiences. We expect the numbers to reflect the reality of radio listening as accurately as possible. We might also expect commercial professionals to want the most accurate audience estimates affordable, as rating can make or break their careers. Yet many are less concerned about **real** ratings than they are about **big** ratings. Many would willingly trade highly accurate audience reports for less accurate but larger numbers. Given the different uses to which we put ratings, this would be an appropriate choice for them to make; it would be a highly inappropriate choice for a public broadcaster.

The primary purpose of on-air contests is to manipulate ratings. Commercial stations live and die by the ratings book: ratings set their advertising rates; ratings determine the stations on which agencies place spots. A station that runs a close second in audience usually runs a distant second in sales. Therefore, commercial stations run contests to increase their share among stations appealing to their target audience. In markets where several stations with similar formats compete for the same listeners, a contest can significantly increase a station's "intra-format" share.

No contest will bring persons outside a station's target to the station. No cash prize is big enough to make your mama like Twisted Sister. Consequently, contests can appeal only to the station's target audience; they can affect only the listening of persons within this segment.

In sum, contests work for commercial broadcasters by tactically manipulating listeners' use of the station. Contests pull listeners away from other stations with similar target audiences. Larger reported target audiences allow the station to charge more advertisers more money. The net result is increased profit.

Given these commercial purposes, how do contests translate to public radio?

RETURN ON INVESTMENT

The ability of a commercial broadcaster to realize an immediate and direct return on a promotional investment is probably the single most "nonmission" difference between commercial and public radio. A commercial broadcaster who spends money and resources on a contest (or on any form of promotion) fully expects to recoup his investment — indeed, turn a profit — because of the larger audiences the contest induces. **A contest pays off when the increase in advertising revenues attributable to the contest exceeds the cost of the contest.**

In public radio, we don't have this immediate and direct **return on investment** mechanism. Of course there is underwriting, but how many public stations sell underwriting on an explicit and competitive cost-per-thousand basis? How many work with agencies or national reps who can help them exploit a good book?

Instead, public broadcasters measure returns in terms of **membership** (more listener support) and **audience service** (more satisfied listeners more often). Therefore, its contest experiments should stringently determine the degree to which **the contest itself** increases audience service and support. How much does it cost to add one person to the weekly cume? How much does a contest-induced listener-hour cost? How much new-member income does a contest return? All of these measures assess returns on investment.

MEMBERSHIPS

Contests will probably not induce more listeners to become members. Our best studies show that a person's propensity to support public radio is a function of that person's **public radio use** combined with the perception that the service is **personally important**. Contests may encourage some people to listen more, but we cannot assume that this contest-induced listening will have the same effect as programming-induced listening.

Will contesting cause nonmembers to embrace the station as personally important? Given the nature of personal importance, there is little reason to assume so. Personal importance is a relationship between a listener and programming, not a relationship between a listener and a technique that promotes programming.

Based on this knowledge, contests are highly unlikely to cause a significant influx of new supporters — at least, not on use and personal importance factors alone. New members are more likely to come from the listeners that contests attract to the station.

REAL AND LASTING AUDIENCE GROWTH

A contest can introduce listeners to a public radio station only if it has some sort of off-air component. This can range from word of mouth (a listener telling a friend that she should listen to the station to win a prize) to off-air promotion of the contest (such as retail displays that tell people they could win a prize just by listening to a radio station they don't currently listen to).

Two things work against public radio's realizing significant numbers of new listeners through off-air contest components. First is the tyranny of appeal: a station can attract and retain the listening only of persons to whom it appeals — persons in the target. Second, as discussed previously, contests have been designed to give an advantage to stations in crowded, competitive situations; contests have never been expected to build extra-format cume.

Without an off-air component, contests can influence only the listening of listeners. Because they require that a person must listen to win, they will be heard mostly by persons already in the station's core. And because core listeners already spend two-thirds of their radio listening time with public radio, there does not seem to be room for significant increases in time spent listening among this group.

Contests may induce fringe listeners to listen more. In fact, they may even cause fringe listeners to act like core listeners for a while. But as extensive commercial experience shows, when a contest is over, it's back to programming — and listening — as usual.

The real and lasting audience effects of a contest cannot be determined until several months after the prize is awarded. If at that time a significant number of new listeners remain, or if the time spent listening by listeners who had been in the fringe is significantly lengthened, then the contest can be credited with making a real and lasting impact.

Real and lasting growth in audience service is perhaps the only measure of success that is appropriate to public radio. When more people use the service and when people use more of the service, then public radio is better fulfilling its public service mission. After all, real and lasting public service is what motivates public broadcasters to build audiences. This motivation is quite different from the motivation of commercial broadcasters.

CARE AND WISDOM

Public radio professionals have much to learn from their commercial brethren. When properly applied, certain commercial techniques can significantly increase public radio's service to its audiences. **But we must be careful.** In our zeal to bring our programming to the greatest number of listeners, we cannot forget the critical differences that distinguish public from commercial radio. We must choose wisely among the lessons to be taken from the commercial side, lest we find ourselves mindlessly copying inappropriate strategies.

Transferring commercial technologies to the public sector requires great care and wisdom. Public broadcasters must assess commercial techniques in their own terms. There are serious questions as to whether extended on-air contests satisfy these terms. If we are to experiment with contests — indeed, any form of promotion — we must be careful to assess their real and lasting public service effects.

IT TAKES TIME Radio Listening Habits Don't Form Overnight

I've got you like a habit and I'll never get enough.
— Leonard Cohen

November—December, 1988

Most radio listening is habitual. People choose a particular station in a particular situation based on previous experience, pattern, and routine. It takes time to build an audience because people need time to get into the habit of listening. For this reason, **audience-building** strategies must of necessity include **audience-nurturing** strategies.

A station's newest listeners are different than those who have been listening for years and years. Understanding these differences may provide clues as to how public broadcasters might better serve their users.

- Do public radio's newest listeners prefer different types of programming than its long time listeners?
- Did they discover public radio through different means?
- Are they significantly different in their ages, their life styles, or their attitudes toward public radio?
- Are they significantly different in their use of public radio?

These differences may suggest various programming and promotion strategies targeted at specific audience segments. They may also affect certain listeners' willingness to become members. The AUDIENCE 88 study asked listeners how long they've been listening to their public radio station; but it didn't report extensively on the results. Here we do.

TABLE 2-2. *Persons listening to their public radio station for eight or more years account for 33 percent of public radio's listeners and 40 percent of its listening. They average nine hours and 55 minutes of listening each week, the product of 6.8 occasions (tune-ins) of 88 minutes apiece. Forty percent of their radio listening is to their public station; 47 percent use their public station more than any other (core), and six percent use it exclusively. One in five (21 percent) use it more now than one year ago. These listeners use an average of 4.1 radio stations each week; 20 percent use more than one NPR member station. Forty-four percent strongly agree that their public station is an important part of their lives; they would miss it if it were to go away.*

Years Spent Listening and Public Radio Use

	YSL to public radio			
	Less than 3	3 to 4	5 to 7	8 or more
Percent of listeners (Cume)	21	20	25	33
Percent of listening (AQH)	15	20	25	40
Time spent listening (H:Min)	6:04	8:04	8:24	9:55
Occasions (Number)	4.7	5.9	6.3	6.8
Duration (in minutes)	78	82	80	88
Loyalty	30	36	37	40
Percent who are in the core	30	40	42	47
Percent who are listening more than 1 year ago	28	27	23	21
Stations used (Number)	4.3	4.2	4.2	4.1
Percent who listen to more than one NPR station	9	12	15	20
Percent who strongly agree that public radio is personally important	23	34	40	44

This brief analysis examines the length of time public radio's listeners have been using their stations. Years spent listening (YSL) is associated with well-known audience concepts such as time spent listening (TSL), core and fringe, personal importance, membership, and program appeal. Exposing these relationships enriches our understanding of how and why listeners use their public radio stations.

THE UTILIGRAPHICS OF VSL

When this survey was taken in early 1987, about 20 percent of all listeners reported listening to their public station since 1985 or 1986 — only one or two years before. Another 20 percent began their listening three or four years earlier, in 1983 or 1984. Twenty-five percent had been listening for five to seven years (since 1980 to 1982), and 33 percent began listening before 1980.

Although long-term (eight years or more) listeners account for 33 percent of all weekly listeners, they account for 40 percent of all listening to public radio because of the correlation between YSL and TSL. A person who has listened to public radio for many years uses it more often than a person who began listening recently. Because they tune in more often, long-term listeners have a greater time spent listening (TSL) to public radio than do newer listeners.

Long-term listeners also depend on public radio more than newer listeners; almost half of those who have listened for eight years or more use their public station more than any other. But this doesn't mean that YSL to public radio is associated with its exclusive use. Even among its old friends, public radio is only one of a number of formatic substances used each week. Regardless of how many years they've been listening, persons in all four YSL segments use an average of more than four stations per week.

On the other hand, YSL is correlated with the use of more than one public radio station. Twenty percent of all long-term listeners use two or more NPR member stations

each week, compared with only nine percent of all short term listeners. It is possible that years of listening to a public station increases the odds of a person's finding others on the dial (in markets where they are available); it is also possible that the availability of multiple public radio stations encourages a person to remain a listener over time.

PERSONAL IMPORTANCE AND MEMBERSHIP

During the last few years research has established that the more a person uses and depends on public radio, the more likely that person is to consider it important in his or her life. This perception is called "personal importance." Personal importance is both a clear reflection of listener satisfaction and a powerful indicator of listener support.

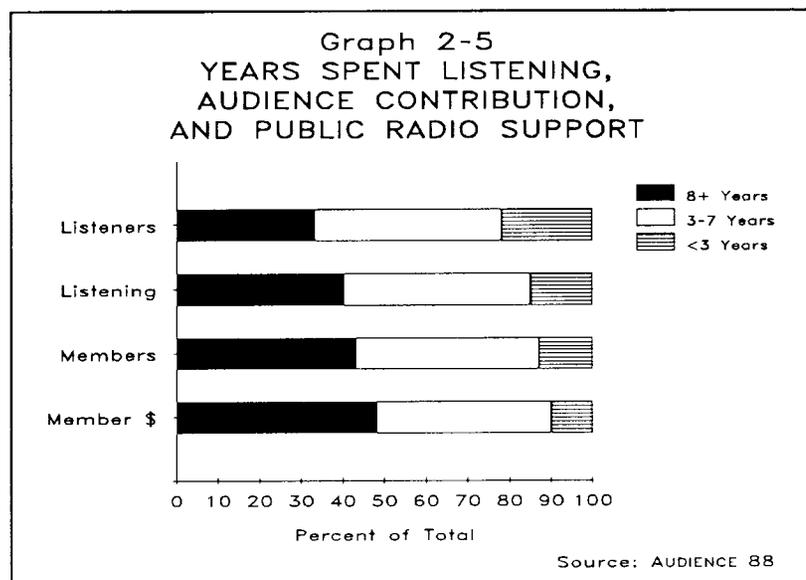
The longer a person has been listening to public radio, the more strongly he or she agrees that "The programming on this station is an important part of my life. I'd miss it if it were to go away." Apparently it takes time for programming to insinuate itself into listeners' hearts and minds.

The more strongly a person feels that public radio is personally important, the more likely he or she is to support it. Persons using public radio for eight years or longer are more than twice as likely as less-than-three-year listeners to live in households currently supporting public radio.

Generous support is also related to longevity as well. More than one in four long-term listeners (eight or more years) gave \$120 or more this year. Forty-three percent of public radio's current members are long term listeners, and nearly half of its total membership income is from them.

As Graph 2-5 shows, persons who have been listening to their public radio station for eight or more years account for 33 percent of all listeners (cume) and 40 percent of all listening (AQH) during a typical week. They represent 43 percent of all current members and contribute nearly half (48 percent) of all member-derived income.

Clearly, long term listeners are an extraordinary resource for public broadcasters. Who are they? Are our newest listeners being cast from the same mold?



DEMOGRAPHICS AND VALS

Well over half of all persons in each YSL segment are between the ages of 25 and 44. Not surprisingly, those who have been listening for eight or more years are most likely to be the oldest listeners. One-third (34 percent) are over 55 years old, compared to less than one-quarter (21 percent to 24 percent) of the listeners in the other three YSL groups.

Most interesting, and perhaps most important, is that the listeners who have most recently discovered public radio are the same **type** of people who have been listening for years. In VALS (Values And Life Styles) terms, they are very likely to be Inner-Directed. The "Societally Conscious" person is the most mature of the three Inner-Directed types, and so it is not surprising to see the highest concentrations of Societally Conscious persons in the older, longer listening segments. Less mature in terms of age, those in the shorter

VALS REVIEW

VALS (Values and Life Styles) is a system that views people from the perspective of development psychology. Developed by SRI International, Menlo Park, CA, VALS divides persons into nine distinct types reflecting their basic attitudes and beliefs. The types that are most important to public radio are reviewed here.

Inner-Directeds conduct their lives primarily in accord with inner values — the needs and desires private to the individual — rather than in accord with values oriented to externals. Concern with inner growth is a cardinal characteristic. VALS identifies three Inner-Directed groups.

The **I-Am-Me** person is typically young and fiercely individualistic, often to the point of being narcissistic and exhibitionistic.

I-Am-Me's become **Experientials** as they mature. Their focus has widened from intense egocentrism to include other people and many social and human issues. Experientials want direct experience and vigorous involvement. They are the most artistic and the most passionately involved with others.

Societally Conscious individuals have extended their Inner-Direction beyond self and others to society as a whole; to many, society extends to the globe or, in a philosophic sense, the cosmos. A profound sense of societal responsibility leads these people to support such causes as conservation, environmentalism, and consumerism. Activist, impassioned, and knowledgeable about the world around them, many are attracted to simple living and the natural; some have taken up lives of voluntary simplicity.

listening segments are more likely to be in the younger Inner-Directed groups — either I-Am-Me's or Experientials.

This means that public radio's overall **appeal** has remained relatively constant over time, attracting large concentrations of Inner-Directed persons regardless of their age. As they grow older they tend to mature into Societally Conscious persons; yet they are well on their way to that end when they begin listening.

PROGRAMMING PREFERENCES

What programming attracts and serves listeners in the various YSL groups? Does some programming appear to be “the door in” for those who have just begun listening?

In terms of sheer numbers of listeners, the programming that serves long-term listeners is also the programming that serves shorter term listeners. Information and classical music programming are mainstays across all four groups. (Shorter term listeners do not use as much public radio and therefore are less likely to use **any** program or format — therefore their numbers are lower across the board.)

There are some subtle “tilts” to the listening, however. Public radio's longest term listeners are the most likely to listen to opera, while its shortest term listeners are the most likely to tune in for jazz and drama. This is not as much a function of longevity as it is a function of age — because shorter term listeners tend to be younger than longer term listeners, they are naturally more attracted to formats with younger appeal (jazz and drama) and less attracted to formats with older appeal (opera).

DISCOVERY

Well over half of all persons in each of the four YSL segments discovered their public stations by scanning — tuning in to the station while searching for something to listen to on the radio. Another one-quarter to one-third heard about it by word of mouth — from a friend or relative.

TABLE 2-3. *The length of time a person has been listening to public radio is strongly related to who that person is.*

	YSL to public radio			
	Less than 3	3 to 4	5 to 7	8 or more
Percent who are				
18-24 years old	9	6	5	1
25-34 years old	31	34	27	27
35-44 years old	24	29	28	31
45-54 years old	13	10	16	17
55-64 years old	10	10	13	17
65+ years old	13	11	11	17
Percent who are				
Societally Conscious	36	42	48	52
Other Inner-Directed	17	11	11	10
Of those who remember, percent who discovered their public station by				
Scanning	56	56	55	53
Word of mouth	29	31	28	24
Percent who listen to the following where available				
Information	58	69	71	69
Classical music	58	67	66	72
<i>Morning Edition</i>	40	53	46	42
<i>ATC Weekdays</i>	33	44	47	46
Jazz	31	29	28	27
<i>Prairie Home Companion</i>	24	27	31	28
Drama	11	9	9	8
Opera	11	12	11	17

Scanning and word of mouth have always been, and continue to be, the main sources of public radio discovery.

CONCLUSIONS

Programming causes audience. It causes new listeners to tune in, and it causes existing listeners to tune in again. And again. And again. Public broadcasters tend to think of the short term when examining how listeners use their stations. Who is listening now? How many will listen this week? Rarely do we consider the effects of maintaining a listener over the long term.

Several disparate elements of this brief study combine into a single powerful finding: The appeal of public radio to the Inner-Directed type — embodied in its major programs and formats — is what attracts most listeners to the medium and what keeps them coming back over the years.

Public broadcasters should understand that while their newest listeners tend to be younger, **new listeners are attracted because of how they think (psychographics) more than by who they are (demographics)**. Public radio’s newest listeners tend to be younger than its existing listeners, but this is much more a function of listener availability than longevity (in other words, a 55-year-old person is much more likely to have been listening for 10 years than an 18-year-old person).

Nurturing this audience requires that public broadcasters maintain and create programming that continues to speak to their information and entertainment needs, their life styles, attitudes, and assumptions about their lives and their world.

SECTION III

RESEARCH METHODS

The last few years have been a time of great interest and experimentation in public radio research. Much effort has been spent adapting methods developed by commercial broadcasters to our own purposes and devising our own methods from scratch.

*Five years ago, public radio stations had Arbitron and the occasional member survey; none had tried any of the methods discussed in this section. Today, many of these methods are considered de rigueur at stations and CPB's Radio Program Fund. Indeed, more stations, producers, and distributors would employ these methods but for their expense. Yet as public radio's resources stretch tighter and the cost of mistakes rise, we may soon find ourselves unable to afford to **not** use these techniques.*

The Denver Project provided a fertile development and proving grounds for many of these methods, and reports on the project dominate this section. But others have also undertaken noteworthy endeavors in the last several years. CPB's Radio Program Fund has become a leader in the evaluation of national programming projects. And astute studies at WPKT in Hartford, Connecticut, and WKSU in Kent, Ohio, indicate how stations may do research that meets their unique needs.

TAKING THE NEXT STEP Research and Management Come Together in Denver

Could a high-achieving, successful major market station like KCFR further improve its program service — and so its audience and fundraising — if it enjoyed the same level of market research routinely used by its commercial competitors?

— *George Bailey, defining the Denver Project's central question*

May 1989

If programming causes audience, then even the best stations should be able to better their audience through better programming. Improved programming can serve more listeners and foster more listening, greater listener satisfaction, and greater listener support. That's the central logic of the Denver Project.

The Denver Project is exploring how research can intelligently drive a station's programming, inform its management, and better serve listeners. Not only might this demonstrate the future of programming and research, it also suggests the future of station and programming management.

Launched in 1988 with a grant from CPB's Audience-Building Fund, the Denver Project is directed by George Bailey of Walrus Research and Max Wycisk, General Manager of KCFR-FM. It's worth watching this "next step in audience building" for several reasons.

- The project employs research techniques that are new to public radio. Rather than adopting methods from

commercial radio wholesale, KCFR is refining and adapting these proven methods for application to public radio.

- The project undertakes each research technique in a disciplined sequence. The strengths inherent in each technique determine the order in which each is undertaken. Findings from each research activity inform the design of the next activity.
- The project integrates research and management in ways that are unfamiliar to many public broadcasters. At each stage, management and researchers carefully define the questions to be answered. Researchers select the most appropriate methods of addressing these questions.
- Management takes action once it is presented with clear results. It changes the programming, personnel, and budget to deliver the improved service.

For the first time, management at a public station has ready access to state-of-the-art programming and audience research technologies. In addition, KCFR's management is capable of acting decisively on research's findings. This means taking and managing calculated risks.

In short, by applying the most appropriate techniques to inform the tactics of management's long-term strategies, the Denver Project is using research the way it should be used. As public stations become more successful, many managers and programmers are increasingly hesitant to make the most minor changes or to take even the slightest risks; they assume that they have too much to lose. But astute managers and programmers know that every station must adapt to the ever-changing radio environment. Those who hide today from the risk of change will be sought tomorrow by a less forgiving peril — obsolescence.

SYSTEMATIC RESEARCH One Step At a Time

People are always neglecting something they can do in trying to do something they can't do.

— Ed Howe

May 1989

In the summer of 1987, guest columnist George Bailey wrote three Radio Intelligence columns in which he laid out a method for systematic programming and audience research. He called this purposeful study "actionable" research — research that provides information that management can use to make better decisions. A key component to actionability is sequence — the order in which methods are undertaken. The following, adapted from the December 1987 Denver Project proposal, outlines the sequence designed for the project.

Although public stations have occasionally found support for an isolated set of focus groups or a stand-alone survey, no station has yet undertaken a comprehensive and systematic schedule of research. A fundamental goal of the Denver Project is to move the public radio system from scattered and isolated research activity to a process of coordinated, cumulative and continuing research. The sequence of methods used the first year in the Denver Project are

- **Arbitron data analysis.** For actionable information, station management needs a thorough analysis and interpretation of the existing data, customized to strategic needs.

- **Diary analysis.** AudiGraphics' advanced analysis of diary data shows how listeners use the station and its competition. Going beyond the standard estimates of rating and share, it provides new statistics such as audience loyalty and utiligraphic segmentation.
- **Recontact study.** Arbitron diary keepers are recontacted and asked about pledging and related attitudes. What characteristics distinguish KCFR's audience? How do supporters listen differently from nonsupporters? What programming is cost effective in programming economics terms?
- **Focus groups.** Highly valid qualitative responses are gathered from six groups of selected listeners, 10 to 12 listeners per group, at a professional facility. Station management sets the agenda so that strategic questions are asked. Results from the diary analysis and recontact study help specify respondents.
- **Perceptual survey.** Whereas focus groups provide valid information, the small sample limits their reliability. A telephone survey of up to 500 respondents can verify or refute that the attitudes expressed in the focus group are represented in the market. The emphasis is on listeners' image and positioning of stations.
- **Music tests.** The "auditorium" music test is radio's standard method of informing music selection decisions. Between 75 and 100 persons are recruited from prime audience targets to assess a number of music selections. Analysis reveals what kinds of music appeal to which kinds of people.

Promotion is not a part of the Denver Project. The studies have been done and their results are clear: the audience for any public radio station, whether that station is a leader or an underachiever, is primarily a function of the quality of the station's program service.

DEMOGRAPHICS POSITIONING

Mapping the Territory and Positioning Your Station

*You've got to get beyond the walls of your station.
Cocktail parties, letters, and phone calls don't count.*
— Annette Griswold

June 1989

Every radio station in your market wages war for listeners. So does yours. You may call it something else, such as "serving the community with programming of significance," but it's still war. Your loftier motivations, noncommercial funding, and unique programming don't entitle you to the noncombative status of medics and chaplains. All public radio stations are combatants in the middle of a battlefield.

The battle is to serve listeners. Your audience listens to two minutes of commercial radio for every minute it listens to you. This isn't unusual; no station on this crowded battlefield can serve all listeners at all times. Each must target a segment of the market, claim the territory, and serve the people within that segment well. This process is called **demographic positioning** (and is unlike the classic psychologically-based Ries and Trout definition of positioning).

Positioning requires understanding the demographic territory. This means knowing what stations control what regions of the territory. Understanding where your station fits in, or could fit in, is crucial. In radio and war, positioning and control of territory are keys to success. Fortunately, Arbitron and Birch have done your reconnaissance for you. All you need to do is draw the map.

THE FRONTIERS OF NEW KNOWLEDGE

In writing about public radio's "chronic underachievers." Thomas and Clifford observe that these stations fail to improve programming, audience service, and fundraising because their managers do not take advantage of "current knowledge." In contrast, they describe a few high-achieving stations "at the frontier" — stations that "have already implemented many of the techniques for maximizing audience and fundraising."

In assessing public radio's future, they ask whether these leading stations are at "the peak of their audience potential, or is there yet another tier?" They conclude that this question must be answered by "research that goes beyond the information currently available from Arbitron — focus groups, psychographic surveys, and other forms of program testing" — in short, new knowledge.

New knowledge is the real deliverable of the Denver Project. Starting with a successful station that has already taken full advantage of the current knowledge, we will push forward the envelope of public radio programming — its appeals, its audiences, and its economics.

It is critical that we generate new knowledge now, because as other public radio stations reach the tier currently occupied by the most successful stations, those on the frontier must have scouted ahead, charting the way for the next step.

— Adapted from the Denver Project proposal
December 1987

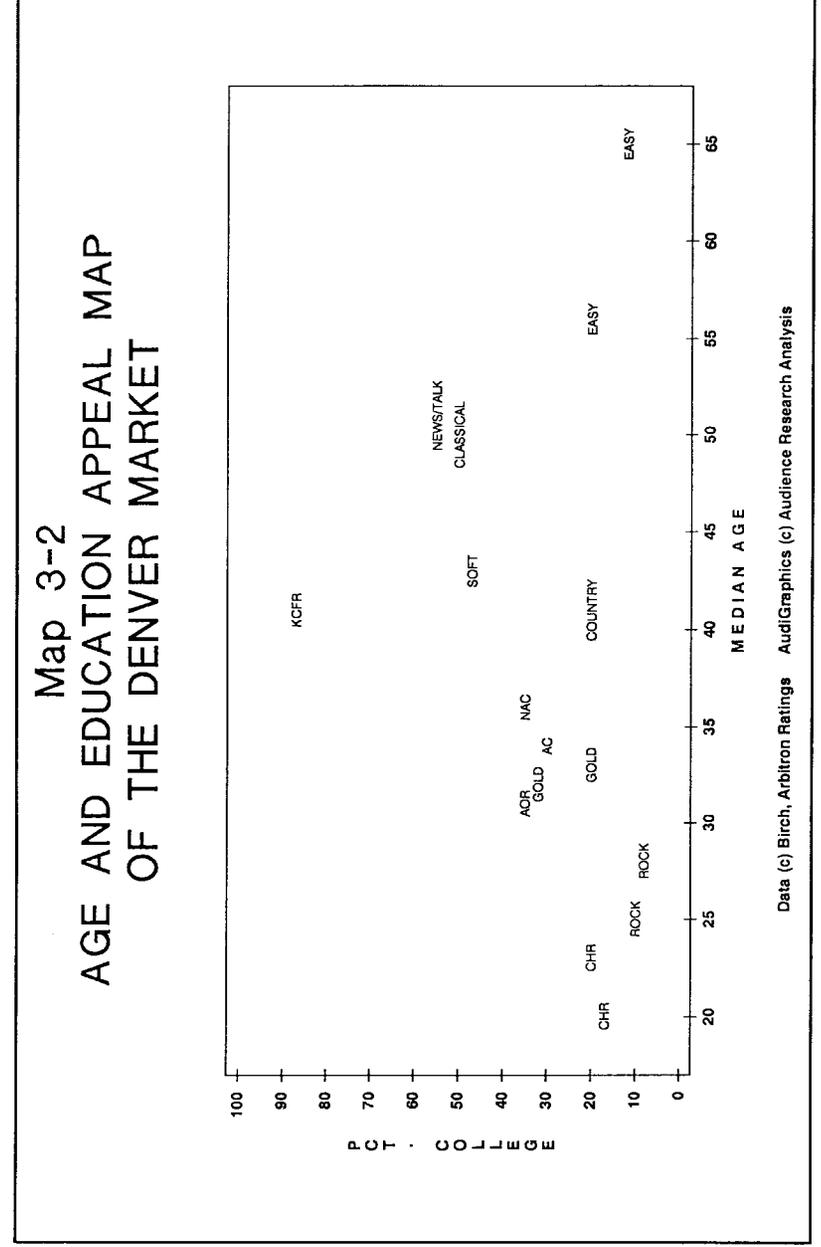
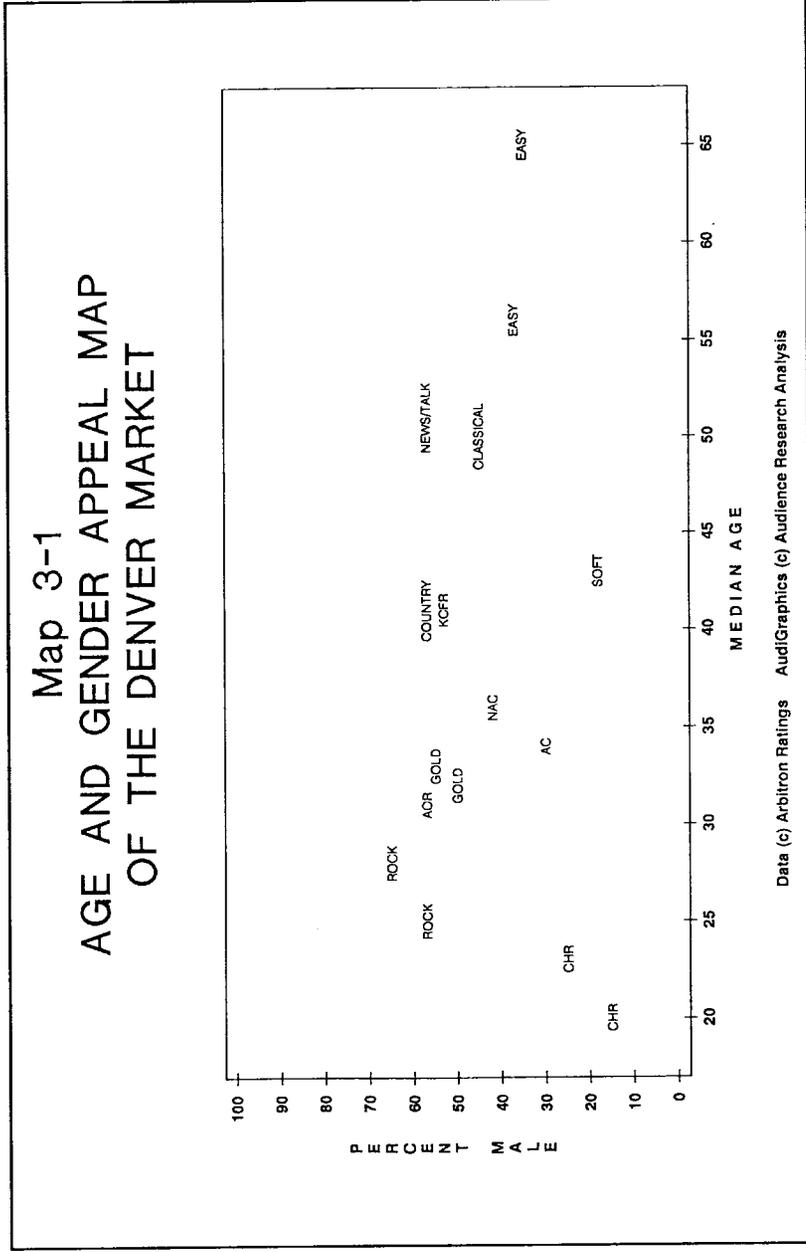
DENVER TERRITORY

An **appeal map** lays out the demographic terrain and pinpoints the positions of all radio stations. An appeal map can be based on any two dimensions; age and gender are the easiest and generally the most powerful and can be easily generated from Arbitron estimates. Some stations target on race dimensions, which also can be obtained from Arbitron. For public broadcasters, education is an important delimiter that can be pulled from the back of Birch reports. (We can even envision an appeal map with three demographics — age, gender, and education, for example — pinpointing the positions of stations in a transparent three-dimensional cube.)

KCFR's appeal maps are reproduced on the following pages. Map 3-1 shows the two most important demographic dimensions — age and gender. Each station is positioned on the map according to its median age and the percentage of its audience that is male. Map 3-2 again shows median age, this time paired with education. Before studying the maps, notice that the locations of stations are based on AQH, not cume, estimates. AQH encompasses both listeners and listening — a more appropriate measure than cume for describing the arena in which stations compete. Also, appeal maps usually show the call letters of the stations; because these would be meaningless to most readers, I've revised the map to show the formats of the stations.

Since appeal is reflected by the characteristics of the audience attracted to each station, proximity on the map can indicate similar appeal. In other words, the closer stations are, the more congruent their appeals and the higher their affinity. People who listen to one are likely to listen to the other.

Map 3-1 shows the positions of stations as most broadcasters think about them — in terms of age and gender. The Contemporary Hit Radio (CHR) stations share young female territory, and the Rock stations share young male



territory. Notice the glut of “thirty-something” stations — Adult-Oriented Rock (AOR), Gold, Adult Contemporary (AC), New Adult Contemporary (NAC), and Soft Rock — each centering its appeal in the baby boom, yet each differentiating itself by appealing more or less to one gender or the other.

This all makes intuitive sense until we get to the apparently high congruence of KCFR and Country music. The median age of each is 41 years, and both are between 50 and 55 percent male. But these just can't be the same listeners, can they? This is where Map 3-2 becomes powerful. It clearly shows that KCFR and this Country station have two distinct audiences; 22 percent of Country's audience has attended college, compared to 88 percent of KCFR's. Indeed, although in age/gender territory KCFR is in the middle of a number of competitors, the station stands alone when it comes to the very high education of its audience. In short, KCFR controls the over-educated territory in Denver.

Look at how the thirty-something stations cluster together on Map 3-2. None claims more than one in three listeners who have attended college, which is **normal** given the composition of the population. Together with CHR, Rock, and Country, they control the younger territory.

STRATEGIES

One of a station's two basic positioning strategies is to claim unoccupied territory. This is what commercial programmers mean when they talk about “filling a hole” in the market.

The hole is seen in audience service terms — that is, as a place on the map where a significant number of people are not served well by existing stations or programming. This is quite different from the notion held by many public broadcasters, who think of market holes as types of music that are not being played or news and viewpoints that are not being heard. From a strategic perspective, it is much more effective to concentrate on audience service.

The other strategy is to engage in head-to-head combat in occupied territory. This strategy requires going after the same listeners; it does not necessarily require doing the same programming. For example, you decide to serve the same people currently served by a commercial classical music station in your market. Your positioning strategy could be to counterprogram this station to differentiate your service — that is, to make your service different and better in the minds of the other station's listeners.

As music research (addressed later in this section) has shown, KCFR's mix of midday music did not consistently appeal to any single age group. Its news listeners were going to other stations to hear consistent music services with reliable appeal.

The challenge to KCFR is to anchor its midday music to a singular and reliable appeal. But the question is, to whom should the music appeal? In positioning terms, what direction (if any) should the music move KCFR on these appeal maps?

Suppose that other research were to identify vulnerabilities in at least one neighboring format; KCFR could reshape its music to draw audiences away from that format. KCFR would **deposition** the format by taking a bite out of one side of its audience. For instance, were KCFR to move its appeal toward the listeners now served by New Adult Contemporary, it would deposition the NAC station into younger, more female, and less well-educated territory.

THE BIG PICTURE

In order to survive in war and radio, one must know the territory, stake out a claim, and fight to keep it. This analogy implies aggression. Although we readily assume that commercial broadcasters have aggressive motives, we do not like to think that we do.

Unfortunately, pervasive positioning passivity among public radio professionals has left us with small and

dwindling music audiences. Those who believe that radio wars happen only within the walls of their own stations will have to remain content with this situation. Those who see the big picture know that listeners don't come from Mars, thin air, or some mystical fourth dimension not shown on these maps.

New listeners come from other stations, and even then they come only when our service is better than what they could be listening to somewhere else.

EXPLOITING LISTENER CROSSOVER

One Station's Fringe is Another Station's Core

One man's ceiling is another man's floor.
— Paul Simon

July 1989

Your audience is not your own. Even if yours is the only station in town, it's not the only station on the dial. While most of us understand this fact, it's difficult not to think in terms of "our audience."

Arbitron and Birch encourage this way of thinking by showing how "our audience" compares to "other audiences." Even though Arbitron's Radio Market Reports show cume sharing, and even though its Programmer Package contains crude diary crossover counts, what Arbitron and Birch miss altogether is an intelligent look at how and when audiences cross over among stations.

The programmer who knows how and when "his" audience uses other stations has an advantage over his colleague who does not. By understanding who among his listeners prefers other stations' programming, he can adjust his own programming to better serve listeners who cross over. This process begins by accepting that not all listeners are created equal.

CORE AND FRINGE

A station's core listeners (people who listen to it more than any other station) typically spend two-thirds of their radio listening time with the station and account for two-thirds of all listening done to it. **If there are places in your**

schedule when your core prefers other stations, your schedule needs work; programming that doesn't serve the core usually serves few, if any, listeners.

A station's fringe listeners (people who listen to the station but who listen more to some other station) typically spend only one-sixth of their radio listening time with the station. Your fringe has the most radio listening time to add to your station; but right now your fringe is composed of other stations' cores. Knowing who these listeners are, when they prefer your station, and what they prefer on other stations can help you serve some of them better.

Who are a station's core and fringe? What programming draws each to the station? What programming causes each to tune away? In the Denver Project's research into KCFR listeners' use of KCFR and other stations, George Bailey applied a new type of analysis to answer these questions. Available under the trade name **AudiGraphics**, this

analysis identified KCFR's core and fringe listeners and compared the listening patterns of each — not just to KCFR, but also to stations with which KCFR shared audience.

The first finding was that persons in KCFR's core listened three-and-one-half times more to the station each week than persons in its fringe, even though the fringe spent more time with radio (Table 3-1). Core listeners indicate current success while fringe listeners point to future opportunities. AudiGraphics shows what other stations these listeners use by focusing on stations that get the most **listening** from these listeners — not on the stations that share the most **listeners**. This departure from well known “crossover” or “station-sharing” thinking requires its own new terminology.

USER-RATING AND LOYALTY

Assume that your station has 100,000 persons in its weekly cume; at this moment 20,000 of these people are listening to radio and 5,000 are listening to you. **User-Rating** is the percent of your weekly cume listening to you right now. In this example your user-rating is 5 percent. User-rating focuses on the internal listening patterns of your audience. Even though your cume may vary from sweep to sweep, **user-rating provides consistency by emphasizing patterns of behavior.**

Loyalty is your listeners' use of a station as a percent of their total use of radio at that time. In this example, 5,000 of your listeners are tuned to you out of 20,000 listening to radio; loyalty to you is 25 percent; 75 percent of “your audience” is listening to other stations. This is not unusual, and it drives home the “your audience” fallacy.

The concept of loyalty can also be applied to your listeners' use of other stations. For instance, KCFR's fringe listeners did as much listening to a commercial classical station as they did to KCFR; they spent almost as much time with a commercial AOR station (Table 3-1, right).

TABLE 3-1. *The left side of the table shows the average time KCFR's core and fringe audiences listen to KCFR and to radio each week. The right side shows the loyalty of KCFR's core and fringe audiences to KCFR and to stations with other formats. Loyalty is the amount of time an audience spends with a station expressed as a percentage of its total time spent with radio.*

	Time Spent Listening in Hours and Minutes		KCFR Listener Loyalty	
	Core	Fringe	Core	Fringe
To KCFR	13:18	3:44	KCFR 68	KCFR 14
To Radio	19:42	25:55	Classical 8	Classical 14
			News/talk 4	AOR 11
			AOR 3	News/talk 7

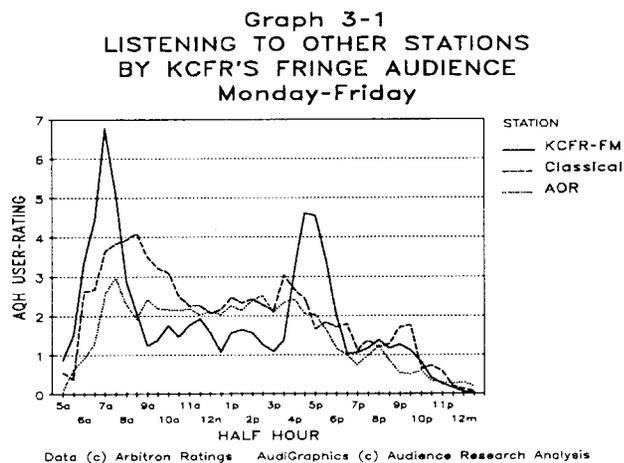
Further AudiGraphics analysis showed that KCFR's fringe listened to music on their preferred commercial station(s) and tuned to KCFR primarily for NPR news (Graphs 3-1 and 3-2). Indeed, this is a common pattern: **fringe listeners are drawn to public stations in the greatest numbers for the stations' strongest regular programming — not, as many public broadcasters believe, for “special” programming intended to “build cume” by reaching for a “different” audience.**

Since new listeners and listening don't come from Mars, this information is a big step toward better serving more

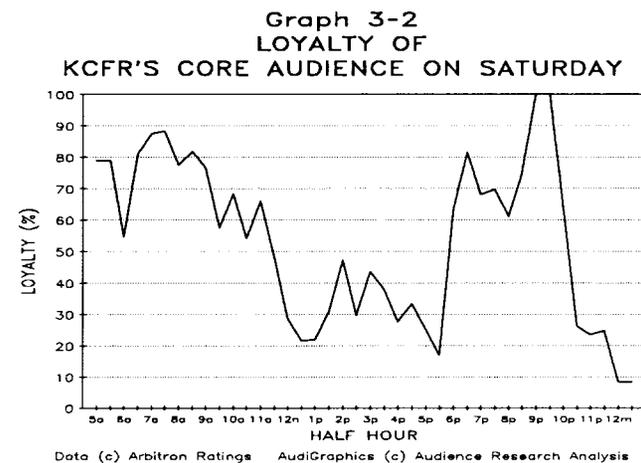
listeners. Knowing when and why your programming is weak helps you target it for improvement; knowing when and why it is strong helps you build on your strengths. AudiGraphics resolves in half-hour detail the programming that attracts core and fringe to your station and the programming that lures them away from it.

Analysis of Arbitron data by all available techniques is an excellent gauge of listener behavior. But behavior only infers motivation; we need to talk with listeners directly to find out what they think about the radio programming available to them. This is the purpose of the focus group.

GRAPH 3-1: *Weekday listening by KCFR's fringe to KCFR, a commercial classical station, and a commercial AOR station is shown. These listeners came to KCFR for Morning Edition and All Things Considered and preferred listening to music on the commercial classical and AOR stations.*



GRAPH 3-2: *The line across the graph shows loyalty to KCFR among its core listeners on Saturday. Between noon and 5:00 p.m. core loyalty dropped well below 50 percent. This programming's appeal was inconsistent with the station's regular appeal and served neither core nor fringe listeners.*



LISTENING TO LISTENERS

Recruiting for Focus Groups

[Anthropology demands] the open-mindedness with which one must look and listen, record in astonishment and wonder that which one would not have been able to guess.

— Margaret Mead

August 1989

There's a big difference between understanding **how** radio listeners behave and **why**. Arbitron does a creditable job of reporting listener **behavior**, but unfortunately it doesn't show **motivation**. Why do people behave as they do? Why are people turned off or on by stations? What do other stations offer that mine doesn't?

Broadcasters are not alone in their ignorance. Why does a consumer prefer Ford to Chrysler? Lands' End to Eddie Bauer? The *National Review* to the *National Enquirer*? Like Arbitron and Birch, syndicated research firms in other industries report who and when and how, but they cannot directly connect observations of behavior to motivations.

Understanding consumer (or listener) actions requires careful probing of their motivations. In the Denver Project's study of KCFR listeners, George Bailey conducted focus groups to assess listener motivation after using Arbitron to assess behavior. There are a few things about recruiting that anyone designing focus group research should know.

DESIGN AND RECRUITMENT

The first step is to specify the **universe** — the people to whom you need to talk. Within your universe there can be

different types of people. Depending on the types of questions to be addressed, you may want to compare listeners to nonlisteners, members to nonmembers, core to fringe, and so forth.

The second step is to identify the **sampling frame** — the sample from which people in the universe are drawn. If you want to study members, your station's membership list is the ideal sampling frame. But the study of listeners requires a different sampling frame — one not biased by a person's desire or ability to support.

Given the low incidence of public radio listeners in the population, it's much easier to find nonlisteners than listeners and much easier to find fringe listeners than core listeners. KCFR's focus group design specified listeners between the ages of 25 and 49, broken out by core and fringe. From this experience we learned a couple of tricks that greatly increase the incidence of listeners in a sample frame while preserving the ever-important aspect of unbiased selection.

KCFR began with a sampling frame based on zip codes in which its listeners were likely to live — information gleaned from Arbitron diaries. The firm hired to recruit listeners identified the phone exchanges in these zip codes and used a technique called **random digit dialing** to ensure an unbiased sample of recruits.

However, it became clear very early in the recruitment that even these targeted zip codes were too broad — the incidence of KCFR listeners was too low. KCFR then designed a second sample frame based on telephone exchanges (the first three digits in a seven-digit telephone number). Through analysis of its members' phone numbers, it identified exchanges in which members (and presumably listeners) were very likely to live.

Using this sampling frame, the recruitment firm employed **interdigit dialing** to recruit nonmember listeners. This technique calls numbers in the identified exchange

that are in between those of identified members. Through this method the recruitment firm was able to draft the required number of core and fringe listeners within budget.

It's important to note that KCFR was not interested in members versus nonmembers — instead, it wanted to compare the motivations of its core versus its fringe. KCFR was the first station to apply the core and fringe scheme to focus group design; it found the scheme to be as powerful in focus groups as it is in AUDIENCE 88 and AudiGraphics.

THE SCREENER

No matter how efficient your sampling frames are, not every person you contact will be a person you want to study. How do you find out if a person is a listener to your station, and how do you decide if he or she is in your core or fringe?

The answers to these questions depend on how well you want your subjects to fit with the definitions used by your behavioral research. KCFR's behavioral research was based on Arbitron data, and it wanted the motivational research to match exactly. The sequence of questions it used to screen for listeners and loyalty went like this:

Question 1. What radio stations you have listened to so far today? (If the person answers "KCFR" then he or she is a listener; skip to Question 4.)

Question 2. What other radio stations have you used in the past week? (If the person answers "KCFR" then he or she is a listener; skip to Question 4.)

(For stations not mentioned already, the person is asked:)

Question 3. Do you ever listen to KXXX?
Do you ever listen to KYYY?
Do you ever listen to KZZZ?
Do you ever listen to KCFR?
(If the person answers "yes" then he or she is a listener.)

Question 4. Of all the radio stations you use, which do you listen to the most often? That is, when you turn on the radio which station are you most likely to tune in? (This is the core/fringe question. If the person answers "KCFR" then he or she is in the core; otherwise he or she is in the fringe.)

The first two questions yield "unaided recall" — that is, the respondent is unaided in his or her recollection of listening to the station. This is by far the best way to identify listeners. The third question reminds the respondent of the existence of the station; this "aided recall" yields people in the extreme fringe, or what AUDIENCE 88 called the "periphery" — those who check out the station on occasion, but who choose not to listen most of the time. (These people were called "samplers" in Section II.)

You can identify persons in the extreme fringe by using aided recall after unaided recall has not yielded a listener. Otherwise, unaided recall gives you the best sample of listeners. When done in this way it closely matches Arbitron's definition of a listener — a person who listened to your station within the past seven days.

You cannot design and recruit too carefully. An inefficient sampling frame can bankrupt your study, and an inappropriate screener can recruit rooms full of people who don't know — and who don't care — what you're asking about. Your focus groups are only as good as the people on whom you focus.

PROGRAM AND PROGRAM PROTOTYPE TESTING Public Radio's New Reality

The Denver Project marked public radio's initial ventures into "program testing" and "program prototype testing" — the playing of actual or potential programming to carefully chosen listeners in a controlled environment to assess their reactions and opinions. The listener feedback from these experiments can be used to fine-tune, redesign, or even abandon programming before significant resources are spent on its full production, marketing, and distribution. It can also alert us to future hits. Program testing is not new to radio, but it is new to public radio.

January—February 1990

RESEARCH AS REARVIEW MIRROR

When something goes wrong, I'm the first to admit it.

I'm the first to admit it — and the last one to know.

— Paul Simon

When a radio station purchases or conducts audience research, it is essentially buying feedback from its listeners. Have people been listening to its programming? How many? Who are they? Do they support the station financially? These and other questions are routinely answered by well-established research endeavors that allow listeners to "talk back" to the station.

Unfortunately, most research mechanisms currently used in public radio are essentially rearview mirrors — they gather listener feedback alright, but only in response to

programming decisions that have already been made and on the air for some time.

If radio programming were free, this wouldn't be a problem for stations. One could simply put a program on the air, wait a year or two for research to gather audience feedback, and then decide whether to continue with that program or to replace it with something else.

But radio programming isn't free. NPR's unbundling, the CPB Radio Program Fund's practical limit on new program support, and producers' increased reliance on station income are driving up the acquisition price of all nationally available programming. And, as public radio stations continue to professionalize and retain their best on-air talent, the cost of locally produced programming is also increasing rapidly.

Not only is programming getting more expensive, but the stakes are getting higher and tolerance for mistakes is getting lower. Most public stations now serve more listeners than ever. Member and underwriter support — both linked to the level of public service the programming is providing — are at historic highs. For the first time ever many public radio stations have something to lose. They can no longer afford producers the luxury of developing programs over years on their air. Stations' increasing sensitivity to audiences, program costs, membership income, and underwriting revenues have made them less patient with new programs. Serious financial difficulties can now result from a program director's buying or making the wrong programming.

But what is the "right" programming? Is there some equivalent to a research "road sign" that will allow us to anticipate the acceptance of a program by listeners? And can we implement such research to fine-tune, revamp, or even discard programming before we invest significant resources in its production, marketing, and distribution?

RESEARCH AS ROAD SIGN

It is futile to try to measure what people want to read in their newspapers. Most will tell you what they think that they want, or should want, to read, but not what they'll actually buy and look at. If such polls reflected reality, there would be a boom in literary supplements.

— Keith Rupert Murdoch

Surveys are one means of assessing what programming listeners might want to hear on their public radio stations. Many public broadcasters have used their program guides to ask members what types of programming they would like more or less of. Some have even conducted scientific market surveys to ask a broader range of listeners — or potential listeners — what programming would best meet their needs and interests.

However, asking people to respond to lists of abstract program descriptions paves a well-trodden road to misleading results. Mr. Murdoch gives his interpretation of the problem above. One can put a kinder face on the problem by saying that surveys can assess only what people are interested in — not what they will actually listen to. Concepts like “less local news” or “more Mozart” are merely words on paper, not actual programming. Much of a program’s appeal relies on style of presentation — easy to hear but difficult to impart in a questionnaire.

Actually, this use of surveys is inappropriate for a grander reason. We are the creators, producers, and programmers; listeners are listeners. We can’t expect listeners to do our jobs for us. Like other marketers, we can ask our consumers what they think of our product; even better, we can create several versions, or prototypes, of the same product and ask listeners to choose their favorite elements of each.

So any way you look at it, surveys do an inadequate job of assessing what people will in fact listen to on the radio. A better way is to actually play programming for listeners

and measure their responses and opinions immediately. Commercial stations have been doing this with “call-out” research for many years. The call-out method reaches people by telephone and plays each person a taped series of programming elements. These are usually easily recognizable themes or “hooks” from songs that are or could be on the station’s playlist. After hearing each hook, the listener gives some kind of rating — not unlike *American Bandstand*’s “I’d give it a 70 because you can dance to it” type of score.

Call-out research is quick and relatively inexpensive; however, it’s limited to the few minutes that a respondent will give an interviewer on the phone. It also works best in identifying enthusiasm or burnout for songs that a person knows well, rather than introducing potential listeners to new songs or programming elements. For these reasons call-out research is used primarily to guide the fast-moving hit formats; its music-related utility for public broadcasters seems rather limited.

Other forms of research have attempted to gather reactions to programming by sending listeners audio cassettes and response sheets that they can listen to and fill out at their leisure. Unfortunately, these methods are plagued by response rates so low as to undermine the validity of the study.

AUDITORIUM RESEARCH

The ear is the only true writer and the only true reader.

— Robert Frost

A proven method of assessing what people will listen to is to bring them into a testing center, play them tapes, and gather their responses during and immediately after each audition. Called “auditorium testing,” this technique offers the advantages of scientific design, tight experimental control, good response and participation rates, and — most intriguing — the ability to measure listener reaction to

actual programming. The word “auditorium” refers to the listeners’ ability to hear, not to a theater, coliseum, or high school gymnasium.

Auditorium testing does not measure listener response in a true radio listening environment. Research firms have tried a range of systems over the years to circumvent this problem, the goal of each system being to get responses from listeners that most accurately predict what they would really do while listening to the radio normally. All sorts of things have been tried — from having listeners fill out bubble response sheets to wiring them with galvanic skin devices.

Several years ago Bob Goode invented the Electronic Attitude Response System, or EARS. EARS works by giving each listener a device that looks like a very simple calculator, complete with numbered keys and a liquid crystal display. As listeners hear programming played over a high-quality audio system, they press buttons on the EARS unit to indicate their level of interest in what they’re hearing at the moment. The response scale follows.

- 5: Would definitely tune in
- 4: Would stay tuned if already listening
- 3: Would possibly listen
- 2: Would probably tune out
- 1: Would definitely tune out or turn off radio

By essentially allowing listeners to turn up the volume when they are interested and to turn down the volume or to turn off the radio when they are not, EARS closely mimics the way they actually use radio. After all, actual use of radio programming is what we’re trying to predict — not abstract concepts or sweaty palms.

EARS can record the reactions of every listener up to 60 times a minute, displaying reactions to programming second by second. At this level of precision EARS is 900 times more detailed than Arbitron’s 15-minute unit of measurement. With this precision a producer can check listener

reaction to pieces of music, hosts, back and front announces, weather and traffic reports, and the full range of program elements — all the way down to a Howard Stern burp.

Most of the time this level of precision isn’t required, and EARS can be throttled back to measure responses at any frequency. Most moment-by-moment tests done for public radio have been at the six-second level, or ten times per minute.

In addition to its moment-by-moment monitoring, EARS can also administer open- and/or closed-ended questions immediately after the programming has been played. This feature allows listeners to assess what they’ve heard in a larger context. Was it interesting? stimulating? entertaining? informative? and so forth.

While all of these features are important, the most significant feature that EARS and the auditorium method bring to public radio is the ability to test prototypes of programming before it is put on the air. It puts the power of scientific experimentation in the hands of public radio’s program creators, producers, and programmers. It can guide the selection of hosts, stories, and music; it can suggest the types of listeners most attracted to and best served by the programming; it can spot programming with no future before resources are wasted on its production, marketing, and distribution; and just as easily it can alert us to future hits that deserve the expenditure of our resources.

Auditorium research can turn our attention from the rearview mirror to the road signs ahead. It’s a new reality for public radio broadcasters.

PROGRAM TESTING MOMENT-BY-MOMENT

EARS can show a producer with second-by-second precision how listeners react to the full range of program elements. A producer can use this information to fine-tune programming; positive elements can be built upon, and negative elements can be fixed or discarded.

SELECTING THE AUDIENCE

Program prototype testing is a controlled experiment in which the selection of listeners is just as crucial as the manipulation of programming elements. Only certain kinds of people are asked to listen; who they are depends entirely on the intent of the producer.

If a producer intends to extend the listening of *Morning Edition* listeners in the midday, then he must test his prototypes with *Morning Edition* listeners; if he hopes to attract new listeners, then he must test prototypes with nonlisteners. Or perhaps he wants to determine if any of the programming can maintain current listeners while attracting new audiences of racial or ethnic or underprivileged minorities; clearly, a producer's intentions and questions determine the experiment's audience.

EARS can plot a separate response line for any audience segment of interest. Age, gender, race, members, listeners, potential listeners, core listeners to a public or commercial station, fringe listeners susceptible to possible programming changes — all of these are grounds for productive segmentation.

Every format is the sum of its elements' appeals. Knowing which elements appeal to whom — and to what degree — is an important step toward public radio's redefinition of existing services to listeners and toward its service to new listeners. Program prototype testing can help public broadcasters avoid costly mistakes, guide the development of new programs, accelerate station acceptance of new programming, and hone all programming to serve as many listeners as well as possible.

The EARS system plots listener reaction on a video graph. The producer sees a line moving from left to right on a television monitor as the programming is played. The height of the line summarizes listener reaction to the programming at that moment (up indicates interest, down indicates disinterest.) Similarly, the trend of the line displays listener interest in relation to what came before (upward movement means increasing interest, downward movement means decreasing interest).

Graph 3-3 (next page) shows listener response to a telescoped version of *Marketplace*, one of eight CPB Radio Program Fund programs assessed by EARS in the summer of 1989. Responses were recorded every six seconds.

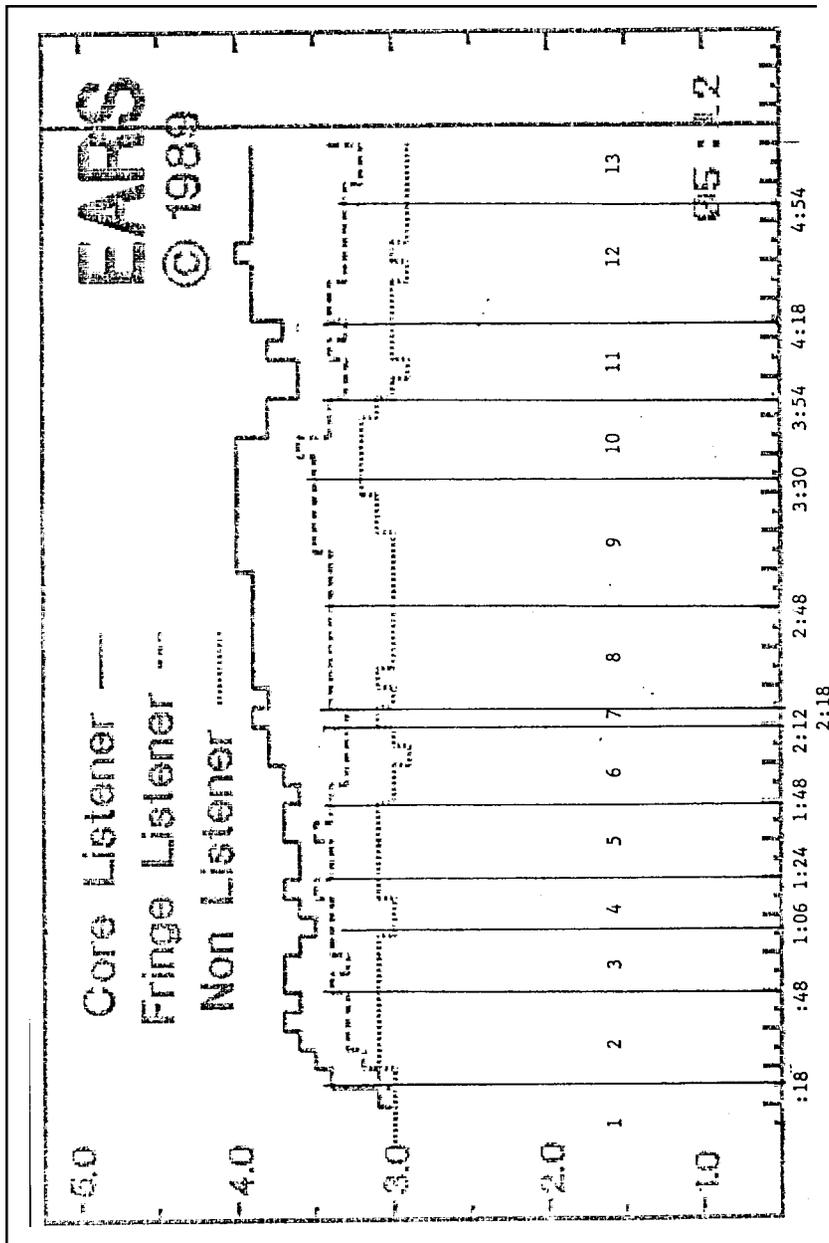
Listeners responded fairly well to the program until it did "The Numbers" — *Marketplace's* summary of the day's markets' activity.

This is the level of listener response that cannot be gleaned from Arbitron data or from pledge calls.

PROGRAM PROTOTYPE TESTING

Not only can the auditorium method assess programming as it's now done, it can also assess programming as it might be done. For example, different hosts can be tried, as can the presence or absence of traffic reports, public service announcements, time checks, and other elements. All programming elements, from personalities and their presentation styles to types of information and music, can be run past listeners to see which are best received.

This experimental manipulation of program elements is called "program prototype testing" — a research method with which every program producer, national or local, should be aware. To the extent that program directors "produce" a radio service by overseeing local productions and acquiring national programming, they are considered producers in the context of this discussion.



THE MARKETPLACE TEST

Graph 3-3 (opposite) shows listener reactions to a telescoped *Marketplace* program assessed in 1989. It's an excellent example of how listeners can confirm, reject, and otherwise inform professional intuitions.

When designing *Marketplace*, producer Jim Russell reasoned that a business show needed to report the daily movements of markets to be taken seriously. However, he also suspected that the traditional quantifications of stocks, bonds, commodities, and other trading activities would not appeal to public radio's core listeners — the people most likely to be served by *Marketplace*. Thus the rationale for "The Numbers" — a summary of the markets' activities for the day.

Was this a good compromise? The research asked listeners what they thought. Despite generally favorable response to *Marketplace*, listeners showed a significant decrease in interest during this segment (element 10). Of all 13 elements, it caused the greatest disruption among public radio's core — the audience to whom the program was trying to appeal the most.

This finding alone doesn't argue for the elimination of the segment. If its presence is deemed important from a carriage, positioning, or underwriting perspective, the producer can create several versions, each one testing various controllable factors such as host, music, approach, length, and depth. Maybe listeners would find it less intrusive and of more value if it were half its current length. In short, such purposeful **off-air** experimentation can guide the fine-tuning of elements to maximize service to the intended audience. Better programming is the result.

It is important to understand what program prototype testing is and what it is not. Foremost, the control of program prototype testing is the responsibility of the producer. The producer decides the programming to be tested. The producer decides what elements of the programming to manipulate, and how each element might be done in several different ways so that listeners may judge the effect(s) of each. With the aid of researchers who assure a proper experimental design, the producer actually creates these prototypes and plays them in a controlled setting for selected listeners.

Program prototype testing brings the audience in direct contact with programming they might never hear on the air. Programmers let their professional standards suggest which programs to carry or avoid; producers let their professional skills and interests guide their creation of programming; program prototype testing lets the intended audience judge programming options. Program testing is not public radio's bow to programming with the "least common denominator" of appeal. Ours is an intelligent audience that expects quality; programming need not titillate or pander to be perceived favorably.

Nor is program testing a capitulation to researcher-driven programming. As with all research, the role of the research professional is to ensure that the producer gets the information he or she needs through the proper use of the appropriate method. Program testing must serve the needs of producers, programmers, managers, funders, and ultimately listeners if it's to be of any value to anyone.

ASSESSING LISTENER RESPONSE

When Not to Listen to Listeners

*What does it mean when people applaud? ... Should I give them money? Say thank you? Lift my dress? The **lack** of applause — that I can respond to.*

— Barbra Streisand

May 1990

Listener response is the closest thing radio programmers have to applause. Positive feedback — from highly polished letters to off-the-cuff remarks at social events — can turn a bad day into a good day, bolster the spirits, and make it all seem worthwhile. The other kind of feedback — from negative newspaper editorials to irate phone calls — can do just the opposite.

Should public radio professionals let such kudos and criticisms guide their decisions? Eloquent letters make great additions to office walls, program guides, and promotional materials. However, these cheers are self-selected, representing neither the full range of your listeners nor their opinions. So too are the jeers.

Unsolicited and uncontrolled listener feedback is a dangerous thing upon which to base decisions for these and many other reasons.

- Useful response requires that the person has actually listened to the programming. This isn't always the case, and there is little one can do to separate informed from uninformed respondents.
- Useful response also requires that a person remember the programming in sufficient detail to react accurately. Too often remarks are made significantly after the

airing of programming; details can be exaggerated or forgotten.

- Even when response is informed, timely, and accurate, it is limited to listeners who know your station and its programming. This excludes the opinions of other people whom you may be attempting to reach with the programming.
- Uncontrolled situations generate more response for some programs and less for others. Listeners choose what programming to write or talk about, as well as what to say about it. Although they can be eloquent at times, without guidance listeners may not provide you with the type of feedback that you really need in order to make better programming decisions.
- And of course unsolicited response are often orchestrated. People may be responding to a friend's or editor's call to oppose a programming decision, reacting to a change at the request of others. More often than not they are defending an established personality or a programming concept without having given the new programming a fair hearing.

Auditorium research can overcome these problems.

- It can seek out people who'd neither hear nor respond to your programming under normal circumstances.
- It can probe listener responses more deeply and with a precision that allows reliable analysis of their opinions.
- It can solicit sentiments on any programming that now exists or on programming that you are considering producing or acquiring.
- It can ask people what they think while they're listening to the programming and immediately following — while it's ringing in their ears, while they remember what they're talking about.
- It allows us to look forward. Arbitron, focus groups, and other research methods are essentially rearview

mirrors, telling us where we have been or, at best, where we are now.

- It can also validate and help us make better sense of the findings of other research methods. For example, it may reveal low listener interest in a program that currently has low system clearance, small audience estimates, weak core loyalty, and unfavorable programming economics. By triangulating the information provided by these research methods, we can better understand exactly where a program is going wrong — or just as easily, where it is going right. This is powerful knowledge.
- It removes filters created by station clearance and schedule placement by taking the programming directly to listeners. This makes it particularly useful for examining the intrinsic merit of programming.
- Alternatively, auditorium research lets producers impose their own filters, either through the selection of targeted listeners or through the setup of the listening evaluation (by telling respondents to judge the programming in the context of their early morning radio listening, for instance).

COMPONENTS OF APPEAL

Putting Auditorium Testing to Work

It's unfortunate, but the way the American people are, now that they have developed all of this capability, instead of taking advantage of it, they'll probably just piss it all away.

— President Lyndon Johnson, speaking about Project Apollo

May 1990

The moment-by-moment tracking of listener response is what gets people's attention about EARS because it's the most eye-grabbing output. Here we look at a more mundane — but no less important — example of how the auditorium method can be used to assess the underlying components of programming appeal.

Why does a person listen to radio programming? Clearly, something in the programming attracts a person by satisfying a need, a desire, or a want. But what are these needs, desires, and wants? Is a listener looking for stimulation? Entertainment? Companionship? Something completely different? The programming attributes that give listeners what they seek when they turn on their radios can be thought of as **components of appeal**.

Public radio got its first look at some components of its appeal in the summer of 1989 when CPB's Radio Program Fund sponsored EARS research on selected Fund programs. The study, commissioned by fund manager Rick Madden, was designed by George Bailey of Walrus Research and conducted by FMR Associates, Inc. More than 440 people — 340 public radio listeners and 100 nonlisteners — heard

telescopes of eight programs. After moment-by-moment tracking of interest in each telescope, the study asked listeners to rate what they'd just heard on the following scales:

Stimulating	↔	Boring
Intelligent	↔	Mindless
Valuable To You	↔	Worthless To You
New, Different	↔	Typical "Standard Radio"
Entertaining	↔	Not At All Entertaining
Familiar	↔	Never Heard It Before

Listeners were then asked, Which of the following best describes your interest in hearing this program on a local radio station? Would you

- 5: Definitely tune in
- 4: Stay tuned if already listening
- 3: Possibly listen
- 2: Probably tune out
- 1: Definitely tune out or turn off radio

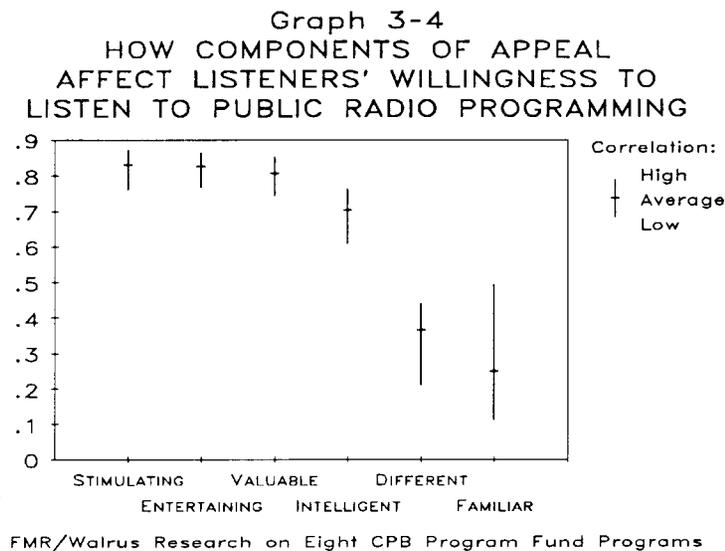
By statistically comparing people's interest in programming with their assessment of its qualities, we can see what components of programming appeal are associated with listening. For instance, if people are interested in listening to a public radio program that they think is unique, then "uniqueness" may be a component of appeal that causes people to use public radio.

Of course, these six components of appeal clearly do not represent the full range of attributes across all public radio programming. However, analysis of these few and simple components of appeal reveals some interesting information.

STIMULATING, ENTERTAINING, VALUABLE, INTELLIGENT

Graph 3-4 shows that the components of appeal most strongly associated with interest and listening are stimulation, entertainment, personal value, and intelligence. In other words, public radio listeners are more likely to be interested in (and listen to) radio programming that they

GRAPH 3-4 shows the correlations of interest in (and willingness to listen to) eight programs across each of the six appeal components. The components are ranked by their average correlations across all eight programs. High correlations mean that programs with this appeal are more likely to be found interesting by the respondents; when respondents don't think programs have this appeal, they are unlikely to be interested in or listen to them. Low correlations mean that people's interest and willingness to listen are unrelated to programs having this appeal.



Programs in the mix: *Afropop*, *Crossroads*, *Fresh Air*, *Good Evening*, *Latin File*, *Marketplace*, *New American Radio*, and *SoundPrint*.

find stimulating, entertaining, personally valuable, and intelligent. This will come as no surprise to most public broadcasters.

Virtually unrelated to interest or listening are the attributes of uniqueness and familiarity. The fact that they've heard a program before or the fact that it's not a typical radio show means little to public radio's listeners when they decide whether they'll listen or not. In fact, the program telescope with the highest uniqueness rating was the program that respondents were least interested in hearing if they came across it on the radio.

We interpret this to mean that uniqueness alone does not serve listeners. Public radio's quest for programming uniqueness — a goal embodied in CPB's Radio Program Fund guidelines, by the way — does not in itself draw listeners to public radio programming. Similarly, familiarity with programming is not enough to serve listeners. Just because someone has heard a program before doesn't mean he or she will want to listen to it again.

This is just a sample of what auditorium research — a new (to public radio) form of controlled and reliable audience feedback — can accomplish. These results represent neither an exhaustive study of the components of appeal nor public radio's full range of programming. However, as with all good research, they cause us to think about why people listen and why we produce and broadcast what we do.

MUSIC RESEARCH

Modes of Musical Taste

The ear disapproves but tolerates certain musical pieces; transfer them into the domain of our nose, and we will be forced to flee.

—Jean Cocteau

July—September 1990

Every bar of music attracts some people and repels others; it's a matter of taste (or perhaps the lack of it). The well-being of radio stations and national music producers depends on how well their music matches the tastes of their intended listeners. For this reason tastes are important to understand.

Music research is an important method of ascertaining listeners' (and potential listeners') musical tastes. Public radio's initial explorations into musical taste reveal the following:

- Even though public radio usually limits its music programs to a single genre, its selection of music within the genre is far too broad to be effective. If the goal is to make music programming on public radio more important to more listeners, research strongly suggests adopting and maintaining a more appropriate sound or appeal — what music researchers call a “mode.”
- The precise nature of this mode depends upon the type of listener the programmer seeks to serve. Selection of the audience determines the selection of the mode, which in turn guides the selection of the music.

- Programmers can train their ears to identify their chosen mode with an audio tape based on music research results. This tape provides programmers with a modal touchstone upon which to base their playlists.

THE GENRE DEMON

The musical genre we call “classical” encompasses a range of styles and sounds too broad to define an effective radio format. So too the genre “jazz.” Before public radio's music programming can become more effective and important to more listeners, it must dismiss the concept of genre and replace it with the concept of appeal. That's the clear message from recent research into the tastes of public radio's listeners.

Genre may be a conceptual godsend for academics, but it's nothing but a misleading demon for radio programmers. For years public radio programmers have confused the genre of music for its sound and appeal. Many stations programming the “classical” genre cover the repertoire from the Renaissance to modern minimalism. However, the gaunt sounds of the Renaissance bear little resemblance to the chamber music of Vivaldi or the full orchestra of Rossini or the lush sonorities of Mahler or the dark brooding of Bruckner or the triads of Glass or the emaciated manner of Reich. Each simply **sounds** different. Each is liked and disliked by different people.

The music research conducted by public radio programmers during the last year clearly demonstrates that **sound, not genre, is the most powerful force acting on a music format's appeal.** Successful music formats — those that serve listeners, not musicologists or record companies, personal or institutional tastes — are created by the **programmer's purposeful selection and rejection of music based on sound.** These sounds are called modes.

CAUSE AND EFFECT

We study the individual to understand personal tastes; but no amount of research can predict with certainty what an individual will choose to listen to at a particular time. Indeed, a person's tastes may encompass a number of modes and a variety of reasons for listening to each. At best, then, music research can only hope to predict the behavior of listeners in the aggregate.

But this is good enough. In fact, it's precisely the level at which physics, chemistry, and all "hard" sciences operate. A chemist who pours two clear liquids into a beaker accurately predicts that the mixture will turn blue; a physicist who blows air into a balloon accurately predicts that it will expand. Although each scientist explains the result in terms of valences and velocities of individual molecules and atoms, there's no way to predict or track the movements and interactions of the individual particles in the beaker or the balloon.

Fortunately for chemists, physicists, and music directors, the macro level of aggregate behavior is the most predictable and useful. Blow too much air into a balloon and it explodes. Pour certain chemicals into a beaker and they explode. Cause and effect.

Music research alone won't keep anyone from blowing away their listeners. As with any research, it won't dictate what mode to program — it can only suggest what results to expect from programming in certain modes. Select modes for which an intended audience has no taste and they will certainly tune out. Select modes that appeal to them and they may tune in. Again, cause and effect.

MODES

You directly affect your audience whenever you play music on your station or in your program. Music can simultaneously attract and repel listeners. Understanding what attracts and repels whom is the key to successful music programming.

Imagine two groups of people, each defined by the musical tastes of its members. Group A's members enjoy the music of Mantovani and other orchestral performances of familiar melodies rich in reverb. They abhor contemporary jazz, all rock, and anything with a drum. They participate at concerts by clapping on the on-beat.

Group B's members are deep into heavy, sharp, metallic rock. The local 7-11 store pipes Mantovani into its parking lot to force Group B's members to hang out somewhere else. They participate at concerts by smashing things.

The people in these groups believe there are only two kinds of music — good music (the music they like) and bad. These tastes are the basis of any music format's appeal. Within groups, shared musical tastes define a **mode** — that is, a body of music — generally liked by people in the group.

It's important to understand a few things about modes.

- Modes are defined by the tastes of listeners — not by radio or concert programmers, record companies, or musicologists. In this sense modes are defined from the bottom up rather than from the top down.
- Modes are very often described by a "sound" rather than by a genre. People in Group B may like certain cuts (and their accompanying videos) by heavy metal, new wave, and punk bands. There's no unifying genre here; the mode is best described as a sound, just as Group A's is.
- Every mode shares affinities with other modes to a greater or lesser degree. Because members of Group A have no tolerance for Group B's music, Mode A has no affinity with Mode B. However, it seems reason-

able that Mode A would have a high affinity with a mode of Boston Pops performances of light classical works or perhaps even lush Russian Romantic pieces (in major keys, up-tempos, and with lots of reverb, of course).

- There are as many modes as there are people. The music you listen to at home, in the car, at work, and in concert defines your own personal mode. However, serving significant numbers of listeners requires modes that hold true across significant numbers of people. Finding the mode(s) to serve a particular type of listener is the key to effective music programming.

Not all modes are music to everyone's ears. When a radio station mixes modes with differing appeals, it severely limits its service to listeners. Playing the wrong music is no less effective than Southland's teen-repelling Mantovani tactic.

Mixed low-affinity modes can be heard on virtually every public radio station. Even stations that program a single musical genre are programming mixed modes. Research shows that classical music, jazz, folk, and even more narrowly defined genres such as opera, orchestral, or minimalist works contain within them modes that are every bit as incompatible as our hypothetical Modes A and B.

Several public stations have recently undertaken music research. It's difficult to do right; it's expensive; but when appropriately applied by competent professionals, it's effective. For these reasons, it is not difficult to understand why a station's management may want to keep the results proprietary.

DESIGNING THE STUDY

As with all research, music research should be part of a larger sequence of managerial direction-setting and soul-searching. At a minimum, management must have defined the type of listener that it intends to serve with its music.

The intended audience guides the music to be tested.

And, of course, the people who are recruited for the music research must be members of the intended audience.

For instance, KCFR in Denver and KERA in Dallas have studied their music to better serve their information listeners. At these and other public stations, most listeners attracted by the morning and afternoon information programming don't listen to the stations' midday music programming. Advanced analysis of Arbitron data shows that although core listeners don't use as much radio as do other listeners during the midday, the majority of public radio's information listeners do listen to music middays — but do so tuned to commercial stations.

Therefore, KCFR and KERA have recruited morning and afternoon information listeners. The intended audience for WXPB in Philadelphia is different. Under a grant from CPB's Radio Program Fund, WXPB is exploring how best to create a national music stream to appeal to a "multiracial audience 25 to 40 years old who appreciate cultural diversity." Its research explores how well various types of contemporary music match the tastes of this intended audience.

TASTE TESTING

Music research is a form of taste testing in that it identifies people's preference for some things and repulsion for others. Although subjective, taste results in very clear reactions. A taste for food causes a person to seek out or to avoid certain spices, dishes, and the restaurants that serve them. Musical taste causes a person to seek out or to avoid certain sounds, composers, compositions, or performances and the radio stations that play them.

Tastes can change somewhat by time of day and day of the week. Ideally, a music format deviates from its sound only to conform to the differences in how people use radio and what they are seeking by time of day and day of the week.

In any sort of taste test, it's the product itself — not the concept of the product — that is being tested. Music research asks people to react to an actual audition of a Bach cantata, not the abstract concept of a cantata by Bach; or the arpeggios of Glass; or the lyrics of Simon. Therefore, testing requires that selections be played for people, and that their reactions be gathered immediately upon hearing.

The auditorium method provides an appropriate venue for music research. In a single session up to 50 people can listen and respond to as many as 100 music excerpts. A musical composition may have several modes (light or dense texture, major or minor key, fast or slow tempo, etc.), so excerpts are chosen for the sound, or mode, that they represent.

Research strives to measure listeners' reaction to the mode, not to the composition itself. The reason is simple: If you test the piece, then your results are specific to the piece; if you test the mode, then your results are highly generalizable, and the resulting knowledge is much more powerful. **Identifying a mode, verifying that it exists in listeners' minds, assessing its appeal, and establishing its affinities with other modes are central tasks of music research.** Modal testing is really the key to successful and useful music research.

Listeners are quite adept at passing judgement after just a few seconds of listening. In public radio's music research so far, excerpts have ranged from 10 to 30 seconds long to allow listeners plenty of time to assess what they're hearing — particularly for modes with which they may not be familiar.

Listener reactions can be influenced by their familiarity with the music; appropriate analysis and careful interpretation of the results can overcome this problem.

MUSIC IN DENVER

The phonograph, by opening up culture to everyone, has made music democratic. The balance of musical power has now passed from the professional to the amateur, from the performer to the listener, and from the concert stage to John Jones's parlor, which is now the musical center of the world.

— Robert Schauffler, 1921

In an earnest attempt to serve its listeners with an array of musical styles, KCFR in Denver spent years painstakingly developing a local music format that thoughtfully ventured from a classical music base into new age, rock, folk, and jazz. Although diverse, all music was selected for its presumed ability to mesh seamlessly into a unified appeal — a musical mode that listeners in KCFR's audience would find consistently attractive.

Hosts spent hours designing sets unified by sonic or intellectual connections. Arbitron showed the size of the audience to be on a par with other public stations programming other types of music. Listener feedback and support were good. By many accounts it was one of the best music mixes being done by any public radio station.

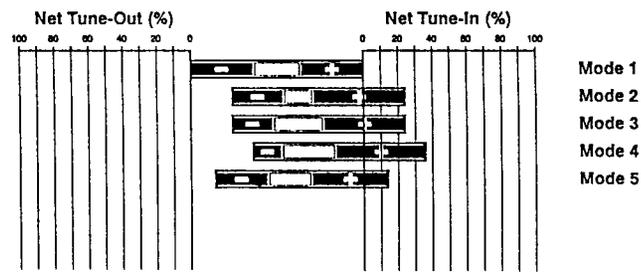
In its first round of music research, sponsored in part by CPB's funding of The Denver Project, KCFR tested the assumption that its artful mix of musical genres did indeed hold together as a single musical mode. The study gathered listener reactions to a range of 54 musical selections, all from the station's playlist. What it found sent management back to the drawing board.

Upon hearing each selection in an auditorium test, listeners told researchers how they'd react if they heard the selection on the radio. They could turn the radio on or off, turn the volume up or down, or simply stay tuned.

Researchers employed a statistical technique called factor analysis to sort these responses. It's important to understand that this technique identifies modes without knowing

Graph 3-5: *The percent of listeners who'd tune in this mode's music (plus sign in bar) minus the percent of listeners who'd tune it out (minus sign in bar) yields their net tune-in for the mode (lateral position of bar). The further the bar is to the right, the greater the mode's appeal.*

Graph 3-5
Assessment of Modes by All Persons
 KCFR Music Test #1 October 1988



Data (c) 1988 FMR/EARS AudiGraphics (c) 1991 Audience Research Analysis

COMPOSERS OR ARTISTS IN EACH MODE

- Mode 1: J.S. Bach, John Williams, Bob James, Waverly Consort, Alcatraz Ensemble, Toumani Diabate, Mozart, Handel, Urubamba, John Lewis, Matt Molloy, Phillip Glass
- Mode 2: Johann Strauss, Tchaikovsky, Bruckner, Mozart, Mahler, John Phillip Sousa, Beethoven, Johann Strauss, Vivaldi
- Mode 3: Suzanne Vega, Tracy Chapman, Peter Gabriel, Dire Straits, Simon and Garfunkel, Joni Mitchell, Nick Drake, Sting, Ian Mathews
- Mode 4: George Winston, Suzanne Ciani, Checkfield, Steve Haun, Mark Knopffler, Mitchell Forman, Ray Lynch, Pat Metheny, The Rippingtons
- Mode 5: Miles Davis, Count Basie, Wynton Marsalis, Claude Bolling, The Green String Quartet

who the listeners are or what they're responding to. **Blind to the respondent and deaf to the music, it discovers modes based on patterns of likes and dislikes. It lets modes be defined from the bottom up, democratically, by listeners.**

Graph 3-5 shows the average **net score** for each mode. Calculated by subtracting the tune-outs from the tune-ins, the net score describes the effect each mode would have on listening to the station. Scores can range from positive 100 (all people keeping the station tuned in or tuning it in especially for this music) to negative 100 (all people tuning the station out or avoiding it altogether due to this type of music).

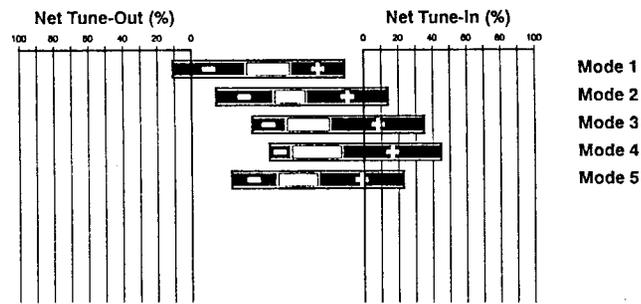
Clearly, KCFR's success with this format was limited because it mixed incompatible musical modes. While older listeners enjoyed the classic classics of Mode 2, for instance, they had little tolerance for Mode 4's classically influenced new age. Programming these works adjacently caused listener frustration and tune-out. The intellectually driven format proved better in theory than in practice.

Management accepted that its music programming was too broad and internally inconsistent in appeal. But questions remained: How narrow must the music selection be? How broad can it be within a single mode? Are there modes that, while distinct, can coexist in the same format?

Management commissioned a second round of music research to study these questions, this time limiting its selection to 200 pieces of music within the "classical" genre. A range of listeners representing potential target audiences reacted to each of these pieces.

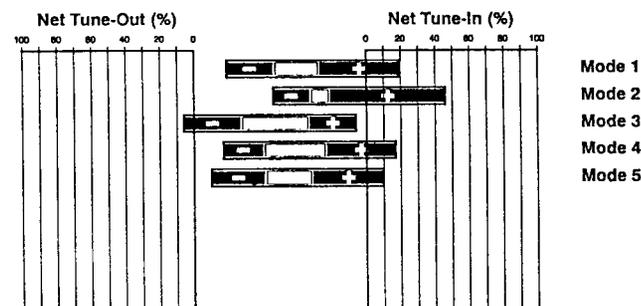
Again, factor analysis was used to sort and assign each of these selections into the one of five modes in which it fit best. Looking at the lists of selections within each mode, the eye begins to understand the mode's appeal. But only when a mode's selections are heard back-to-back on tape does the ear perceive the mode's true appeal, because the

Graph 3-6
 Assessment of Modes by 25-34 Year Olds
 KCFR Music Test #1 October 1988



Data (c) 1988 FMR/EARS AudiGraphics (c) 1991 Audience Research Analysis

Graph 3-7
 Assessment of Modes by 45-54 Year Olds
 KCFR Music Test #1 October 1988



Data (c) 1988 FMR/EARS AudiGraphics (c) 1991 Audience Research Analysis

mode is a **sound** — music as the audience hears it. This can't be overemphasized.

The sound of its component selections defines a mode. A mode's appeal is the effect these selections have on certain listeners. Any mode will attract some people and repel others. That's what appeal is all about.

Music is neither "good" nor "bad"; no mode is inherently better or worse than another. Yet each has its own effect on a certain type of listener, and this is the knowledge that management gains through music testing. It's also the knowledge on which it must act.

IMPLEMENTATION

Management can select or reject each mode according to its effect on the station's intended audience. The graphs on the opposite page show the effect each of the five modes would have on 25- to 34-year-olds (Graph 3-6) and 45- to 54-year-olds (Graph 3-7). Modes 1 and 2 are the sounds of choice (among the sounds included in the study) for older listeners; they are the least liked among younger listeners. Management would accept or reject music in these modes based on the demographics of the audience that it wished to serve.

Once the mode is chosen, music selection software can help manage the day-to-day programming of a mode-defined format. The greatest value of music software is in managing the scheduling of programming, relieving programmers of this routine duty and freeing up their time to audition, select, and reject musical selections.

A programmer's selection of music puts the heart and soul into a format. Inappropriate choices can break a station; appropriate choices can make one — indeed, a very good one. **Appropriate choices, however, can be made only by professionals who know their music, their listeners' tastes, and radio.** Ignorance of any one of these three factors will severely diminish the programming's use by and importance to an audience.

UTILIGRAPHIC SEGMENTATION Turning Ideas Into Action

The answer is blowin' in the wind.
— Robert Zimmerman (Bob Dylan)

August 1988

ART, HEART, AND SCIENCE

Until recently, public radio hasn't had the tools with which to explore how its intended listeners react to specific types of music. Its music programming serves relatively few listeners as a result; its shares are low because most national news listeners abandon it middays in favor of commercial radio music.

With several music studies now completed across diverse markets, public radio's music programmers find themselves at a crossroads. Research clearly indicates the errors of the past and points in directions that show great promise.

These results have tremendous ramifications for all public radio professionals who select music. To move public radio's music programming forward, programmers must find modes that best serve their intended audiences, then act with intelligence and purpose on this understanding.

Programming music in the service of the audience — not in the service of the genre itself — may sound heretical or job threatening to some programmers. Heretical to some, maybe, but job threatening, no. The most effective and most important music programming can be done only by those with an intimate awareness of music.

Anyone can understand the results of music research; only a few gifted people have the sensitive musical ear to put this knowledge to work.

Public radio programmers are already applying some new ideas from AUDIENCE 88's *Programming* report. One idea enjoying immediate application is the notion of "core" and "fringe" listeners.

This utiligraphic segmentation scheme classifies a station's audience into two types of listeners based on how they use the station. Those who use it more than any other station are "core" listeners. The rest — those who spend more time with some other station — are "fringe" listeners.

Here we look at data from WPKT-FM in Hartford, Connecticut, and examine how these ideas are being applied to local programming and cross-promotion decisions. Thanks go to John Berky for sharing this audience information.

CORE LISTENER ANALYSIS

Although they account for less than half of the station's cume listeners, persons in WPKT's core constitute three-quarters of the listening (average quarter-hour audience) and two-thirds of the station's members. They are 69 percent loyal — that is, 69 percent of their radio listening time is spent tuned to WPKT. They average more than 15 hours of listening to the station per week, which is generated by 11.1 occasions (tune-ins) averaging 1 hour and 22 minutes each. (See Table 3-2.)

People become core listeners when they like the station's programming better than other stations'. An advanced analysis of the station's diaries can track when WPKT's core listeners find its programming more or less appealing.

Graphs 3-8 through 3-10 (left column) display the number of core and fringe listeners using WPKT throughout the week. Graphs 3-11 through 3-13 (right column) show their loyalty. During the weekdays, core listeners give more than 70 percent of their radio listening to WPKT, **except** between 2:00 and 5:00 in the afternoon, when loyalty drops as far down as 55 percent. In fact, from noon to 5:00, loyalty is on the decline. This means that WPKT becomes **less appealing** to its core audience as the weekday afternoon progresses.

Similarly, Saturday afternoon from noon to 4:00 has a low (below 60 percent) core loyalty; and Sunday evening from 7:00 to 10:00 is a veritable core meltdown period.

This analysis identifies programming that does not have a high appeal to the station's core listeners. Low appeal among core is not necessarily bad; for instance, station

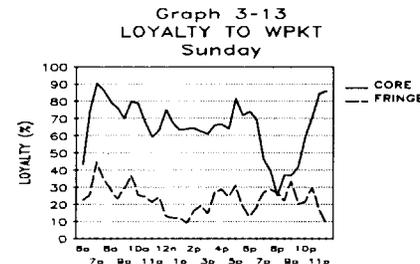
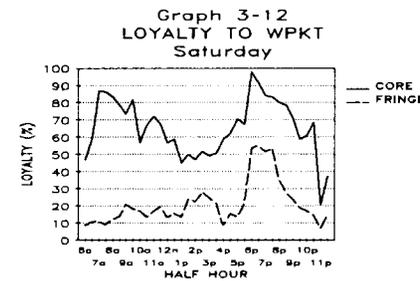
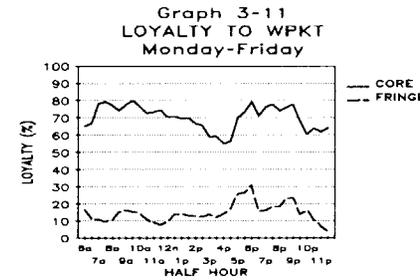
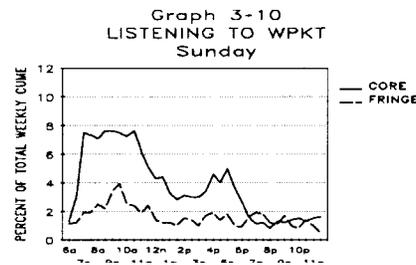
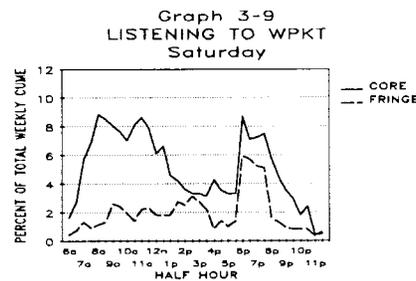
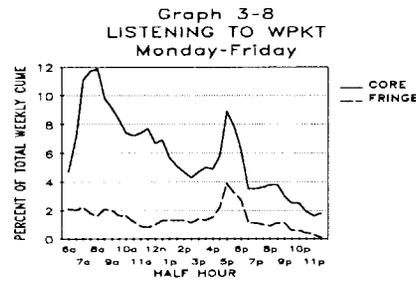
management may intend these time periods to serve a "different type" of listener. This different type of listener would tend to be in the fringe, but what we see from the fringe graphs is that these time periods **are not** bringing in fringe listeners. Therefore, the management may decide to fine-tune programming during core meltdown periods to increase their most important audience's use of (and satisfaction with) the station.

FRINGE LISTENER ANALYSIS

Fringe listeners are most in evidence Saturday evening between 6:00 and 8:00 (the station was airing *A Prairie Home Companion* at the time of this survey). They are over 50 percent loyal during the program (core listeners exceed an awe-some 90 percent loyalty in the first hour).

Most fringe listeners do not tune in just for *A Prairie Home Companion* — as Table 3-2 shows, they average almost 4 occasions per week.

All Things Considered (5:00 to 6:30 weekday afternoons) is where some of these occasions occur, as is the classical music on Sunday morning (perhaps fringe listeners' use of this daypart is aided by their radios being set to the station the night before).



Knowing the programs and dayparts that have the highest appeal for fringe listeners, station management can target their on-air promotion to this very specific audience for a very specific purpose. The objective is **to increase the frequency with which fringe listeners tune in**. Highly targeted on-air promotion is an effective and efficient means of doing this.

Therefore, one strategy is to cross-promote all three programs from each other — for example, promoting *All Things Considered* and Sunday morning classical music from *A Prairie Home Companion*. It is the fringe listeners who need to be reminded that other programming exists and is appealing. They are the ones who need to be influenced.

Other parts of WPKT’s analysis are not shown here, but they include information about the age and gender of fringe listeners and what stations they are listening to when they are not using WPKT. This sort of information is very useful when crafting cross-promotion messages. When you have a good idea of who these listeners are, you can talk to them with a vocabulary and an attitude that resonates strongly. When you know what “competitors” they are using during

these target periods, you can hone more finely crafted messages to give them a reason to come back to your station.

DOING WELL BY DOING GOOD

On-air promotion helps all your listeners to use your station. It reminds them that you are there, doing programming that will appeal to them. Because they are listening heavily, core listeners are the most likely to hear on-air promotions; but for the same reason, they are the least likely to be affected by them — they are already listening with a high degree of loyalty to most programming. On-air promotion is primarily a fringe-influencing strategy.

When your analysis identifies programming that is not particularly appealing to your core, you must ask yourself if there is some other “pay off.” Is the programming bringing fringe listeners into the station? Are these fringe listeners being served well by the station at other times? Are they demonstrating their gratitude with pledges? If the answer to these questions is not a resounding “yes,” you may have reason to revisit your programming options.

Intelligent programming and cross-promotion strategies will increase the loyalty of both fringe and core listeners. As they respond, your station will see their frequency of listening increase, thereby giving your TSL a boost, which in turn will have a positive effect on your average quarter-hour audience.

The cascade of ramifications doesn’t stop there. As AUDIENCE 88’s *Programming and Membership* reports demonstrate, heavier dependence on a public station (that is, amount of use and loyalty of use) is highly associated with a person’s believing public radio to be **important in his or her life**; in turn, **this perception of importance is highly associated with listener support**.

Therefore, fine-tuning your programming to encourage core listeners to listen more and targeting on-air promotion

TABLE 3-2: *Core and fringe listeners differ greatly in their use and support of WPKT.*

Core and Fringe Listeners Compared

	Core	Fringe
Percent of cume	46%	54%
Percent of AQH	78%	22%
Percent of members	63%	37%
Loyalty	69%	15%
TSL (H:Min)	15:11	3:38
Occasions	11.1	3.8
Duration (H:Min)	1:22	0:58

to encourage fringe listeners to listen more will not only increase your audience's satisfaction with your station, it will eventually pay off in terms of increased memberships.

A TALE OF THREE CITIES And One Radio Station

*O let us love our occupations,
Bless the squire and his relations,
Live upon our daily rations,
And always know our proper stations.
— Charles Dickens*

October 1990

Many factors affect how and when people listen to your radio station. You control the most important of these — your station's programming. Yet two others are nearly as important: the type of people who live under your signal and the programming available to them from other radio stations.

Your station's ability to serve listeners can vary greatly across your coverage area. Neighborhoods change; types of people cluster together; some will find your programming more appealing than will others. Availability and strength of your signal, and the signals of other stations, also vary from place to place.

The composition of the population and the availability of other stations essentially define your market. Arbitron and other syndicated research services typically report a market in its most inclusive sense, focusing on geographies encompassing the whole metro and total survey areas. But obviously this falls short. People aren't distributed evenly across neighborhoods, and all stations' signals can't be received with equal facility.

As a result, a number of "submarkets" can exist within your total survey area (TSA) and your metro (MSA), each

reacting differently to your programming. A number of readily-available analytical tools can provide you with a deeper level of submarket understanding — an enlightening and appropriate exercise, as radio gets increasingly more segmented and competitive.

THE THREE-MARKET PROBLEM

Some public broadcasters are fortunate enough to operate radio stations across a number of markets, but more often a single public station serves multiple markets. This is particularly true in areas where towns or cities have grown into each other and at university stations that broadcast from smaller communities adjacent to major cities.

WKSU-FM is such a case. Broadcasting from Kent State University in Ohio, its signal blankets the Akron area and is relatively strong in Canton; it also gets into Cleveland, the area’s major population center. Arbitron encompasses at least part of all three geographies in its Cleveland TSA. In the winter of 1989, program director Eric Hammer set out to determine the relevant distinctions among these three markets.

How are people different in each submarket? The simplest way to see population differences is by reading the front of the Arbitron book. Arbitron publishes three separate reports for WKSU’s coverage area, each replete with useful and interesting statistics about each city. A quick comparison of ClusterPlus characteristics shows that the cities are significantly different and in what general ways.

Each ClusterPlus group’s concentration is shown as a percentage of each market’s metro composition (persons 12+) in Table 3-3. The G01, G02, and G06 groups are typically associated with significant amounts of public radio news and information listening. These data suggest that the audience potential for WKSU’s weekday information and classical programming varies profoundly by city.

How does the competition vary in each submarket? Hammer assigned each county in WKSU’s coverage area to one of the three cities — Akron, Canton, or Cleveland — and ran an AudiGraphics analysis for each custom geography. The analyses identified how much listening WKSU shared with each competitor, where this listening was done (at home, in the car, or at work), when, and by whom. He found that WKSU faced significantly different competitive situations in each of the three cities.

How does listening to WKSU vary in each submarket? Graph 3-14 shows how people in each city use the station. Here is where the effects of submarket composition and competition express themselves most clearly.

TABLE 3-3: *Information from Arbitron’s Fall 1989 Radio Market Reports shows just how dissimilar adjacent cities can be.*

**Metro Area Life Style Profiles
by Selected ClusterPlus Groups**

		Percent of Each Market		
		Akron	Cleveland	Canton
G01:	Well educated, affluent, suburban professionals	14.3	14.5	.0
G02:	Urban, upscale, professionals, few children	1.6	10.8	.0
G04:	Young, mobile, above average income, white collar workers	5.2	20.0	2.4
G06:	Younger, mobile, singles few children, urban areas	18.3	9.9	2.8
G07:	Average income, blue collar families, rural areas	2.8	1.5	19.1
G08:	Older, lower income, rural areas, old homes	6.2	3.0	16.1

Canton listeners don't tune in much for WKSU's information programming, particularly in the afternoon. For them, WKSU is the only classical service available, and that's why they listen. Cleveland offers WKSU listeners the choice of another commercial classical and public station, and WKSU is used most heavily by listeners in that area for its national news. Akron listeners use WKSU more as a "full-service" public station. The result is a broad age differential among listeners by market. The median age of core WKSU listeners is 43 in Akron, 50 in Cleveland, and 64 in Canton — a spread of a full generation.

Further analysis shows that commute and work patterns also vary significantly by city.

A NEW SENSE OF COMMUNITY

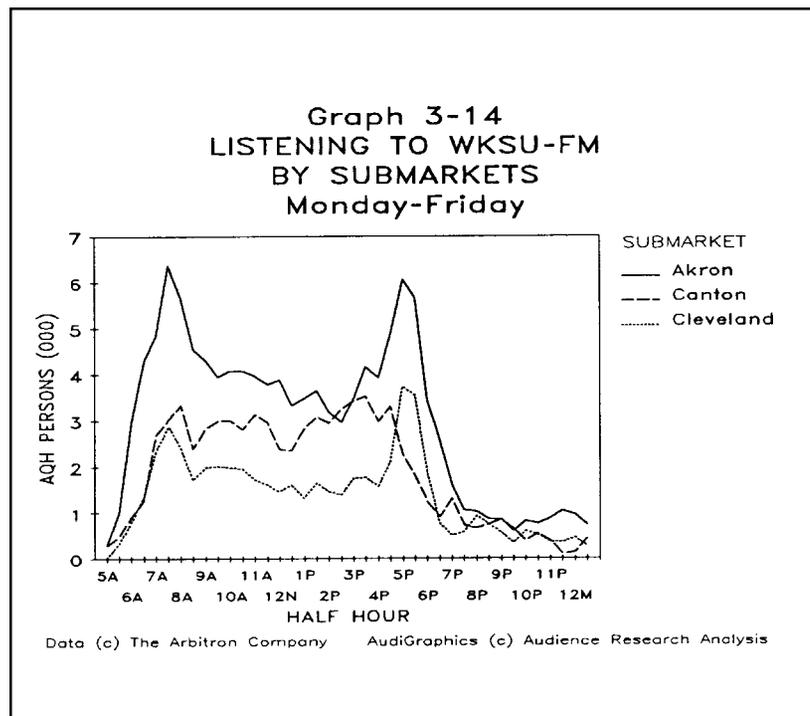
Even though a station is limited to a single programming stream, it can tailor its off-air activities to the cities or submarkets in which they occur. The appeal of everything from billboards to membership and underwriting pitches can be sharpened based on an understanding of submarkets. It's easy to imagine the many programming, promotional, development, and planning applications to which this information can be applied.

And from a programming perspective, understanding submarkets is critical to serving your listeners. Without this knowledge, you may find yourself wasting limited resources by counter-programming the wrong competitors or attempting to meet the needs of people who don't really care about certain types of programming.

Across all activities, this analysis may direct your attention away from certain communities and toward others. It may even alter your perception of what a community is.

For instance, when WKSU carried this analysis to the zip code level, it identified a scattering of "micro-markets" that share significant interest in public radio. Indeed, its top five zip codes for listening are the same as its top five zip codes for membership.

It's only a matter of time before we'll be able to refine the definition of micro-markets beyond the useful but crude five-digit zip code. We may even transcend geographies, changing our antiquated notions of "market" and "community" to updated versions that acknowledge that shared interests or activities — in this case, the use of a public radio station — can provide as powerful a sense of community as geographic proximity provided in the past.



SECTION IV

SYSTEM EXPANSION

Stations entering the system's fold in the next decade will bring a larger audience to public radio. But with an audience now half a generation younger than that of the present system, expansion stations will likely change the complexion of the entire public radio system. In the next few years public broadcasters will make important decisions about these new stations that will affect the audience potential and viability of every public radio enterprise in the year 2000 and beyond.

As this volume goes to press, a CPB-funded study is gathering and evaluating the current programming and programming aspirations of the more than 700 stations that may ultimately make up the "public radio system." The report from this study, to be released in 1991, will provide much of the information we'll need to make decisions about our future as a system.

The first and last essays in this section are based on the first hard data gathered about the "expansion" stations. Their findings should be treated with some caution, as more complete information will supersede them in 1991. All but the first essay explore why some stations are much more important than others in terms of their national audience service. This fact will never change.

**PUBLIC RADIO'S
EXPANDING UNIVERSE
A First Glimpse at
the System(s) of the Future**

Our expansion plans will be undermined if the spectrum disappears.

— *Karen Christensen,
NPR Assistant General Counsel*

November—December 1990

Public radio's audience is likely to get younger as the system expands. The stations now out in the wings — those most likely to become full players in an expanding system — are serving listeners who are significantly younger than those served by most stations in the current public radio system.

This is one of the primary findings of the 1990 Arbitron Nationwide study. Every year Arbitron combines information from all its Spring surveys in the contiguous 48 states (297,619 diaries in 1990) into a single Nationwide report. The Nationwide shows the national audiences for all of radio and for participating radio stations and networks.

Public radio has been a part of the Nationwide study every year since 1977. Nationwide numbers are the authoritative source of when and how quickly public radio has increased its service to the American people. In 1990, as a result of the work of the Public Radio Expansion Task Force, CPB commissioned Arbitron to include audience estimates for “expansion stations” — stations that will play a vital role in shaping the public radio system of the future.

THE EXPANDING UNIVERSE

In 1970, only 80 public radio stations qualified for Community Service Grant (CSG) support from the Corporation for Public Broadcasting. Today stations receiving support number about 320. Add the stations that are full or associate members of National Public Radio and/or are affiliated with American Public Radio (APR) and the “public radio system,” as we usually think of it, approaches 500 stations.

The public radio system still has plenty of room to grow. In its report in January 1990, the Public Radio Expansion Task Force estimated that in the next ten years, at least 50 stations are likely to qualify for CPB CSGs and another 50 are likely to become a part of the satellite interconnection system and affiliate with public radio’s national programming organizations. The Task Force envisioned a public radio system of nearly 600 stations by the year 2000.

The public radio system may eventually encompass more than 700 stations — the number of FM noncommercial, educational radio stations (as licensed by the Federal Communications Commission) that are currently neither devoted to religious broadcasting nor operated primarily by and for students.

At the time the Task Force prepared its report, much was assumed but little was known about the expansion stations’ listeners. Nobody knew how many people listened or who these people were. Nobody knew how these listeners differed from those who tuned to CPB-qualified, NPR-member, and APR-affiliated stations. Nobody knew for sure if listeners to these expansion stations were a subset of those in the current system or if they constituted a whole new audience.

Now we know. Our first glimpse at these listeners suggests that expansion stations have more in store for public radio than just new listeners.

A RATHER DIFFERENT UNIVERSE

Arbitron estimates nearly 13.9 million people each week listen to at least one of the 432 CPB-supported stations and their repeaters. This is about 6.8 percent of the population. Arbitron estimates that the approximately 260 expansion stations (not CPB-supported or their repeating stations) are heard by 3.8 million Americans per week, or about 1.9 percent of the population. (See Table 4-1.)

Of these 3.8 million, approximately one in four also listens to CPB-supported stations. This means about three million expansion station listeners are not listening to the current public radio system. This is a substantial new audience.

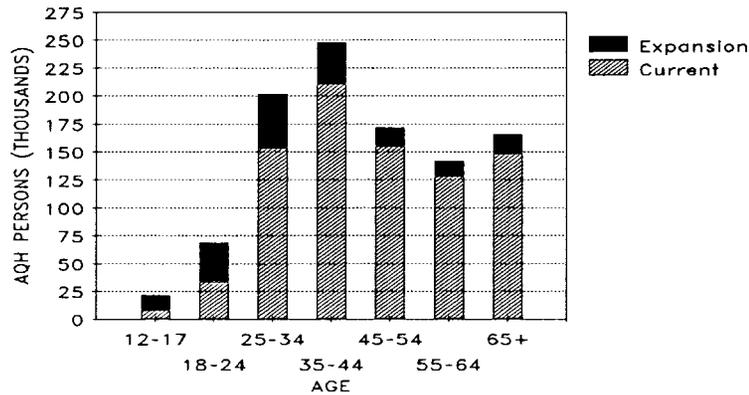
If the current and expansion stations were combined into a hypothetical “potential” public radio system, its weekly audience would be about 16.7 million persons each week — 8.1 percent of all Americans, a 20-percent increase over the current system’s weekly audience.

TABLE 4-1. *Basic audience estimates for the current system, the expansion stations, and the hypothetically-aggregated potential system are summarized.*

**Summary of
Public Radio National Audience Estimates
All Persons, Broadcast Week
(Arbitron Nationwide 1990)**

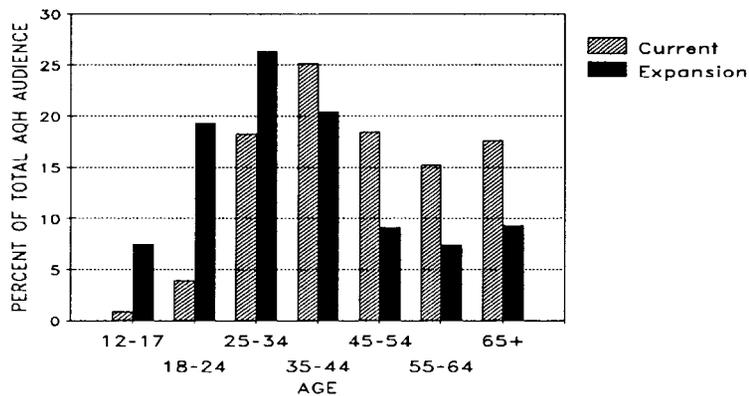
	Cume persons	Cume rating	AQH persons	Share	AGH rating	TSL
Current System	13,877,500	6.8	835,000	2.3	.41	7:34
Expansion Stations	3,811,200	1.9	183,400	.5	.09	6:03
Potential system	16,698,600	8.1	1,023,800	2.9	.50	7:43

Graph 4-1
LISTENING ADDED BY
PUBLIC RADIO EXPANSION STATIONS
All Listeners, Broadcast Week



Source: Arbitron Nationwide, 1990

Graph 4-2
COMPOSITION OF CURRENT SYSTEM
AND EXPANSION STATIONS COMPARED
All Listening, Broadcast Week



Source: Arbitron Nationwide, 1990

Public radio as it's currently configured claims 2.3 percent of all radio listening in America. The inclusion of the expansion stations would increase this share to 2.9 percent.

AGE OF THE UNIVERSE

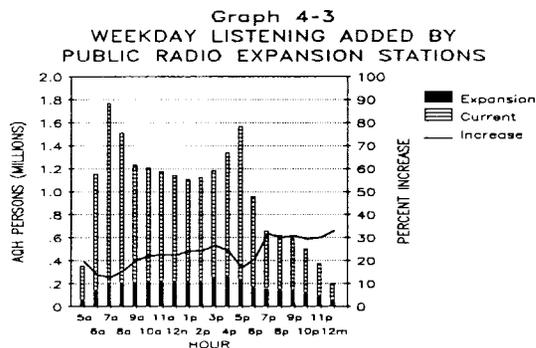
The audience added by the expansion stations is half a generation younger than the audience served by the current public radio system. The median age of persons listening to CPB-supported stations is about 46 years; that is, half of the AQH audience is older, half is younger than 46. Compare this to the 34-year median age of persons listening to expansion stations — 12 years younger.

Graph 4-1 shows how much listening would be added to the current system by expansion stations, by age group. The primary age cell would remain 35-44; however, rather than the adjacent 25-34 and 45-54 age cells tying for second, as they now do, the addition of the expansion stations would give the edge to the younger side (25-34).

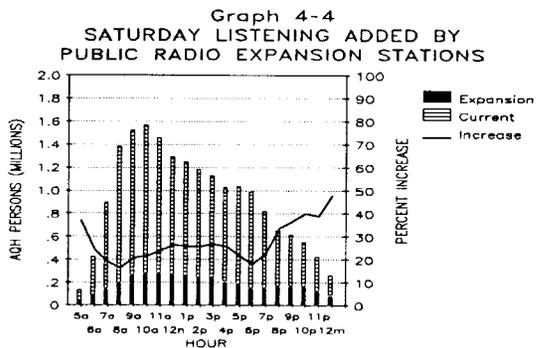
The younger appeal of the expansion stations is clearly demonstrated in Graph 4-2. One in two expansion station listeners is between 18 and 34 years of age, compared with only one in four of the current system's listeners.

There are two ways to interpret this information. The first is to assume that the appeal of the system will be broadened, or expanded, by the addition of younger listeners. That is, we'll have more and younger people listening to our current fare of NPR news, classical music and jazz, and so forth.

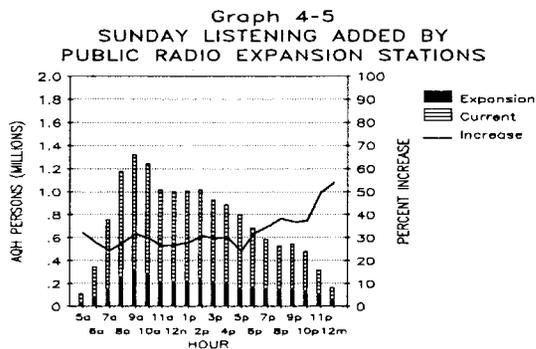
However, studies tell us that the difference between the appeals of the current system and the expansion stations is too wide to span with a single programming stream. As the public radio system brings these expansion stations into its fold, it can expect increased pressure to split its national programming streams into an older service — a "gray network" — and a younger "green network."



Source: Arbitron Nationwide 1990; Audience Research Analysis



Source: Arbitron Nationwide 1990; Audience Research Analysis



Source: Arbitron Nationwide 1990; Audience Research Analysis

THE GRAY AND GREEN NETWORKS

Assuming that its programming remains relatively stable, the current system's audience will get older, in step with the educated segment of American society to which public radio now appeals. By the turn of the century this audience's median age will be at or above 50 years; it will have become a "gray" network along with many other formats on the FM and digital bands.

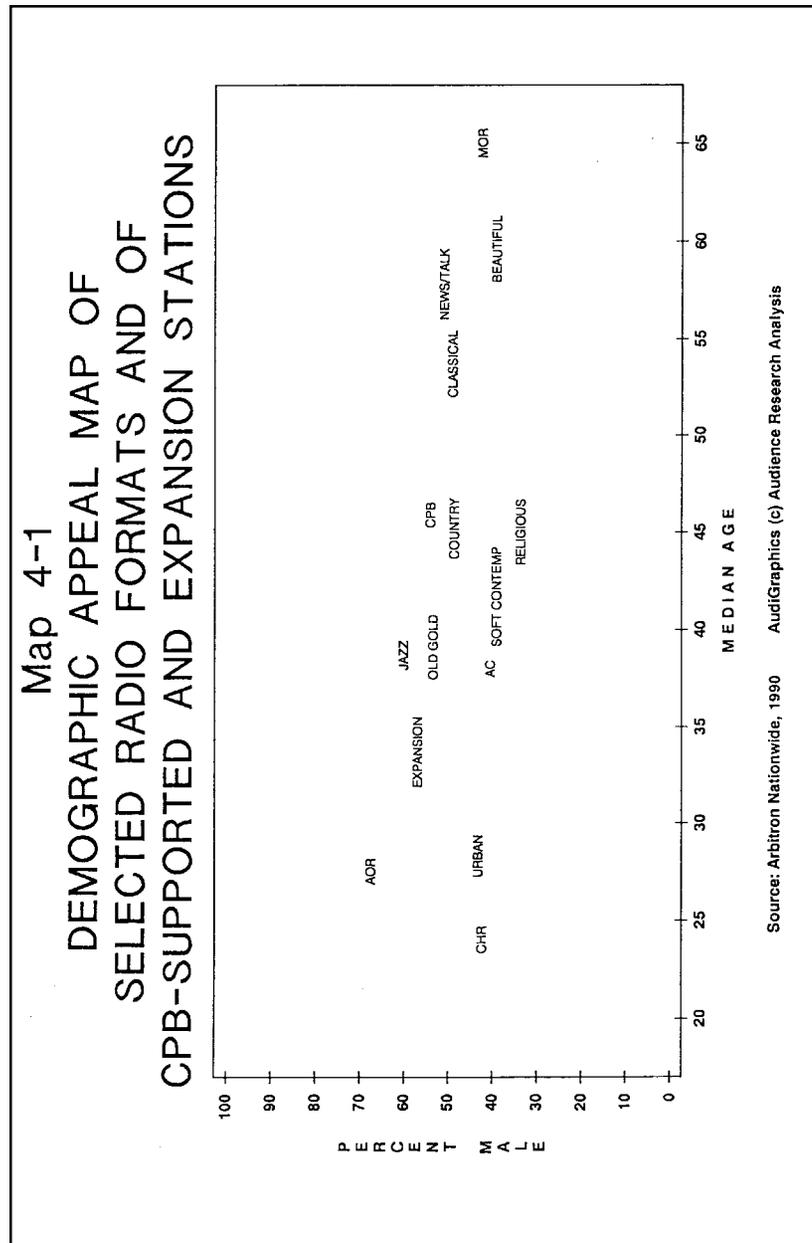
What will be the effect on the expansion stations as they join this graying public radio "system"? Perhaps they'll drop their existing programming, become more like the typical NPR member or APR affiliate, and lose their younger listeners.

An alternate scenario has them maintaining and extending their most successful programming, thereby retaining and augmenting their younger audiences. Along with stations now in the system that are also striving to serve similar types of listeners, expansion stations could form a market eager for new streams of younger national programming. With a median listener age between 35 and 40 years, these stations could spur the formation of a "green" network — one with the same high standards and ideals of the current system, but one that realizes the power of talking to an age cohort half a generation younger.

What effects would the bifurcation of stations (and programming streams) into green and gray camps have on public radio's ability to serve listeners? And what central decisions affecting programming will we make to discourage or encourage this trend?

BIFURCATE OR BROADEN?

Before examining these decisions, it's important to understand why the expansion stations simply won't broaden the audience for existing programming. The keys lie in the magnitude of their listeners' age difference and in the way radio formats work.



The median age of listeners to the expansion stations is about 34 years. This is half a generation younger than the 46-year median age of CPB-supported stations, the 45-year median of NPR members, and the 47-year median of APR affiliates (this minor disparity is caused primarily by the greater role of classical music on APR stations).

This contrast is equally as enormous when compared to the differences in the median ages of public radio program types. Based on AUDIENCE 88 figures, the median age of *Morning Edition* is 41; of *All Things Considered*, 42; of public radio's classical music, 45. All are very close.

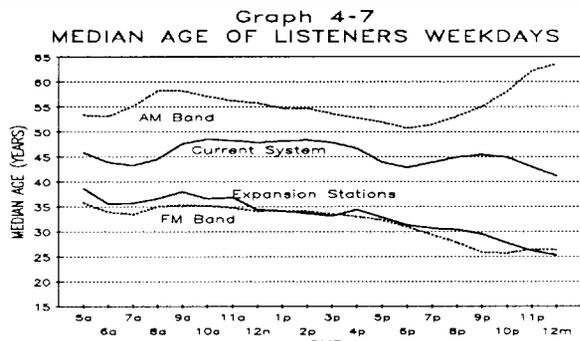
The oldest format on NPR member stations is opera, with a median audience age of 56; that's 13 years older than for NPR news. Consider this: The difference in appeal between the current public radio system and the expansion stations is of the same magnitude — and the same level of incongruence — as the difference in appeal between NPR news and opera. That's major.

Looking beyond the bounds of public radio, Map 4-1 puts the contrast of these appeals into the context of radio in general. Twelve years may not sound like much, yet it's all that separates major radio formats from each other. The Contemporary Hit Radio and Adult Contemporary formats are between 10 and 15 years apart, as are Album-Oriented Rock and Oldies, Soft Contemporary and Classical, Classical and Middle of the Road.

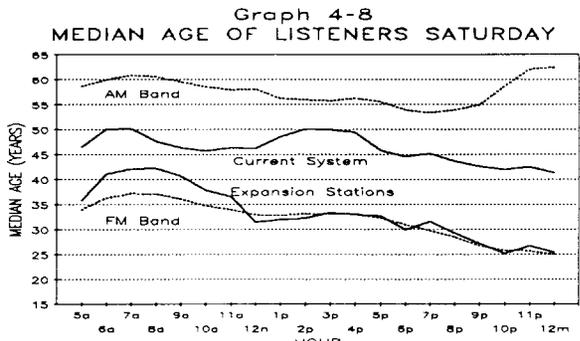
GREEN AND GRAY MAKE?

What impact would green and gray networks, 10 to 15 years apart in their median ages, have on public radio's overall service? Consider the reasoning put forth in "Multiple Outlets With Adjacent Appeals" (page 44) of AUDIENCE 88's *Programming* report.

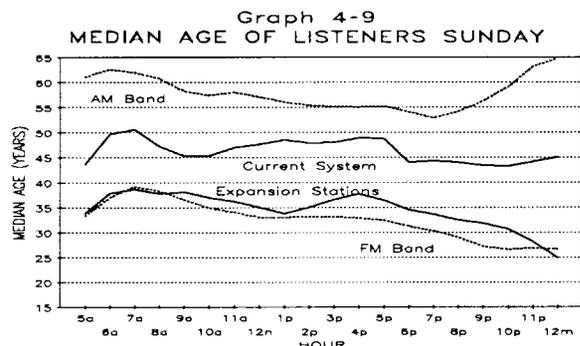
Try as they might, public radio programmers have yet to serve large numbers of listeners who are anything but well educated. Public broadcasters' widely held standards of



Source: Arbitron Nationwide, 1990; Audience Research Analysis



Source: Arbitron Nationwide, 1990; Audience Research Analysis



Source: Arbitron Nationwide, 1990; Audience Research Analysis

intelligence and quality are at the heart of this appeal. Assuming these standards remain, then a gray station and a green station in the same market would serve listeners synergistically. One would serve older well-educated persons, the other would serve younger well-educated persons.

Even with median ages a full 15 years apart, there would be significant audience sharing between the two services, just as significant crossover exists among major radio formats. People not in the core audience for either station may be in the core for the pair when their listening is summed. The core for the two stations will be larger than the sum of the cores for the individual stations. (A core listener to a station is one who spends more time tuned to that station than to any other.)

Research has demonstrated repeatedly that core listeners are much more likely than others to consider public radio personally important and to support it financially. This is especially true when core listeners are generated by multiple services; even today, people who listen to two or more public stations are nearly 50 percent more likely than other listeners to support at least one of these stations.

So gray and green make gold. Centered on the same intellectual appeal but differentiated by a 10 to 15 years in median age, the gray and green public radio networks stand to dominate the listening of well-educated persons by the end of the century, while synergy between the two promises to maximize support per listener.

But this golden future will be mined only if the public radio system can foster the emergence of the green network while maintaining the best qualities of its current graying network. This is where decisions must be made.

PROGRAMMING CAUSES AUDIENCE

Fostering a younger audience means fostering programming for that audience. No one knows how committed expansion stations' management and licensees are to continuing their service to younger listeners. Nor has anyone yet even determined the types of programming on these stations. (CPB is currently funding research to answer these most basic questions.)

Even without this information, we can predict that the programming and information options available to these stations will greatly influence the programming directions they choose as they become full participants in the system:

- If public radio's best national information and music programming continues to appeal primarily to listeners over 40, stations seeking a national service will be forced to carry programming incongruent with their locally produced appeal. The unavailability of younger national services will put these stations in direct competition for listeners now served by existing public stations.
- If public radio conducts no significant research into the modes of music that serve younger well-educated listeners, these stations run the risk of choosing inappropriate or suboptimal music formats. They may even opt for public radio's old standby, classical music; the plethora of free or cheap classical programs to be had from the satellite may prove too tantalizing a temptation for many.

This emerging green network is not your father's public radio and possibly not even yours. Stations in the gray and green networks can coexist quite well and may even hold the promise of maximizing public radio's audience. But unless public radio invests the resources in appropriate programming and research, the promise offered by expansion stations may end up squandered on highly duplicative and competing services.

AUDIENCE AND POPULATION Fishing Where the Fish Are

You can cast your line where the fish are biting, or you can cast it where they're not. Where you aim depends on why you're fishing.

— *Saying*

November 1989

One in two Americans lives in one of this country's 25 largest population centers. Similarly, half of public radio's national audience lives in these markets. This is no accident; population and audience are inextricably linked.

Public radio's current audience is determined much more by where people live than by where its stations are, but both are important. In the future, public radio's full potential as a national service will be determined by the number of stations (and other outlets) it has — and the quality of service these stations (and other outlets) offer — in this country's major population centers.

There's nothing magic or special about large markets *per se*, except for the sheer number of people who live in them. As we explore expansion and audience-building tactics, we will need to recognize the importance of having multiple, effective outlets in the largest markets. If public radio is fishing to serve more listeners and serve them better, it has to fish — and put its best bait — where the most fish are.

How does this relationship between population and audience play out in terms of public radio's current — and potential — service to the public?

WHERE THE AUDIENCE IS

Twenty-five public radio stations account for half of public radio’s national audience. All of these 25 stations are in markets of more than two million persons. Together, these 25 stations serve as many listeners as the remaining 400 public stations that are CPB qualified or associated somehow with National Public Radio or American Public Radio.

Half of the U.S. population lives in the top 25 ADIs.¹ The same 25 markets are also where half of public radio’s national audience lives. This naturally occurring inequality is known as the “twenty-eighty rule,” which characterizes

how the minority (20 percent) can account for the majority (80 percent). The concept behind the twenty-eighty rule describes a wide range of phenomena, from marketing (a few of a product’s consumers consume most of that product) to economics (a minority of any country’s population controls the majority of that country’s wealth) to global resource allocation (a small number of the world’s countries consume most of the world’s resources) to cosmic reality (most of the mass of the universe is composed of one or two elements).

These and countless other examples illustrate that the concentration of public radio’s audience at a few stations and the concentration of the American public in a few major urban areas are absolutely normal situations.

TABLE 4-2: *Public stations in the top five ADIs account for six percent of all public stations. But because 22 percent of the population live under their signals, they account for a disproportionately high 18 percent of all listening to public radio nationally.*

Station, Audience, and Population Concentration by Market Rank (Arbitron Nationwide 1989, Broadcast Week)

Market rank	Percent of stations	Percent of audience	Percent of population
1-5	6	18	22
6-10	5	14	10
11-25	11	18	18
26-50	13	14	17
51-100	18	18	19
101+	47	18	14

¹ ADIs, or Areas of Dominant Interest, are geographies used primarily to define television markets. But because ADIs are mutually exclusive and exhaustive, they are used heavily in the analysis of national radio audience estimates.

TABLE 4-3: *To serve 7,000 average (AQH) listeners, a station must achieve an average time spent listening (TSL) of eight hours among ten percent of a market of 1.1 million persons. The table shows the cume ratings and TSLs required to generate 7,000 average listeners among markets of various sizes.*

Market Population Required to Serve 7,000 AQH Persons Given Various Assumptions (Arbitron Nationwide 1989, Broadcast Week)

Cume rating	Assumptions Required		Market population
	TSL (hours)		
10	8		1,100,000
10	10		900,000
10	12		750,000
15	8		750,000
15	10		600,000
15	12		500,000

In fact, they are more than normal — they are highly related. Table 4-2 shows that public radio’s audience is determined much more by where people live than by where stations are. Almost half (47 percent) of all public stations that are CPB-qualified or somehow associated with NPR or APR are outside the 100 largest ADIs; yet these stations account for 18 percent of the national audience because they serve only 14 percent of the U.S. population.

WHERE THE AUDIENCE WILL BE

Although we can’t change these circumstances, we can use them to inform our audience-building and expansion activities. For instance, current station performance suggests that another NPR station in one of the top ten markets could be expected to serve over 7,000 AQH persons (Table 4-3). What is the smallest market in which a public station could be expected to serve this many listeners? A little arithmetic shows that even under the most generous

assumptions, at least one-half million persons are needed under an NPR station’s signal for it to serve 7,000 AQH listeners (Table 4-4).

The general formula for estimating the market population required to serve a given AQH audience is

$$POP = \frac{AQH \times 12,600}{TSL \times RTG}$$

where

- POP = the minimum population required to serve an
- AQH = average quarter-hour audience given a
- RTG = weekly rating (as a percent) and a
- TSL = time spent listening (in hours).

This formula and the data in Tables 4-3 and 4-4 can be combined in a number of ways to estimate the relative effectiveness of adding or improving public station service in markets of various size.

TABLE 4-4: *Public stations in the top five ADIs average 5,400 listeners at any time during the broadcast week. Those that are CPB qualified average 6,400 persons, and those that are NPR members average 7,300 persons.*

**Average (AQH) Audience per Station
(Arbitron Nationwide 1989, Broadcast Week)**

Market rank	All 425 stations	CPB stations	NPR stations
1-5	5,400	6,400	7,300
6-10	5,900	6,200	7,000
11-25	3,000	3,800	3,400
26-50	2,100	2,500	2,200
51-100	1,900	2,200	1,900
101+	800	1,000	900

TABLE 4-5: *Although public radio stations in the top five markets serve many more listeners than stations in the smaller markets, they account for a smaller piece of the radio listening pie.*

**Average Share of CPB-Qualified Stations
by Market Rank
(Arbitron Nationwide 1989, Broadcast Week)**

Market rank	Share
1-5	1.4
6-10	3.0
11-25	2.1
26-50	1.8
51-100	2.0
101+	2.0

WHERE THE AUDIENCE ISN'T

Before leaving this discussion of the power of putting stations where people live, it's instructive to note that public stations in the largest markets are currently **under-performing** in comparison to public stations in other markets. In the top five markets, CPB-qualified stations combine to serve only a 1.4 share on average (Table 4-5). Although these five markets contain 22 percent of the population, only 18 percent of public radio's national audience live there.

Commercial competition is greatest in the largest markets, and this may explain some of the discrepancy. Or, perhaps public radio's service is off the mark — that is, not appealing to the type(s) of people who live in these markets. Either case would suggest strategies to improve service in these areas — by refining the programming service at existing stations and/or by increasing the number of outlets.

Market size, number of stations, and the fit between programming and population characteristics are three important factors that determine the level of public radio's service in any market. Any national policy aimed at serving more listeners better cannot ignore where the fish are. The relative effects of putting more lines in the water or fishing with better bait are still a matter of debate.

THE TWENTY-EIGHTY RULE

Making the Most of a Natural Inequality

All animals are created equal, but some animals are more equal than others.

— George Orwell

November 1989

Thirty or 40 years ago marketers first noticed a pattern so prevalent and consistent that it's since approached the status of law. The "twenty-eighty rule" is the most descriptive of its several names. Public radio policy makers and programming marketers have a lot to learn from it.

"Twenty-eighty" is a shorthand way of saying that 20 percent of a market consumes 80 percent of a product. Twenty percent of all beer drinkers consume 80 percent of the beer; 20 percent of the people who drive cars consume 80 percent of all gasoline. And, over the course of a month, 20 percent of a radio station's cume will do about 80 percent of the listening to the station.

The phrase "twenty-eighty" is meant more to convey the idea of unbalanced consumption than to pinpoint exact percentages. The rule describes a whole class of phenomena in which certain participants — those who use a product or service a lot — "count more" than others by virtue of their heavy use. For instance, a relatively small percentage of users account for most of the pizza and overnight mail delivered, most of the deodorant and insect repellent sprayed, and most of the color prints and phone calls made. Over the course of a week around 20 percent of your listeners will account for about 60 percent of all listening to your station.

The most successful marketers of products and services know and serve their heavy users well, as heavy users make up the bulk of their market share. Radio is no different. I've worked with program directors at commercial stations whose goals include "super-serving" their station's heaviest listeners and raiding the heaviest listeners from their competitors — all with the aim of maximizing the use of their programming, their station's share, and their advertising rates.

Most public broadcasters have broader goals. However, listener support of public radio programming, their perceptions of its importance, funders' assessment of its value — even the idea of public service — all depend on the amount of listening done by listeners.

Programmers can exercise significant control over listening through adept exploitation of the twenty-eighty rule. Many do, and the more advanced research tools directly inform these strategies.

The ramifications of the twenty-eighty rule cascade well beyond the programming domain. Membership professionals understand that a small proportion of members contribute the bulk of all listener support. At many stations the tasks of upgrading membership levels and maintaining large donors are more remunerative than any number of low-end pledges.

A variation on the twenty-eighty rule also works for producers, distributors, and others who make programming available to public stations. One measure of success that producers and distributors typically report is "carriage" or "clearance" — the number of public stations that carry their programming. This statistic is used to convince decision makers at other stations that they should carry the programming and as an indication of the programming's usefulness to stations.

Underwriters, however, don't worry about station exposure as much as they care about listener exposure: How

many **people** (not board operators) will hear their credit over the air? Producers and distributors understand the importance of getting cleared on stations with large audiences. When we look at the public radio system using the twenty-eighty concept we can see just how important the largest stations really are.

The 1989 Arbitron Nationwide survey offers the following statistics about the 425 public radio stations that are affiliated, qualified, members of, or otherwise associated with American Public Radio, the Corporation for Public Broadcasting, or National Public Radio.

- Twenty-five stations account for half of the national audience; 400 stations account for the other half.
- The five stations with the largest audiences serve 10 percent of public radio's national audience. These stations serve as many people as 280 of the system's smallest stations.
- The 90 public stations with the smallest audiences serve less than one percent of the national audience.

The 25 stations serving half the national audience aren't necessarily doing particularly well, although many are; nor are the 400 stations serving the other half doing particularly poorly, although many are. **More important is the number of people who could listen if they so choose — that is, the number of people under these stations' signals.**

Again, the ramifications cascade. As public radio continues its move toward a listener-driven economy, will the stations in larger markets be required to pay more for acquired programming while stations in smaller markets pay less? Will the five largest stations have to pay as much for a national program as 280 of the system's smallest stations combined?

Similarly, as national underwriters increasingly demand clearance in the major markets, carriage in New York or Los Angeles could literally make a life-and-death difference

for a program. Will NPR, APR, and other producers/distributors of nationally underwritten programming actually pay stations in the largest markets to carry their programming? Commercial broadcasters discovered years ago that this can pay handsome dividends.

And what about system expansion? Can or should we encourage concepts as “listeners potentially served per dollar spent on expansion?” The cost of putting another public station in Chicago, for instance, pales in comparison to the cost of putting 50 more stations in unserved areas; yet creating this one station would be much easier to do, clearly more effective, and significantly more efficient in terms of increasing service to the American public.

On Orwell’s *Animal Farm* the pigs decreed that some animals — specifically pigs — are more equal than others. The twenty-eighty rule is driven not by decree, but by natural and essentially immutable forces. Listeners, members, and stations may be created equal; but when measured by the results they produce, some are — and will remain — more equal than others. That’s just a fact.

There will always be tension between the pervasive forces of the twenty-eighty rule and public radio’s tenacious egalitarianism. However, there may be times when prudent tempering of one with the other will be essential to public radio’s effectiveness.

PUBLIC RADIO’S EXPANSION LEAGUE Superstars and Networks of Interest

I’ll always remember this as the night Michael Jordan and I combined to score 70 points.

— *Stacey King, Chicago Bulls rookie forward, commenting on Jordan’s 69-point game.*

February 1991

A few superstars account for most of the points scored in pro sports. So it is among public radio stations. We’ve known for some time that a small number of stations account for a large percentage of the national audience. Now we’ve confirmed that this holds true for public radio’s “expansion stations” — those noncommercial, nonstudent, nonreligious stations not currently supported by CPB.

- Two of the 255 expansion stations account for ten percent of these stations’ national audience.
- Four stations account for 20 percent of their national audience.
- And 21 stations (just eight percent of all expansion stations) account for half of the national audience to the “expansion system”.

Who are the Michael Jordans of public radio’s expansion league? Who are the four expansion superstars that alone serve as many listeners as the 190 expansion stations with the smallest audiences combined? Can we look to these expansion stars for some sense of new possibilities? How does this inform our expansion strategy? And at the broadest scale, how might this change the way we think about “public radio?”

First, the all-star lineup.

KTSU-FM Houston, Texas. With well over a quarter million weekly cume listeners, KTSU has by far the largest audience of any expansion station, and one of the ten largest in all of public radio. Ninety percent of this audience is black. The median age of this jazz station (blues at night and gospel on Sunday) is 33 years.

Houston is one of the ten largest markets in the country; radio there is highly competitive. KTSU's listeners are only 23-percent loyal to the station, low by public radio standards. In fact, its weekly cume audience spends as much time listening to a Magic station as it does listening to KTSU.

WMPR-FM Jackson, Mississippi. WMPR blocks blues, gospel, R&B, and jazz across the weekdays. Although different music formats, they all have one thing in common: appeal to blacks. As with KTSU, nearly 90 percent of WMPR's listeners are black (in areas where race and ethnicity are ascertained); the median age is 33 years.

WMPR's listeners are very heavy radio users, averaging more than 30 hours per week of listening, of which almost 11 hours are spent with WMPR and 10 hours are spent with a Magic station. In this sense its situation is very similar to KTSU's; however, WMPR operates in a much smaller, less urban market.

WKTZ-FM Jacksonville, Florida. WKTZ proves that a public station can achieve a ten rating and a six share in its market, with a 29 share in its primary demo. But you don't hear public radio's staples of classical music or jazz on this station. WKTZ plays beautiful music, 24 hours each day, every day.

It's no surprise, then, that its audience is two-thirds female with a median age of 66 years. (Its primary demo is women over 65.) Either competition for these listeners is light in Jacksonville or WKTZ is doing a super job with its

format, or both, because WKTZ serves its listeners an average of almost 13 hours per week. Indeed, over half (55 percent) of its cume's radio listening is to WKTZ — extremely loyal by public radio's standards.

WSOU-FM New York, New York. WSOU lies on the opposite end of the age spectrum. With its mixture of young contemporary sounds, it serves a young (median age 21 years), primarily male audience. It earned a 2 share among male 18- to 24-year-olds in the New York market in spring 1990. Most listeners are white.

Based solely on audience comparisons such as rating and share, WSOU is not in the same league as the top three expansion superstars. It's heard by so many listeners because it's in the nation's largest market, and for this reason its potential is great.

OBSERVATIONS

Obviously, the programming and resulting audiences of expansion stations vary greatly. WKTZ drives this point home with a format virtually unique in public radio. It certainly doesn't fit into the young audience profile suggested by the expansion stations' aggregate audience data (the "green network" discussed in a previous essay). And unless other noncommercial stations join the beautiful music bandwagon, WKTZ will probably remain a public station unsupported by national programming appropriate for its audience.

WSOU's audience more closely matches the idea of the green network. Like WKTZ, its programming is significantly different from that now available on CPB-supported stations. But unlike WKTZ, its programming and its listeners are similar to those of many other expansion stations. It's quite possible that five or ten years from now, there may be enough of these stations in the system to warrant a separate national stream of information and

feature programming aimed at 20- to 30-year-olds. Indeed, there may be a number of stations currently entrenched in classical music, jazz, and NPR/APR news willing to change formats to join these new stations.

KTSU and WMPR demonstrate how new stations may combine with existing stations to reach some sort of critical mass. Predominantly black (mostly jazz) public stations are not uncommon in major markets — WBGO in the New York market, WRTI in Philadelphia, WDCU and WPFW in Washington, WEAA in Baltimore, WCLK in Atlanta. Together these stations serve the majority of public radio's black listeners. Another station in this vein, KTSU will find itself in good company if and when it joins the system.

So will WMPR, because there are many public stations with significant black audiences in smaller markets. KCEP in Las Vegas and WFSS in Raleigh-Durham are currently the superstars in the CPB-supported league, while stations in the expansion league include KABF in Little Rock, KAZI in Austin, WCSU in Dayton, and others.

As expansion stations with certain programming and audiences add to the ranks of existing stations with similar programming and audiences, national programming becomes much more affordable. In a few years there may be enough of these stations to support a separate national stream of information and feature programming aimed at blacks. Expansion stations will not define this group, but they may make a separate stream of national programming economically viable.

NETWORKS OF INTEREST

Understanding which stations are alike and how they are alike will help guide national policies, programming efforts, and resource allocation decisions in public radio's final decade of significant expansion. Our expansion efforts spur us to find new ways of grouping stations that share common programmatic and audience service traits.

Public broadcasters are adroit at sorting stations into categories that are more politically than programmatically useful. Geographic location, organizational affiliation, ownership, and operational considerations are at best tangentially linked to the programming services provided by public stations. Our challenge is to replace this old-think with a more functional "network of interest" concept.

A network of interest is a set of public stations serving the same type of listener with the same type of programming.

A station is part of a network of interest when its programming is similar to others in the network, and when the audience resulting from this programming is similar.

What do we mean by similar programming? Certainly format is part of it. In network-of-interest terms, a classical station has more in common with other classical stations than with any jazz station, regardless of licensee, budget, or affiliation.

But broad format categories alone are not sufficient to define a network of interest. Appeal can vary widely within a format, and appeal profoundly affects who is served. A myriad of appeal-related factors affect whether the listeners to any given format skew older or younger, blacker or whiter, and so forth. For instance, a jazz station serving black listeners is different from a jazz station serving white listeners; a classical station serving younger listeners is different from a classical station serving older listeners. In both instances, each station is in a distinct network of interest.

We can guess what these networks of interest might be, but we don't know for sure what they actually are. We know so little about the expansion stations that we aren't sure how they merge with or augment existing networks of interest. Indeed, we don't have much of a handle on the networks of interest that exist in the current public radio system.

As this volume goes to press, CPB is assembling the most basic programming and audience information from all 700-plus public stations. From this information we'll take the first steps toward understanding what networks of interest exist in the current system, what networks of interest may form with the addition of expansion stations, and which stations make up each network.

The resulting information will be essential for national policy makers and programming producers. It will identify shared audience and programming goals among an increasingly diverse system of stations. It will guide efforts to assemble or create new programming streams, as well as to refine and strengthen existing streams.

Understanding public radio's networks of interest will prove essential to the tasks of managing our current services as well as managing expansion. Station superstars — whether in the current system or not — will be the flagships that most listeners hear and will most likely be the gatekeepers and primary suppliers of national programming for their particular networks.

SECTION V

ODDS AND ENDS

THE OPERA AUDIENCE(S)

Understanding Three Types Of Listeners

The game's not over 'til the fat lady sings.
— Dan Cook, *Sports Editor*

February 1988

What kind of person tunes in to the fat lady? Common wisdom says that opera serves a small but vocal cadre of wealthy patrons who's generous support of public radio is entirely dependent on hearing people sing in foreign tongues live from New York on Saturday afternoons.

But how accurate is this common wisdom? Over the years many of you have asked for objective information about public radio's opera listeners. With the historical data on one side of my desk and the latest data on the other, I'll tell you all I know about opera audiences in one thousand words, maybe less.

JUST THE FACTS, MA'AM

We've known for years that the opera audience is a subset of the classical audience; in other words, although most opera listeners tune in to classical music, not all classical listeners tune in for opera. In this sense opera is a highly specialized type of programming which attracts a minority of listeners. This knowledge comes from NPR's Public Radio Audience Profile (PRAP) reports, published annually since 1980.

PRAP also taught us that opera has the oldest audience of any major public radio format. The most recent information, from the AUDIENCE 88 *Underwriting* study, shows that 50 percent of public radio's opera listeners are over 55 years

old. Compare this to 32 percent of its classical music listeners, 29 percent of its information listeners, and 26 percent of its jazz listeners.

Because so many are retired and living on fixed incomes, opera listeners are not as well off financially as other persons in public radio's audience. Over one-third (34 percent) of the system's news listeners have household incomes of \$50,000 or more, as do 33 percent of all classical and 29 percent of all jazz listeners; however, only 28 percent of public radio's opera listeners have incomes in this range.

Although they may be less able to afford it, opera listeners do give money to public radio. One person listening to one hour of opera contributes an average 1.08 cents, compared to public radio's overall listener income per listener-hour of .99 cents. This isn't as high as *A Prairie Home Companion's* 1.58 cents per listener-hour, or the 1.16 cents of NPR's news and information services, but it isn't as low as jazz's .74 cents. [These 1986 numbers are taken from the *Programming Economics* study.]

The thing that keeps opera from being a better fundraiser is its relatively low average quarter-hour audience. On this count, common wisdom is right: The audience **is** small. Opera programming accounts for approximately 2 percent of public radio's program hours, yet it accounts for only 1.3 percent of all listener-hours. Compare this to *Prairie Home* which, in 1986, generated 4.2 percent of public radio's listener-hours in just 1.3 percent of its program-hours.

PROGRAMMING VS POSITIONING

Some opera proponents argue that opera is an important positioning agent — a unique and special service that sets a public station apart from others, a jewel in public radio's crown. I know of no hard data substantiating or disproving this assertion.

But, for reasons already stated, I do know that programmers who schedule opera must schedule it carefully. Opera's heavy concentration of older listeners indicates that its appeal is quite dissimilar from that of other programming. And since its audience is a subset of the classical audience, itself a subset of the total public radio audience, opera is a certain tune-out for most public radio listeners.

Opera's dissimilar and narrow appeals are proven facts; scheduled in prime time (midday Saturday, for instance) without regard to larger audience service considerations, the damage it can inflict in a program schedule might very well outweigh its presumed and unproven positioning benefits.

THE THREE TYPES OF OPERA LISTENERS

It's a mistake to treat any program's audience as homogeneous. There is no "typical" listener to any program or format, and opera is no exception. Half of public radio's opera listeners are over 55 years old. That's not a young audience by any standard; but what about those who compose the other half of the opera audience?

A statistical procedure called "cluster analysis" was applied to the AUDIENCE 88 database to ferret out three "types" of listeners. Around one-third of the opera audience clusters into each listener type. Table 5-1 (next page) shows a thumbnail profile of each type.

Opera Type 1. These listeners are between 18 and 44 years of age, with an average age of 30. Most are employed and over 80 percent have graduated from college. But while their incomes are high by most standards, they are the least wealthy of the three opera listener types. Only 14 percent live in households earning more than \$50,000 per year.

These young listeners are concentrated in large urban markets. One in four has never been married. They've been listening to public radio an average of 7 years — a shorter time than any of the other groups. They listen to public radio opera programming about one hour per week.

Opera Type 2. Averaging 50 years of age, Type 2 listeners are wedged between the younger Type 1 group and the older Type 3 group. Listeners are no younger than 40 years old and no older than 60. Four out of five are currently married.

Type 2 listeners are at their earning power peak. Ninety percent are employed, and two in three have graduated from college. They are likely to consider themselves members of the upper middle class; half earn household incomes greater than \$50,000 per year.

These listeners use opera about an hour and a half each week. They are the most likely of the three groups to also listen to news and information programming on public radio. They are also the most likely to perceive that public radio’s programming has gotten worse in the last year.

Opera Type 3. These listeners, all of whom are over 55 years old, average 70 years of age. Most are retired and living on fixed incomes; one in four is widowed. As a group they are well educated — half have college degrees of some sort — yet they are the least educated of the three groups.

These senior listeners are the most loyal public radio listeners of the three types; six out of ten hours they use radio are spent tuned to public radio. They are heavily concentrated in smaller markets, where fewer stations compete for their attention; this may account for much, if not most, of their greater loyalty.

People in this group are the heaviest opera users, averaging around an hour and forty-five minutes a week listening to the format. They’ve been listening to public radio an average of 14 years, and most think its programming has gotten better in the last year.

TABLE 5-1: *Public radio’s opera audience clusters into three distinct types. These three types are best understood by their age, associated demographic characteristics, and the size of their radio market.*

The Three Types of Opera Listener

	Type 1	Type 2	Type3
Average age	30	50	70
Age range	18-44	40-60	55+
Employed	80%	90%	25%
Household income	high	very high	high
Market size	large	mixed	small

THE PUBLIC RADIO PROGRAM DIRECTOR'S HANDBOOK

Presenting the Basics With Clarity and Humor

I'm making this up as I go along.
— *Indiana Jones*

May 1990

Public radio jobs have never come with instruction manuals. There are job descriptions, of course, but they're designed to impart what to do, not how to do it. Every day thousands of us go to work and make it up as we go along. For many, the challenge of defining our own purposes adds to the excitement of our field.

Most of what we know we've learned through our own trial and error and the trials, errors, and successes of our colleagues. Indeed, sharing experiences has been central to the "professionalization" of public radio. Think about your own job description; very likely it's quite different than it was (or would have been) 10 years ago; in fact, the odds are maybe ten to one your current job didn't exist 20 years ago.

Nowhere in public radio are the powers of self-determination and self-instruction more apparent than among program directors. In 1985 less than half of all CPB-qualified stations had a full-time program director. The job of PD is one of the last key positions to be formalized by public radio's ongoing processes of invention and professionalization.

THE PD BEES

Making it up as we go along certainly isn't unique to public radio. However, some of our methods are highly original. Between 1986 and 1988, the coming of age for public radio's PDs was greatly accelerated by the intense work of a group of antennae-wearing apostles of professionalism calling themselves the PD BEES. Only in public radio.

The term PD BEE was actually the name of a series of workshops, conceived as a radio variation on the quilting bee, wherein each person contributes to a larger body of knowledge and expertise. Learning by sharing. The two types of BEEs — the workshops and the workers — are now legend, and no public radio retrospective would be complete without a display of 1980's memora-BEE-lia.

The PD BEE experience is now available in a handbook, particularly useful for those unfortunates who weren't pollinated in person. Written by program directors for program directors, the handbook distills the essence of what it means — and what it takes — to be a PD. As Craig Oliver writes, "We offer this handbook in the hope that those coming after us will have something more to go on than we did." This is what makes the *Public Radio Program Director's Handbook* so valuable.

THE BEE BOOK

Eric Buchter's layout of illustrations and text greatly enhances the handbook's readability. It's fun to read, too. But don't be fooled by the cartoons, humor, and apparent simplicity; these are the voices of experience speaking. Financed in varying degrees at various times by the Radio Research Consortium, the Public Radio Program Directors Association, the Corporation for Public Broadcasting, Eastern Public Radio, and participating stations, these PD BEE principals (and principles) have played a central role in defining and professionalizing the jobs of public radio's program directors.

*[This handbook] deals with the **how** of public radio. The **what** and **why** of public radio we leave to you. Each station must decide that for itself. We would not presume to suggest what your mission as a broadcaster should be...*

Beginning with this opening premise, the authors work through some of the essential basics of being a program director. Much to their credit, they've avoided limiting their attention to program-, format-, and research-management techniques. They also address the management of people and change, and provide a balanced mix of the technical and managerial skills that a competent PD must master.

Technical skills include assembling an effective program schedule that serves the station's mission, implementing the schedule, and interpreting the feedback provided by audience data. In its first section, the handbook guides a PD through an examination of the station's format and provides tips on how to shape on-air sound through formatic techniques of station IDs, forward promotion, transitions, recycling, and on-air promotion.

If a PD worked alone, these skills would be sufficient. But PDs must also manage music programmers, announcers, and other on-air staff. Similarly, PDs are often called on to defend programming changes to higher-ups or to the public. Therefore, management skills are every bit as important as technical competence.

Managing staff requires the ability to hire, motivate, and fire; managing change requires mapping out and addressing the concerns of listeners, station managers, announcers, boards, licensees, and others with real or perceived standing in what will be lost or what might be gained. Through experience culled from numerous case studies, the authors point out the challenges of each of these activities and encourage novices and old hands alike along the roads most prudently travelled.

Public radio's voice is just one of many in a highly competitive radio environment. The handbook devotes an entire section to positioning, formatting, and on-air basics such as properly identifying the station and promoting forward — the techniques that are required to attract and serve listeners in our highly segmented medium.

The authors dedicate a full section to the basics of audience research. After a reminder of what audience estimates are, complete with applications and limitations, they delve into the nitty-gritty of how Arbitron measures listeners and listening, how these measurements are expressed as numbers, and how these numbers are interpreted. These are the most basic of basics, addressing only Arbitron and Radio Research Consortium data, and even then only the "top-line" information. Those who have dealt at all with Arbitron estimates will find nothing new here, but these essentials will put a novice on the right track.

The book contains an audio cassette that amplifies and illustrates the text. Exercises and case studies round out the volume.

WHO SHOULD READ IT

The authors suggest that the handbook be circulated among the station's staff, starting with the music and news directors, and that it be kept handy for new staff to read when joining the station. In my opinion this list is too modest; the handbook should be required reading for every professional involved in the creation or management of public radio programming.

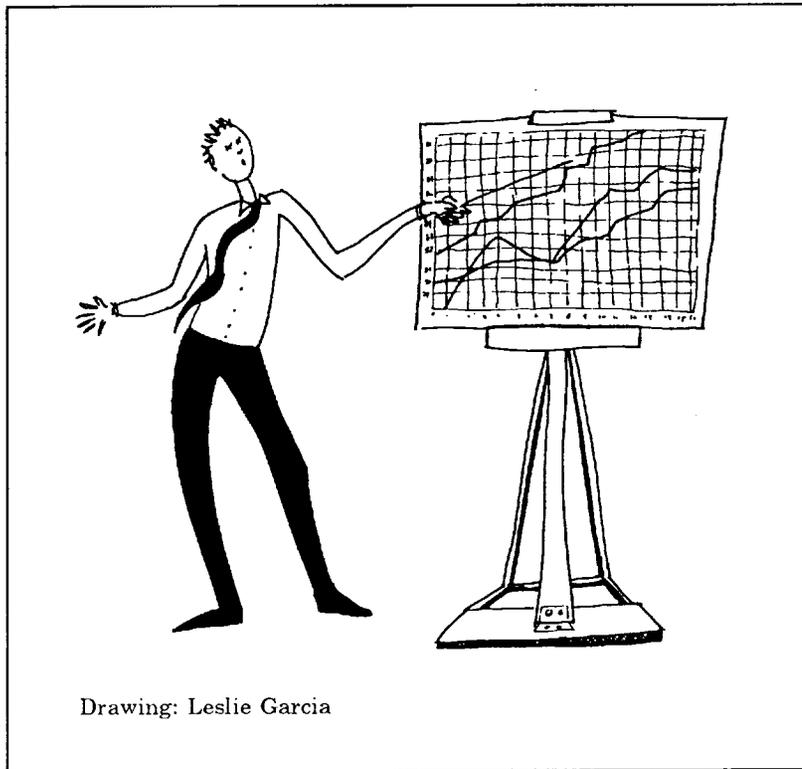
- On-air talent will see their role in the big picture — many for the first time.
- Managers will come to appreciate more fully the many jobs their PDs must perform, and perform well, for their stations to become and remain viable radio entities and valued community services.

- National program producers and distributors will gain insight into the paradigms that shape what goes on local air and what doesn't.

We could pick nits: The handbook refers to Arbitron's Programmer Package, which the Radio Research Consortium has replaced with its own set of tables. Also, the audio cassette should be embedded in the front cover, thereby allowing the pages to lie flat for reading.

But these faults pale next to the book's one major inaccuracy: The cartoon on page 31 (reproduced below) shows a research presentation being given by a guy wearing a tie.

Everyone knows that real researchers don't wear ties.



Drawing: Leslie Garcia

SURVEYING A SMALL AUDIENCE What To Do When There's No Doctor in Town

Kids — don't try this at home.
— David Letterman

June 1990

The following true story is not for the squeamish.

In 1978, a student at the University of Wisconsin at Madison attempted to remove his own appendix. As I recall reading in the local papers, he scrubbed his dorm room with Hexol, sterilized his tools (which included a fork from the dining hall), and went to work. He'd gotten past his liver or spleen or something when he had to stop; the local anesthesia that he'd self-administered wasn't up to the task.

Overcome by pain, he called an ambulance. The emergency room crew recognized him. The semester before he'd failed in a similar attempt to extract his own gallbladder.

Any station conducting its own audience research risks a similar operation and outcome. Arbitron and Birch, the prime pulse-takers of the radio industry, are the first places to turn for the most reliable diagnoses. But what is a station to do when neither Arbitron nor Birch surveys its market? How can it find out even the most basic information when the word "market" is an inappropriately generous description of the situation under its signal?

Such are the questions addressed in *Surveying the Audience: A Handbook for Small Market Public Radio Stations*, recently completed by the Alaska Public Radio Network and funded by a Corporation for Public Broadcasting Radio Audience-Building Grant.

The handbook provides a model for small market or minority stations to follow in conducting their own research. It even tackles the particularly difficult problems of surveying listeners who don't speak English, those without phones, and those living in remote or essentially inaccessible locations.

DO IT YOURSELF?

Only professional researchers are capable of fully executing the scientific process of research.

— *From the handbook*

At the risk of appearing professionally elitist or biased, any professional researcher must argue strenuously against a station conducting its own research. This is why, as a professional researcher, I'm so fond of the medical analogy. Most of us wouldn't try to remove our own appendixes, diagnose our own malignancies, or even administer our own intrusive therapies. We simply aren't qualified. Even if we were qualified, it would be very difficult to remain objective. Even doctors have doctors.

A central message throughout the handbook is to enlist professional assistance. Its authors take this stance based on experiences shared in the handbook, not because they've been cowed by professionals. But in no way does this mean that an end-user of research should be ignorant of the processes. An educated and astute patient can prevent even a medical doctor from committing serious mistakes. ("Hold it, doc — I'm in for a laryngectomy, not a lobotomy.")

Although it delves into the special needs of small markets, the handbook transcends this limited universe by sharing experiences and showing any public radio professional in any market how listener research can and should be done. Although uneven in its presentation, reading it is time well spent for anyone seriously involved in using audience or membership research. Sketches of some of the most interesting and useful parts follow.

SOMETIMES NOTHING IS BETTER

Too frequently, programming decisions at small-market stations are based on membership questionnaires, intuition, anecdotal information, and other less-than-scientific methods of audience measurement.... Since the purpose of audience research ultimately is to take action based on the information obtained, the research better be right. No research is better than bad research.

— *Colleen Cashman, Project Director*

I couldn't have said it better myself. However, whatever listening information can be gained from even the most modest research, if scientifically reliable and valid, is certainly much better than no information at all. In an overview of communications research the handbook touches on most of the salient points — the scientific method, validity and reliability, quantitative and qualitative research, and sampling considerations. Public broadcasters will appreciate having all of this information written in their language. It will help them get the research done right.

The handbook examines surveys and focus groups, how each technique is implemented, the appropriate applications of each, their inherent advantages and drawbacks, and their strengths and limits. It addresses the how-to's and how-not-to's of written questionnaires and phone surveys.

Following the handbook's advice to get professional assistance, Diane Kaplan, Executive Director of APRN, cautions that dealing with a research firm isn't as easy or responsibility-free as it might sound. She addresses this and other points in an essay called "Learning The Hard Way: Mistakes We Made That You Can Avoid." Although she generously refers to "some of our worse mistakes" (emphasis added), such things as erasing raw data or grouping it into inappropriate geographies, dayparts, and demographics are every bit as much the fault of the research firm.

To her advice, “Don’t assume anything,” one could add that there are a lot of interns — even quacks — out there; the lesson, of course, is to select your researcher as carefully as you would select your surgeon.

The handbook includes surveys of varying quality as models from which to learn. It emphasizes the importance of knowing what you want from your study before you begin. “Our survey asked questions which turned up apples, oranges, and cherries for answers,” writes KFSK General Manager Matt Holmes. It also stresses pretesting a survey to find bugs. Research done for APRN showed that military personnel reported very high levels of listening to the network. What analysis afterward showed, and what pretesting could have detected, was that these people were confusing APRN with the Armed Forces Radio Network.

CASE STUDIES

The handbook is graced with three case studies, each reporting the processes and outcomes of a research project funded under the grant. Case studies allow us to learn from the successes and mistakes of our peers, proving once again that those who do not study history are doomed to repeat it.

Four days after station volunteer Barbra Reynolds signed on to conduct a telephone survey for KBBI, the Exxon Valdez hit Bligh Reef and the entire community became embroiled in protecting Kachemak Bay. Four days into the survey, oil globs hit the beach. People were hard to reach by phone; many who answered were testy, impatient, and unwilling to participate. The survey was conducted anyway and results reported, although with no guarantee that they are an accurate representation of “normal” KBBI listening.

The lesson here is that timing is important. Sometimes bad timing can be anticipated; as Kaplan writes, “Not during fishing season, you don’t.” When unexpected events of this magnitude happen, research should be either canceled or postponed. If you’re a social scientist you might be

interested in studying behaviors during and attitudes toward the disruption, but this usually does not lead to actionable programming information.

Rich McClear, General Manager of Raven Radio, offers a most thorough case study. The research itself is technically competent, employing not one but two professional firms for both surveying and analysis; cross-validation of the results through the use of three different survey methods (telephone survey, intercept survey, and focus groups); the correction of weak response rates from demographics of interest through weighting; and the calculation of confidence levels around the data points.

Management’s approach to the research was also competent, with specific and well-defined questions on which it intended to take specific programming actions. It even went so far as to weigh the cost of additional information against its potential benefit (it determined that the information would simply be too expensive). Those who may take the availability of research for granted might do well to consider this exercise.

The importance of working closely with your research firm is made painfully clear in the third case study. Dick Brooks, WOJB’s General Manager, candidly admits that the surveys were poorly designed, even though they were conducted by professional research firms. “[The firms] did exactly what we asked them to do...except we had no experience or idea of what we really needed to ask, nor how our decisions may affect the results. As a result of calling our own shots...we confused the results.”

Again, however, the fault is not totally station management’s. It’s the professional responsibility of any research firm to work with their clients to address their needs; when a client can’t express these needs, the research firm should be able to assist. To return to the medical analogy, it’s the role of the doctor, not the patient, to suggest which specific lab tests are in order.

Brooks clearly states the lesson: “Determine precisely why research is to be done and exactly what information, for what purpose, is to be gained. Question the survey instrument thoroughly to make sure it answers the questions you have.”

Each case study is followed by an analysis by Craig Oliver, Director of the Public Radio Program Directors Association. His objective eye gives perspective on what was learned. Keeping things in perspective is always a good idea. As McClear writes, “Knowing you have a 48.5 percent share...makes you feel great until you find it represents only 53 listeners.”

These and many other lessons from the handbook are axioms that research-users in any market would do well to memorize. If you absolutely must operate on yourself, then for goodness’ sake, know what the fork you’re getting’s into.