

Comment on M. Einstein's article "Program Diversity and the Program Selection Process on Broadcast Network Television".
http://hraunfoss.fcc.gov/edocs_public/
last visited October 26, 2002.

Abstract

This paper analyses the study by Einstein and some additional pertinent issues that will affect diversity in the broadcast market. Einstein's analysis can be criticized in three respects. Firstly, do the indices on which Einstein bases her data actually correlate with diversity? Secondly, even assuming that the data in the indices are relevant; what level of error in the data could be present before the observed trends were no longer statistically significant? Thirdly, can the indices measure overall diversity and yet be skewed because they fail to consider the quality of diversity? In addition, this comment considers the effect of the transition from analog to digital and the amalgamation in broadcast and MVPD programming on diversity and quality.

Introduction

The FCC released the aforementioned study by Einstein as one of twelve studies on the current media marketplace.
<http://www.fcc.gov/ownership/studies.html>.
This research is part of a FCC fact-finding mission on how media ownership affects diversity, localism and competition. FCC News media release, October 1, 2002. The FCC would like to decide what effect the relaxing of various broadcast ownership rules in 1999 had on these factors. In particular, the study by Einstein that investigated what effect the introduction and repeal of the financial interest and syndication (FINSIN) rules had on diversity of programming. Einstein's report is broken up into two parts; the first is an extensive statistical analysis of prime time viewing audience preferences. The second part of the study is a qualitative investigation of FINSIN repeal on programming based on personal interviews with media executives involved in the broadcast programming industry. The study endorses FCC deregulation of the cross ownership rules. The analysis (a) casts considerable doubt on whether the FINSIN rules were effective in achieving diversity on prime-time broadcast TV and (b) finds that the increased network involvement in programming following repeal of FINSIN has not, with certainty, affected the quality of programming.

This paper analyses the study by Einstein, but also tackles some broader questions that the FCC study is directed toward, what factors will affect diversity in the broadcast market. Specifically, we ask whether the indices that Einstein uses to probe diversity would be responsive on a qualitative level to some obvious biases. Next we ask from a statistical point of view how we should interpret the data from the indices. We also ask a number of questions concerning the role independent producer's play in creating diversity. The paper then suggests some constructive ways that the concerns regarding the indices as a tool to measure diversity, localism and competition could be addressed. Finally, this paper raises some preliminary questions regarding the transition from analog to digital and broadcast to multi-channel video distributors (MVPD) and the effects on diversity, localism and competition.

(i) What is diversity? Can there be diverse programming within a sub category (e.g. detective) that Einstein's analysis will fail to evaluate? On the other hand can diversity be lower when a theme is reused in different genres and sub-categories, e.g., a love triangle. Is programming diversity, racially, socially, age or sex orientated and do the subcategories and therefore the statistical analysis reflect this concern?

(ii) What level of error in the data would result in a significant change in the trends observed? Specifically, what level of error in the data could be

involved before the observed trends were no longer statistically significant?

(iii) What will be the effect of the amalgamation of programmers on the quality of programs, their diversity and the selection process?

(iv) How can the FCC use data from studies such as that carried out by

Einstein? What should the FCC do to be able to correct for the deficiencies of the study?

(v) What will be the effect of the change from analog to digital transmission and the presumed shift from broadcast to MVPD on diversity?

1. What is Diversity?

In *Schurz Communications v. FCC*, 982 F.2d 1043 (7th Cir. 1992), Judge Posner proposed that the FCC's concern with the television industry "is not just with market power in an anti trust sense but with diversity, and diversity is promoted by

measures to assure a critical mass of outside producers and independent stations."

However, Posner noted that the FCC neither defined the meaning of the word diversity, nor

distinguished between source, outlet and programming diversity. Id at 1054. The latter

concept, Posner proffered, referred to the heterogeneity of programs, where source and

outlet diversity was a means to the end of programming diversity. Id.

Einstein has taken Posner at his word and categorized the programming according to heterogeneity during two time periods, from 1966 to 1974 and from 1989 to

2002. Each program viewed during defined prime-time hours is allotted into one of twenty-

two program content categories. Diversity in the program schedule was then 'calculated'

based on the Dominick Pearce (D-P) diversity indicator, the

Herfindahl-Hirschman (H-H)

Index or a horizontal diversity index. In addition, a correlation

between the types of

programming and the producers of that programming was undertaken.

Einstein, p. 6.

1.1 Diversity depends on Categorization

Using the evaluation based on the D-P index, diversity is a function of the

categories and sub-categories selected and subject to the biases involved in this selection

procedure. If a genre is not broken down into sub categories such as is the case for

'situation comedies (sit-com)' or 'motion pictures' then there is an increased likelihood

that either of these two genres will be one of the three largest categories and therefore

contribute to the D-P index. As a result the response will be weighted to changes in

programming that effect the largest categories. If any factors reduce the programming of

either 'sit-com' or 'motion pictures' such that these do not make up one of the three largest

categories then this may significantly influence 'diversity' whereas a similar magnitude

drop in a genre which is broken up into sub categories will not influence 'diversity' as

measured by the D-P index. For example a 4.5 % drop in general drama between 1994 and

1995 from 13.6 to 9.1% has no effect on the index. In contrast, a 3.9 % reduction in sit-

com prime time viewing between 1966 and 1967 from 17.3 to 13.4 % does effect

'diversity' as reflected in the 3.7 % increase in the D-P index between these years.

Einstein, Appendix 1.

1.2 Diversity within a Subcategory

From the point of view of the D-P index, 'diversity' is a change in the

viewing preferences of the broadcast audience as measured by the total amount of viewing of certain major genres. But this completely overlooks the diversity that is present within a subcategory. Consider the 'crime/detective' subcategory of drama. Presumably shows such as 'Burkes Law', 'Hawaii 5-0', 'Starsky & Hutch', 'Columbo', 'Magnum PI', 'Barbarillo', 'McBean', 'HSB', 'Homicide', 'NYPD Blue', 'L.A. Law', 'Law & Order', 'Ali McBeal', 'Robbery Homicide Division' and many more could all arguably be classified within this sub-category. However, to classify all these shows in the same sub-category means that there would be no change in diversity if you substituted one program for another program. While that may be the case for a viewer who considers 'Law & Order' as a successor to 'L.A. Law' however, for a considerable number of viewers although there may be some 'cross over' in viewer appeal, there is as much diversity between either of these shows and 'Ali McBeal' as there is between two different genres.

1.3 Lower Diversity Where a Theme is used in Different Subcategories

The study claims that there is significant diversity in horizontal programming, but what if programs in different sub-categories use the same formula within different settings to simulate 'diversity'? For example, the plot of a love triangle can be used in literally unlimited settings, e.g., musical ('West Side Story' with Tony, Maria & Chico), westerns ('Bonanza', 'Gunsmoke', 'Little House on the Prairie' they all did it!), general drama ('Waltons', 'Eight is Enough'), detective ('Moonlighting' revolved around this theme with Bruce Willis, Cybil Shepherd & guest), sit-coms (Friends reused this theme again with Joey, Rachel & Ross) and women's serials.

If the theme is transparent then the viewer may after viewing the preview know the outcome and his response may be the disinterest he experiences for another re-run. Is this really diverse programming? It is questionable that this is the type of heterogeneity to which Justice Posner referred. Schurz, 982 F.2d at 1054.

1.4 Social, Racial, Age and Sex Related Perceptions of Diversity

The inability of the index to address social, racial, age and sex related values of diversity in programming is further illustrated by changes in racial viewing preferences. Sit-coms have contributed to the D-P index in all but two of the years studied (1967 and

1974). Whereas in the 1960's there was very limited access for black African-American (bAA) actors in major sit-com roles that is no longer the case. With the success of the 'Cosby Show' in the late 80's, the networks have targeted the growing appetite of bAA audiences with successful programs such as 'Fresh Prince of Bel-Air', 'Kenan and Kel' and the 'Burnie Mac Show'. With the exception of a few shows (e.g., the 'Bill Cosby Show' and 'First Prince of Bel-Air') these programs attract relatively lower numbers of white Caucasian (wC) audiences. In contrast, shows such as 'Frazier', 'Seinfeld' and 'Friends' have appeal to relatively lower numbers of bAA audience. These wC or bAA preferred programs are different and presumably diverse. Since 'sit-com' viewing has remained reasonably stable (17.3% in 1966 vs. 15.9% in 2002) then there must have been a considerable reduction in sit-coms appreciated by wC audiences to compensate for the programs attracting bAA audiences. This implies a reduction in diversity for largely wC audiences. Without a breakdown of the viewing preferences we cannot determine whether the bAA audience has increased (if he did not watch 1960's sit-coms) or has remained unchanged (if the bAA preferred sit-coms are viewed instead of the previous time spent watching 1960's sitcoms).

However, because the D-P index does not distinguish between the targets of different sub categories it cannot reflect the very real changes in viewer diversity, which have accompanied these significant changes in viewing preferences. Similarly, the D-P index cannot reflect the continuing inability of the major networks to satisfactorily address the tastes of Latino viewers (who with the exception perhaps of "George Lopez" do not have shows which attract large community following) nor for that matter Asian-American audiences (wasn't one character in Ali McBeal of Asian descent?).

Similarly an example of an age related perception of diversity could be drawn from music (e.g. a comparison of MTV versus a classical concert). An age trend may be very subject specific, for example feature films and comic strip heroes are being reborn and preferences may skip a generation or be largely age independent. An example of a social perception of diversity could compare a sit-com such as 'Archie Bunker', which appeals to generally a blue-collar audience with a white-collar audience's preference for a program such as Alley McBeal. Finally, the soap opera "Days of our

Lives" typically drew its audience from women, while more men view football. These examples illustrate at different sexes may have a different perception of what constitutes diversity.

1.5 Are Hours Viewed the Best Method of Measuring Diversity?

News programs may significantly add to a viewer's perceived diversity yet because of their format they are statistically weighted against in the analysis undertaken. A station that increases programming from one fifteen minute news slot at 6 PM, to news at 6, 9 and 11 PM in which the program is not a repeat but has actually updated the viewer regarding latest developments in news events has arguably made a significant commitment in this format to diversity. However, the three-fold increase would barely register in terms of the H-H diversity index and may not register at all in the D-P index.

In contrast, a station that broadcasts a world cup soccer match, in addition to significant NFL and college football broadcast commitments will register an increase on the H-H index (and possibly the D-P index) because of the increased hours of sports viewing. However, to a significant minority (majority?) of viewers, there has been no increase in diversity by presenting the FAA Cup. The alternative code of football is still football and the additional eight quarter programming hours do not add to diversity of viewing. Here the format of the activity, two additional quarter hour news slots versus eight additional quarter hours of soccer effects the contribution of the activity towards the index. While news subcategory may have undergone a significant relative increase (up to 66%), the two additional quarter hours will amount to less than 0.5% change in the subcategory and almost certainly will not alter the D-P index. In contrast, the football broadcast (which may represent only a 20% relative increase in sports programming) will result in a 2.5% change to the programming subcategory and may thereby affect the index. Since news programming makes a particularly important contribution towards localism through many affiliate stations, a system that disfavors the diversity in this manner also is likely to misrepresent localism.

1.6 Which Categories?

Einstein is obviously aware that the use of the D-P index is open to criticism as she investigates whether the data are skewed based on the use of

categories

representative of programs from the 1970's. As a result she recalculated the D-P index

based on categories representative of the type of programming available in the 1990's.

However, the criticisms identified in sections 1.1-1.5 remain relevant.

Posner suggested

that we investigate heterogeneity of programming to investigate diversity. Schurz, 982

F.2d at 1054. He did not say what categories to use! Einstein's statement "Whether we

believe that or not, ." Einstein p. 18, used to describe the variance in the results based on

the different categorizations perhaps recognizes the author's own concerns about the

suitability of the categories in general.

1.7 Does the H-H Index Fair any Better?

Clearly, the D-P index is not the only tool Einstein uses to investigate

diversity. But the fact that the research resorts to the H-H index further raises the specter

of uncertainty concerning the D-P index and vice versa. The criticism of a circular

argument for validity of the indices is explored in section 2.2.

Briefly, the H-H will not be subject to the vagaries of the D-P index dependence on the top three categories, but it is subject to the same

critique concerning the

problems involved in categorization (see criticisms 1.2, 1.3 and 1.4).

In particular it will

overlook diversity within a subcategory or viewing audience diversity per se. The H-H

index will not address the concerns about the bias towards length of time of the program

(see criticism 1.5).

2. What Level of Error Would Alter the Observed Trends?

2.1 The Problem of Placing a Program into a Category

In addition to the bias effects discussed in section 1, it is suggested that we

have no meaningful way to discern the trends observed from either the D-P or the H-H

indices compared with what may be just random scatter of the data.

Consider that some

shows may fit into more than one subcategory, for example 'Ali McBeal' may fit into either

'general', 'crime/detective' or 'women's series' subcategories of

'drama' or alternatively

the 'comedy' subcategory of 'variety'. If the show does not easily fit into only one

subcategory then there is a possibility of it being incorrectly

classified. The question is

what effect would an error of misclassification of Ali McBeal have on the index?

Based on the data in appendix 1, we observe an average and standard deviation of 41.3 ± 5.8 % for the D-P index over all the years

presented. Further, for each year the value of the D-P index is within one standard deviation of this average value for the great majority (16 out of the 23) years presented. If we just consider those years where the data was more than one standard deviation outside of the average value, then the magnitude of the deviation from the average plus or minus one standard deviation involved between 0.5 to 3.4 viewing hours (average 1.9±1.0 hours). That is, in the most discordant year if 3.4 hours of viewing (out of the 80 hours of weekly viewing) were incorrectly classified then that year (1997) would have been within one standard deviation of the mean. Basically the difference between the scatter associated with one standard deviation and the largest dips (1997) or peaks (1968) in 'diversity' amounted to 3.4 and 2.2 viewing hours respectively (i.e. if 3.4 out of the 80 viewing hours assigned in 1997 to 'sit-coms' were better categorized as 'comedy' then the D-P index would have reported the data for that year as being within one standard deviation of the mean; similarly if 2.2 out of 40 'western' viewing hours in 1968 would be better categorized as 'sit-com's then the high in 'diversity' would disappear).

In the above discussion it is not necessarily assumed that no trend within one standard could be meaningful. The purpose behind examining data, which lie outside one standard deviation, was simply to consider the extremes of a possible problem. It should be noted that without further information it is not possible to conclude one way or the other the relevance of data within one standard deviation of the mean. We conclude that without some measure of the error associated with the assignment of viewing hours to (sub) categories we cannot know whether any of the trends reported for the 'diversity' data are meaningful.

Finally, without a rigorous statistical analysis e.g., determination of whether variables are dependent or independent (see section 4.3), then the value of both indices are severely limited. In addition, statistical based rules for excluding single outlying data points should be applied when appropriate.

2.2 Circular Argument of Concordance

Concordance between the D-P and H-H index should not be asserted as confirming the analysis and undermining this critique. Einstein resorts to the H-H index to verify the results of the D-P index. If the D-P index is flawed, then what we have are the

results of the H-H index (with there by no means insignificant limitations) to base our conclusions on verification of trends. That is, if the critique on the D-P index is accurate, then we cannot use the results of the D-P index to bolster our conclusions concerning the H-H index and vice versa.

2.3 Deciding Whether Trends are Valid or can be disregarded

What is most disturbing in the analysis of the results in general is the manner in which results, which are concordant, are used to verify the validity of the methodology and draw further conclusions whereas data that are at odds with either other aspects of the data or the theory that Einstein is proposing are ignored with no rationale. This part of the analysis is the least scientific. For example consider the Figures of Program Genres by %

for 1966-1974 and 1989-2002. Einstein, pp. 8 and 9.

(a) It is claimed that "the largest growth was in drama in the 1970's from 49.3 (1966) to 56.3% (1974)", however this could just as easily be ascribed to a one year

growth (or perhaps a sampling bias?) occurring from 1973 (42.9%) to 1974

(56.3%); where the underlying trend from 1966 (49.3%) to 1973 (42.9%) would

then arguably be described as a decline.

(b) It is arguable whether the most statistically significant increase for the period 1966

to 1974 described in section 2.3(a) was in the 'other' category (which includes

children's shows and sports), which was a more than two fold relative increase.

The question of relative effects is addressed above (see section 1.5).

(c) The statement that "Dramas have particularly taken off within the last two years."

is also contentious and at least should be qualified with respect to other trends.

While the viewing in 2000 (36.4) is smaller than 2001 (41.7), which again is

smaller than 2002 (43.9), all these values are within one standard deviation (6.1%)

of the mean 39.9% and may simply be normal scatter. The question of errors in the

assignment and the implications are considered above (see section 2.1).

3. Quality in Programming

3.1 Can the Diversity Index reflect Quality?

Quality in programming is probably one of those definition less conundrums

that is easier to label with a truism "you know it when you see it" than it is to define. At

the same time, the experienced observer can quickly recognize the difference between a

quality act and a workmanlike performance lacking the substance, character, development or sometimes just the finesse or glitter of class showmanship.

Einstein's more qualitative section on the programming selection process makes clear that there has been a massive amalgamation of producers in the broadcast-programming arena with the repeal of the FINSIN rules. There is a real risk that concomitant with the dramatic amalgamation the industry has undergone, the talent to produce quality programming will somehow be lost. With these concerns in mind, there are a number of questions, which remain to be addressed. Firstly, has the quality of diverse ideas that go into the shows that are produced fallen, despite the retention of 'diversity' as measured by the indices? This is not just an extension of the question asked in sections 1.3 and 1.5 (although we note that rehashing themes or padding programming via lengthy formats while it may increase diversity as measured by the indices, is not increasing quality). There is an additional legitimate question whether the 'diversity' that is measured can reflect changes in the quality of the program. Because the categorization of programming does not address the entertainment quality, the indices cannot reflect quality of programming.

3.2 Replacement Decisions

Even if we can be assured there has been no immediate direct loss of talent from the amalgamation following FINSIN repeal, can we be sure that the basic elements of quality programming have not been set adrift from their nurturing supports. Can the amalgamation of networks and previously independent programmers, which resulted after FINSIN was repealed, reduce diversity at some later point (perhaps 5 years from now)? For example, what will happen when the current generation of outside producers who were acquired by the networks during the amalgamation retire? Has the repeal of the FINSIN rules decimated the spawning fields of creative genius that led to the diverse ideas on broadcast TV? Finally, if not now, will the continued success of the network stations in developing programming finally result in the demise of the independent producer resulting in stagnation more than 5 years from now? We need to know where do the innovative ideas come from, is it the networks or the independents or a combination? What role do the independents play in that process and is it critical? Are the

networks now satiated and self-sustaining, or will they continue to devour independents as the need arises?

Economists with a macro perspective are always keen to point out that amalgamation can reduce programming costs and make goods available at a cheaper price.

In the case of the broadcast market where the programming is not received by a paying consumer, one might imagine that amalgamation could lead to lower production costs and thereby more diversity or higher quality (it is also arguable that the efficiency gains of amalgamation could be passed on to the advertisers in the form of reduced rates who could then pass on savings to consumers in the form of reduced prices of advertised goods').

Because of the direct feedback of consumer dissatisfaction on program viewing, the

broadcast stations do have substantial reasons to transform any increased efficiency into

either a better quality or less costly good. Despite this desire, Einstein reveals that the

actual costs of producing a half hour pilot have risen quite dramatically and are currently

quite substantial (can approach \$2M). Einstein, p. 21. One can only surmise that the

increased efficiency of amalgamation has been used to slow an even steeper increase in

costs that would otherwise have taken place?

In any case, the consequence of this and the fact that all network have limited

budgets is that when a group of network executives are presented with a poor performing

program they are often left with a Hobson's choice (either stick with a poor program or

switch to a re-run, the cupboard is bare). Thomas Ward 1577-1639.

However, either

choice could result in the retention of diversity as measured by the current indices (if the

program was replaced by a re-run, it could even result in an increase in 'diversity'), but

intuitively we would expect that the action (or inaction) reduced diversity. We need to

know, are there any trends in terms of networks shifting to independent producers (either

through acquisition of the firm or a program) after being left previously with Hobson's

choice decisions? Do the independents serve to infuse the networks with their vitality? In

addition, should there be some lower factor for re-runs (or poor performing programs)

applied to a diversity analysis?

3.3 A Template for Diversity and Quality in MVPD Programming

In the 1970-80's a number of foreign films which broke from the Hollywood

style and told stories of interest had commercial success (e.g.

'Walkabout', 'Sunday Too Far Away', 'Picnic at Hanging Rock', 'Breaker Morant', 'Mad Max') and it was surmised

by many that Hollywood had lost direction. L. Corpus, Is There A Resurgence of Values in Hollywood? <http://www.r2rministries.com/> last visited November 22, 2002.

Although clearly a generality, there is a public perception "that Hollywood makes one film a year with 80 titles" M. Colville-Andersen, <http://www.euroscreenwriters.com> last visited November 22, 2002. In contrast, the blossoming foreign film industries were by nature based on the beliefs and commitment of individual scriptwriter's producers, directors and actors. In these foreign films the plot was not 'a given', and while the audience may not have left with that smug feeling one gets when the good guy 'wins out in the end', the audience felt they had been a part of the drama. They had been entertained.

The wrong step that Hollywood made in the late 1970's compared with the

foreign film industry exemplifies how a conglomeration of filmmakers (e.g., Warner Bros., MGM and Universal Pictures) could simultaneously become bereft of direction and flounder. This should serve to remind us not only that both broadcast and MVPD programming could also flounder if the creative input is extinguished, but also more importantly how essential it is to protect the goals of diversity, localism and competition. In the case of the feature film industry Hollywood remains the central cog, but many see the contribution from international participants as being intertwined with the current growth and success (e.g., the recent spate of U.S. remakes of French films such as Nikita, 3 Men and a Baby, Samurai). The development of the international film industry could serve as a template for development of diversity and quality in MVPD programming. Rather than relying on one recipe for success, the FCC should encourage conduits to enable access of the programming infrastructure for dynamic, imaginative and refreshing young writers, directors, producers and actors who are not associated with the mainstream programming process. Isn't this the 'critical mass' concept of outside producers and independent stations that Judge Posner's argued promotes diversity? Schurz, 982 F.2d at 1050.

4. How Should the Data be Interpreted and/or Corrected?

Einstein notes that in the last ten or twenty years, the testing that the networks

carry out to assess pilots have become much more sophisticated.
Einstein, p. 32.

Similarly, the FCC needs to adjust the methods that it uses to assess diversity. As currently used, these indices are really not carrying very much (any?) useful information.

4.1 Categorization Error

One simple way to resolve a major criticism of the study by Einstein would be to gain a measure of the error involved in the indices. For example, by getting a group (e.g., 100 viewers) to assign the 80 programming hours for one year into the appropriate categories using the same sub-categories and then calculating the indices we would obtain a measure of the human error involved in program categorization as reflected by the indices. This would establish a minimum categorization error, presumably by using different racial, social, age or sex-based criteria for choosing the groups to do the assigning. Using this process it would be possible to determine some of the characteristics of the characterization error. Carrying out this process for several different years would allow an estimate of categorization error in the Figures presented.

4.2 Classification Error

Another meaningful exercise would be to ask different groups to devise the categories for classification. Einstein's study presumes that the choice of the categories is independent of racial, social, age or sex related factors but this might not be the case. By giving different groups chosen on social, racial, age or sex criteria the task of dividing the programming into classes to reflect diversity the categories that each group came up with could then be used to recalculate the indices. The divergence between the values obtained by the different group's categories (when used as the criteria in the paradigm described in section 4.1) would be a measure of classification error. The level of classification error would then be superimposed on top of the categorization error. Note that even if the categorization process was shown to be independent of racial factors it does not mean that the index does not fail to reflect racial diversity (the argument in 1.4 about the growth of sitcoms that a BAA audience prefers, which were not reflected in any increase in diversity would argue strongly against that conclusion). Thus it is emphasized that the classification error so determined would be at most a minimum value.

4.3 Empirical Approach

An alternative approach at estimating error would be to try and understand why the categorization or classification is deficient as outlined in sections 1.1-1.6 and adjust the category, classification or process accordingly. Any reasonable adjustment to the process that did produce a change in the measured diversity would lead to a measure of error. A method to investigate the error in the indices might take into account the length of time of duration of a program format and weight its contribution to the indices accordingly. For example, it is arguable that an increase in the programming of a news program should be weighted equally with a retransmission of a 2-hour sports event (see section 1.5).

4.4 Are Social, Racial, Age and Sex Variables Independent of Diversity?

A more thorough statistical analysis of the social, racial, age or sex related proclivities of classification and/or categorization tasks should be able to determine whether the assignment of programming to categories (the classification) or the actual choices of categories (categorization) are independent of biases. By determining if these processes are dependent or independent variables we would be in a position of knowing whether some formulation of different demographic representatives was necessary to carry out these tasks.

4.5 Incorporating Dependent Variables into Diversity

Ultimately, if we presume that the indices fail to reflect diversity and we find that the variables investigated in 4.4 are not independent, then we should in theory be able to use this information to optimize the acquisition of data that better reflects diversity. By changing parameters such as the social, racial, age or sex related characteristics of the humans involved in these different aspects of the data accumulation, and then recalculating the indices, we would expect that any statistically significant change in the indices would reflect a better measure of diversity. For example, one could turn to the biases of all the people who run the program, to everyone from the author of the study (M. Einstein) to the FCC commissioners who decided the boundaries for the review of diversity, localism and competition and ultimately to the members of Congress who charged the FCC with this task and then ask what effect the social, racial, age or sex characteristics would have on the way they would carry out their individual tasks associated with this

investigation.

Perhaps a more intuitive (but conceivably biased approach) would be to examine some of the findings in this critique and pose the question what happens if we adjust for the perceived problem. For example, we recognize that sitcoms have a measure of diversity based on the racial characteristics of the actors. Therefore we could change the categorization or classification processes until the indices reflect a change in diversity for sit-coms of one period when the racial diversity was not present compared with another period when the diversity was present. See also section 3.2. Similarly, should not audience endorsement be better encapsulated into diversity so that the network that runs an unpopular sit-com is penalized? Perhaps we need a more sophisticated manner than the Nielsen ratings of measuring viewer approval. For example a system that could take into account, that a program was merited as high quality despite low viewer ship and appropriately rated compared to a popular program that did not have the same endearing properties. See also section 5.4.

4.6 Foreseeable Problems

One problem with this approach will be quantitative. What effect on the indices will be sufficient, are we satisfied with a 5% increase in diversity following the introduction of sitcoms that appeal to bAA? Because we are using change in the index as a measure of appropriate classification/categorization, we run into a circular problem that we can no longer use the index as a measure of the property (diversity).

Another more general problem is the difficulty of re-tabulating the results for previous years. Not only do our perception of programming change with time, but also phenomena such as fore- and hindsight bias would come into play. Jeffrey J. Rachlinski, A positive Psychological Theory of Judging in Hindsight, 65 U. CHI. L. REV. 571 at 606 (1998). How a bAA audience viewed sit-coms in the 1960's is something that we can never know? All we can ask is how different age group bAA audiences in the 21st Century would view 1960's sit-com programming and hope that the differences of different age groups (perhaps those that did watch the programming first in the 1960's compared with those that had never been exposed to it) would be helpful in hypothesizing what the original response would have been in the 1960's.

5. A Time of Transition

If the FCC acted with the kind of foresight that Secretary of Commerce Wilson utilized in 1927, it would not be trying to consider the effects

of changes in the ownership rules on diversity in the broadcast industry. If we look 10 years forward, in 2012, then the terrain may look exceedingly remote. There may be no broadcast industry 'per se'. There will, however, almost certainly be an MVPD industry. Ultimately, it is to this industry that we should look in our efforts to insure diversity. Having stated that, we must remain concerned that in the transition process, we do not inadvertently deliver a death knoll to diversity.

5.1 Broadcast versus MVPD

The current analysis by Einstein is restricted to the broadcast market.

However, some statistics suggest that as much as 96 % of households are passed by cable and 85 % of households subscribe to MVPDs such as cable, satellite dish or direct broadcast satellite service. 2001 MVPD competition report 17 FCC Rcd 1244 (2002). In 2000, the total revenues from cable (\$44 billion) were comparable to those for broadcast TV, although video subscription remains the most significant source of revenue for cable.

To suggest that the contribution from MVPD or similarly that in the future other players such as SMATV, MMDS, Internet, personal video recorders and ultra wideband will not contribute to the diversity of programming simply ignores reality.

The question is to what extent do we need to protect the diversity, localism and competition on broadcast TV when most homes have MVPD service and so already extend diversity and competition? Firstly we note that under the current regime, with cable 'must carry rules', as long as local broadcast programming remains vital localism will be preserved. In contrast, for satellite there is a 'none or all' provision with the option to negotiate. If negotiations afford similar coverage then we should preserve localism.

Alternatively, if negotiations reduce the coverage or fail to give local broadcast stations an equivalent outlet via satellite compared with cable, then we will see localism fall. The extent of the reduction will be tied to the ultimate mix of cable vs. satellite in the MVPD equation, again an unknown at this stage, but certainly a significant proportion of viewers.

How much will MVPD extend broadcast diversity or competition?

Currently there is a significant increase in diversity for those that receive MVPD and broadcast.

However, it is questionable whether this will remain the status quo. Einstein indicates that

ABC has a first look arrangement with HBO and has begun repurposing Monk. Einstein, p. 30. This report may be the beginning of a coming trend. A recent report by Tim Goodman suggests a correlation between the retention of programming and the availability of replacements. San Francisco Chronicle, November 6, 2002, pp D1, D5. One could imagine a scenario where a program such as "Robbery Homicide Division" produced and owned by CBS unable to find a competitive spot amongst a strong CBS program lineup might be shifted to strengthen a weaker ABC lineup. The network would argue it was giving the ABC viewer a better line-up and possibly improving diversity (e.g., if CBS had better crime/detective script writers or directors the station could generate more of these shows but farm them out to ABC and claim that they were increasing diversity). However, the fallacy of this argument is not difficult to penetrate. The viewer is entitled to the best competition available and one of the successes of programming has been the ability to create new and diverse ideas (e.g. RTV). A network that knows how to (re-) formulate a successful program will have less incentive to go out into the market place and take the risk of being creative. Reducing the number of independent, creative programming organizations arguably reduces viewer diversity. Further, farming out reduces programming sources and thereby increases the chances of the total loss of creativity in broadcast and MVPD programming (see section 3.3).

Even assuming that MVPD does increase the diversity in programming, what of the remaining 13% of households who do not get MVPD service? We need to know more about the situation of these viewers to evaluate the effect of the combined market on diversity and competition. Why have these broadcast viewers chosen not to obtain MVPD, is their resistance a reflection of the cost of MVPD service? Alternatively, are they discriminated by physical characteristics of the MVPD service, a personal preference (either lack of interest in MVPD or interest only in local broadcasting) or is it a passive choice (general disinterest)? Once we better understand why these households do not receive MVPD, we may be able to determine how much diversity, localism and competition this 'minimum user set' actually experiences and therefore how much there is to sacrifice.

With respect to the 'minimum user set', it would also be vital to

understand

whether to expect further reductions in this group with time. The growth of MVPD has been predicted to be limited in the future. Levy, J., Ford-Livene, M. and Levine, A., OPP Working Paper Series #37, Broadcast Television, September 2002, Table 1 citing Television Bureau of Advertising, Inc. Television Households, Trends in Television, at <http://www.tvb.org> last visited October 26, 2002. The basis for this claim is the 2% fall in cable subscribers between 2000 and 2001 and the limited growth (2%) of satellite over the same period. However, it would appear that the decline in 2001 does not reflect a long-term downturn in cable service. A more plausible explanation is that the decline corresponds with a general down turn in consumer interest in TV as reflected in the significant drop in advertising expenditures in 2001 compared to 2000. The reasons for the latter event include the normal decline experienced after a summer Olympics and the presidential and congressional elections. In addition, the dot com collapse and the September 11, 2001 tragedy may have exacerbated the normal downturn. Levy et al conclude, "It is premature to project any long-term downturn in advertising expenditures based on the 2001 experience". Id. It is suggested that these factors that negatively affected advertising revenue coupled with the general downturn in the U.S. economy are relevant to the market for MVPD. The projections for total MVPD subscribers in 2010, which do not exceed 85% (Levy, J. et al., Broadcast Television), may be too conservative.

5.2 Analog versus Digital

We are concerned with the diversity of programming for the 'minimum user set', because they represent the group who are provided with the least diversity (provided we dismiss the sub-group of the 13% who do not receive either broadcast or MVPD). In addition, this group may also be threatened in the near future by the switch in the broadcast signal from analog to digital transmission. We need to know how many of the broadcast stations will be converted to digital? We should also interest ourselves with particular characteristics of the 'minimum user set', in particular how often do they typically update their TV receivers and is this at variance with the rest of the public? Our concern is will they be able to receive the diverse programming that (hopefully) is

available? Two problems exist, the first that they do update their receivers but that a significant portion of their diversity preferences will be transmitted in an inappropriate (analog) form. Alternatively, if they do not update their TV receivers, but broadcast transmissions become predominantly digital, then there is a risk that their diversity will be significantly reduced b/c they cannot receive the transmission irrespective of what is actually available.

We also need to concern ourselves with the economics of a local broadcast station switching from analog to digital transmission. In those cases where broadcast stations need to increase economies of scale to rationalize the expense of switching to digital, some diversity and localism (particularly in the format of local news broadcast) may be lost. A scenario can be envisaged where networks trying to economize, initially group adjacent regions that were previously serviced by independent news services together (a recent suggestion of a merger between ABC and CNN news underscore this scenario <http://www.newsscape.com/>, last visited September 30, 2002). Local stations that remain independent will presumably end up in the category of the buggy whip manufacturer, never being able to justify the expense of upgrading for digital transmission? The affirmative obligation of cable to carry local broadcast and the availability of sufficient capacity will keep these stations and their diversity available for an interim period only if the public is able to receive the analog transmissions.

One possible way that the FCC could handle the receiver problem would be to set guidelines for the TV manufacturing industry that all TV's sold after some date (e.g., January 1, 2004) are digital with the ability to seamlessly switch and receive analog signals. By doing so, the FCC will insure that viewers, irrespective of whether they update their receivers or not, will be able to obtain the diversity, localism and competition in programming supplied by broadcasters. The FCC may also choose to insure the separate manufacture of rapid seamless switching devices for digital to analog conversion of broadcast signals for installation on analog receivers purchased prior to the specified date (2004) so that older TV apparatus can also receive the newer digital transmissions. This would effectively enable the second group referred to in the paragraph above to retain access to digital broadcast programming. In this regard it may also be

appropriate to require seamless switching from cable to satellite. If satellite is being heralded as the future competitor to cable, then a level playing field will be of enormous value as well as being a desirable future feature for consumers (For example an audience in the future may wish to increase its diversity by subscribing to both cable and satellite services, while others may want to mix and match different packages to increase their 'diversity' of choices).

An alternative to seamless switching, that may also insure diversity in programming would be to change the rules, so that not only cable, but also satellite was subject to the 'must carry' rules. In addition, it would be necessary to then require the MVPDs to convert analog broadcast signals for retransmission as digital.

This would insure diversity for those who received digital transmissions, while presumably those who received only analog signals could still receive the actual broadcast transmission. So under this scenario, those viewers who switched to MVPD because geographic constraints limited their reception would be serviced by MVPD, while those who did not could be serviced by the broadcast transmission. We note that their ability to receive is dependent on whether they have analog or digital receivers and whether the broadcast transmission is analog or digital. Even assuming there was no mismatch, this scenario clearly has a problem even if broadcast continues to broadcast on analog and those who choose to receive have an analog receiver. Both assumptions are time constrained.

Broadcast stations are starting to switch to digital and old analog receivers are being replaced.

A third scenario for insuring diversity during the analog to digital transition period would be to require MVPDs to undertake a universal service commitment. This might entail the MVPDs making available the broadcast channels covered by the 'must carry rules' at a rate that would insure >95 % hook-up and >98 % coverage of US homes. If MVPD transmitted the broadcast programming digitally, then this would also relieve stations of undertaking the costly upgrade of equipment to transmit digitally, at least in the short term. If one was concerned that the rapid demise of the broadcast networks could conceivably strike a death knoll for diversity, then this may be the best way to avoid that problem. An added benefit may be that we guarantee broadcasters of

retransmission as a way to help the local stations to continue to operate independently. This may also be the best method to insure that localism in programming was advanced. These local independent broadcast stations could increase localism somewhat in the way the FCC may have envisaged low power FM would have added to diversity in the radio broadcast market. Depending on developments with broadcast the independent local stations may become that reservoir of skill and talent that spawns new directors, with different themes and ideas that will ultimate become the mainstays guiding MVPD programming and thereby keep MVPD vital, diverse and competitive. See also section 3.4.

There are a number of good counterarguments to the proposals put forward in the third scenario. Firstly, does society have a responsibility to provide broadcast equivalent services to the 13% of homes that do not currently receive MVPD, equivalent to the universal service commitment for telephony? Secondly, isn't it really a historical anomaly that grants the original broadcast stations the right to enter our living rooms. Once we have switched our focus to MVPD and broadcast is a concept of the past, why should the FCC or Congress be concerned with NBC, CBS and ABC right to entertain. These networks did not pay for their licenses and now their time has run out. If diversity is present through MVPD, then should not the broadcast networks stand or fall on their merits? Otherwise we could be accused of creating a stage for aged silent movie stars in the 1930's or vaudeville actors in the 1960's, long after their time had passed.

On the other hand, the broadcast spectrum on which the networks, their local affiliates and the independent stations broadcast is a valuable resource. If it is being dedicated to an exceedingly smaller group of individuals then there may be an argument for the return of that spectrum at some point in time. We need to ask the question; at what level of viewer ship will we reassess the value of broadcast transmission? Clearly, if the 'minimum user set' could not afford MVPD services, then there might be a good argument for continuing to provide the bandwidth necessary to service this segment of the community. However, if this group is not economically disadvantaged then the rationale for dedication of the spectrum would appear to be based heavily on diversity and competition grounds. The third scenario may be a means of brokering a

resolution of a situation that has all the 'hallmarks' of an impasse.

5.3 National Ownership Rules

We are concerned with ownership that affects the properties of diversity, localism and competition in the MVPD market, which includes the broadcast stations. What we should be restricting is the ability of any of the major broadcast networks from becoming so dominant in the MVPD market that they are able to either directly or through their leadership role reduce diversity, localism and competition. In the short term we may also remain concerned about cross ownership of the broadcast networks (e.g., an NBC-ABC merger may reduce diversity now, but eventually with the growth of non broadcast MVPD programming, these networks may become so small that such a merger is allowable). It may be sensible to continue to place restraints on cross ownership of broadcast in relationship to the constraints on MVPD providers. In other words, we need to decide what are appropriate limitations for ownership of MVPD resources to advance our goals, and then ask the question what will be the consequences of applying the same rules to the broadcast industry.

The current restrictions limit cable to 65% of households (80 % of MVPD households) and an aggregate of 30% of MVPD subscribers nationwide. FNPR FCC01-263. In contrast, broadcast limits are 35% of TV households based on signal contours of national ownership. The system of constraints is like a card house, if you pull away one card then the whole system is vulnerable to the charge of 'arbitrary and capricious'.

If the national ownership limits were raised to allow a broadcast network to purchase stations to enable it to reach 100% of the market then presumably similar relaxation of the constraints on MVPD would take place. The implications of such a change are not clear. Particularly, what effect will this have on diversity and localism? Presumably the networks will either buy up their affiliates to defend their broadcast market domination, or seeing the change in the broadcast vs. MVPD regulatory 'winds', reposition to control the MVPD market? Perhaps they will assume that the former (buying up control of a network with access to 100% of the broadcast market) will enable the latter (a corresponding channel on MVPD)?

Further what will happen to the local independent stations contribution

to diversity if the networks leave the broadcast market to reposition in or gain control of the MVPD market? If the FCC enacts rules to allow seamless switching between analog and digital and broadcast/cable and satellite then this may give the local stations a chance to find a niche and survive independent of the network influence on MVPD. Presumably the present broadcast networks will either purchase their affiliates in order to insure 'must carry' on the MVPD provider, or if more cost effective simply contract with the MVPD provider. In the latter scenario the former network affiliate presumably becomes an independent broadcast station. Will conversion to digital transmission be necessary for the remaining local broadcasters to remain viable? If not, there is some real prospect of an increase in localism and diversity, not to mention reinvigorating programming in general as discussed in 5.3. The affirmative obligation of MVPD to carry local broadcast and the availability of sufficient capacity may allow these stations to act as a vehicle to launch a future network.

Without knowing the outcome of so many of the questions posed above concerning diversity in programming, it would appear premature to change the rules for ownership of broadcast stations.

5.4 Interacting with the Viewer

Currently, the broadcast network stations have 15 MHz of bandwidth that was dedicated for HDTV but remains largely idle. One question that we should ask is would this bandwidth be suitable for innovative new ideas? At the same time, we need to ask whether our attempts to make calculated guesses on the effects that regulatory actions have on diversity are other viewer preferences are sufficiently precise. If in the near future, it becomes possible to have a more interactive means of gauging viewer preferences and satisfaction then we need to think seriously whether this is necessary and desirable and what constraints should be placed on our use of such information if gathered.

6. Conclusions

This study concludes that the indices used to measure diversity need to be validated before Einstein's conclusions regarding the repeal of the FINSIN rules on diversity can gain any credence. As currently performed, Einstein's analysis cannot support the proposition that repeal of FINSIN did not effect diversity

on broadcast TV.

Diversity and quality of programming are susceptible to the high costs of production and the overall limited budgets available. Increasing the efficiency of MVPD by allowing economies of scale and streamlining may slow these ever increasing costs, but the more effective weapon will be competition from the market place. The challenge lies in changing to a more competition orientated MVPD market, while preserving diversity and localism.

By taking advantage of improvements in technology the restrictions on the number of broadcast networks that were imposed by the physical limitations of the broadcast spectrum and that previously limited diversity can be circumvented. The recognition of broadcast and MVPD as a combined market and the adoption of appropriate rules could have a positive effect on stimulating new and diverse programming. However, before any changes are adopted, well characterized studies to determine the level of diversity in broadcast and MVPD programming should be undertaken.

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on M. Einstein's article "Program Diversity and the Program Selection

Process on Broadcast Network Television". http://hraunfoss.fcc.gov/

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last visited October 26, 2002.

 Abstract This paper analyses the study by Einstein and some additional pertinent issues that will affect diversity in the broadcast market. Einstein's analysis can be criticized in three respects. Firstly, do the indices on which Einstein bases her data actually correlate with diversity? Secondly, even assuming that the data in the indices are relevant; what level of error in the data could be present before the observed trends were no longer statistically significant? Thirdly, can the indices measure overall diversity and yet be skewed because they fail to consider the quality of diversity? In addition, this comment considers the effect of the transition from analog to digital and the amalgamation in broadcast and MVPD programming on diversity and quality.

 Introduction The FCC released the aforementioned study by Einstein as one of twelve studies on the current media marketplace.<http://www.fcc.gov/ownership/studies.html>. This research is part of a FCC fact-finding mission on how media ownership affects diversity, localism and competition. FCC News media release, October 1, 2002. The FCC would like to decide what effect the relaxing of various broadcast ownership rules in 1999 had on these factors. In particular, the study by Einstein that investigated what effect the introduction and repeal of the financial interest and syndication rules had on diversity of programming. Einstein's report is broken up into two parts; the first is an extensive statistical analysis of prime time viewing audience preferences. The second part of the study is a qualitative investigation of FINSIN repeal on programming based on personal interviews with media executives involved in the broadcast programming industry. The study endorses FCC deregulation of the cross ownership rules. The analysis (a) casts considerable doubt on whether the FINSIN

rules were effective in achieving diversity on prime-time broadcast TV and
(b) finds that the increased network involvement in programming following
repeal of FINSIN has not, with certainty, affected the quality of programming.
This paper analyses the study by Einstein, but also
tackles some broader questions that the FCC study is directed toward, what
factors will affect diversity in the broadcast market. Specifically,
we ask whether the indices that Einstein uses to probe diversity would be
responsive on a qualitative level to some obvious biases. Next we ask
from a statistical point of view how we should interpret the data from the
indices. We also ask a number of questions concerning the role
independent producer's play in creating diversity. The paper then
suggests some constructive ways that the concerns regarding the indices as a
tool to measure diversity, localism and competition could be addressed. Finally, this paper raises some preliminary
questions regarding the transition from analog to digital and broadcast to
multi-channel video programming distributors (MVPD) and the effects on
diversity, localism and competition.
(i) What is diversity? Can there be diverse programming within a sub category (e.g. detective) that
Einstein's analysis will fail to evaluate? On the other hand can diversity
be lower when a theme is reused in different genres and sub-categories,
e.g., a love triangle. Is programming diversity, racially, socially,
age or sex orientated and do the subcategories and therefore the statistical
analysis reflect this concern?
(ii) What level of error in the data would result in a significant change in the trends observed? Specifically, what level of error in the data could be involved before the
observed trends were no longer statistically significant?
(iii) What will be the effect of the amalgamation of programmers on the quality of
programs, their diversity and the selection process?
(iv) How can the FCC use data from studies such as that carried out by Einstein?
What should the FCC do to be able to correct for the deficiencies of the
study?
(v) What will be the effect of the change from analog to

digital

transmission and
the presumed shift from broadcast to MVPD on diversity?</DIV>

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1. What is Diversity?

In Schurz

Communications v. FCC, 982 F.2d 1043 (7th Cir. 1992), Judge
Posner proposed

that the FCC's concern with the television industry "is not just with
market

power in an anti trust sense but with diversity, and diversity is promoted by

measures to assure a critical mass of outside producers and independent

stations."
However, Posner noted that the FCC neither defined the

meaning of the word diversity, nor
distinguished between source, outlet and

programming diversity. Id at 1054.
The latter
concept, Posner proffered, referred to the heterogeneity of programs, where source and

outlet diversity was a means to the end of programming diversity.
Id.

Einstein has taken Posner at his word and categorized the programming

according to heterogeneity during two time periods, from 1966 to 1974 and

from 1989 to
2002. Each program viewed during defined prime-time hours is

allotted into one of twenty-
two program content categories.

Diversity in the

program schedule was then 'calculated'
based on the Dominick Pearce (D-P)

diversity indicator, the Herfindahl-Hirschman (H-H)
Index or a horizontal

diversity index.
In addition, a correlation between the types of
programming and the producers of that programming was undertaken.

Einstein,

p. 6. </DIV>

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<DIV>
1.1 Diversity depends on Categorization

Using the evaluation based on the D-P index, diversity

is a function of the
categories and sub-categories selected and subject to

the biases involved in this selection
procedure.
If a genre is not

broken down into sub categories such as is the case for
'situation comedies

(sit-com)' or 'motion pictures' then there is an increased likelihood
that

either of these two genres will be one of the three largest categories and

therefore
contribute to the D-P index. As a result the response will be

weighted to changes in
programming that effect the largest categories.

If any factors reduce the programming of
either 'sit-com' or 'motion

pictures' such that these do not make up one of the three largest

categories
then this may significantly influence 'diversity' whereas a similar
magnitude

drop in a genre which is broken up into sub categories will not
influence
'diversity' as
measured by the D-P index. For example a 4.5 %
drop in
general drama between 1994 and
1995 from 13.6 to 9.1% has no effect
on the
index. In contrast, a 3.9 % reduction in sit-
com prime time
viewing
between 1966 and 1967 from 17.3 to 13.4 % does effect
'diversity' as

reflected in the 3.7 % increase in the D-P index between these
years.

Einstein, Appendix 1.</DIV>

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<DIV> 1.2 Diversity within a
Subcategory
 From the point of view of the D-P index,
'diversity' is a

change in the
viewing preferences of the broadcast audience as
measured by

the total amount of viewing
of certain major genres. But this
completely overlooks the diversity that is present within a

subcategory. Consider the 'crime/detective' subcategory of
drama. Presumably shows
such as 'Burkes Law', 'Hawaii 5-0',
'Starsky

 'Hutch', 'Columbo', 'Magnum PI',
'Barbarillo', 'McBean', 'HSB',

'Homicide', 'NYPD Blue', 'L.A. Law', 'Law Order',
'Ali
McBeal',

'Robbery Homicide Division' and many more could all arguably be

classified

within this sub-category. However, to classify all these shows in
the same

sub-
category means that there would be no change in diversity if you

substituted one program
for another program. While that may be
the

case for a viewer who considers 'Law
Order' as a successor to
'L.A.

Law' however, for a considerable number of viewers
although there
may be

some 'cross over' in viewer appeal, there is as much diversity

between

either of these shows and 'Ali McBeal' as there is between two different

genres.</DIV>

<DIV> </DIV>

<DIV> 1.3 Lower Diversity Where a Theme
is used in

Different Subcategories
 The study claims that there is
significant

diversity in horizontal programming,
but what if programs in
different

sub-categories use the same formula within different
settings to simulate 'diversity'? For example, the plot of a love triangle can be used in
literally unlimited settings, e.g., musical ('West Side Story' with Tony, Maria & Chicco),
westerns ('Bonanza', 'Gunsmoke', 'Little House on the Prairie' they all did it!), general
drama ('Waltons', 'Eight is Enough'), detective ('Moonlighting' revolved around this
theme with Bruce Willis, Cybil Shepherd & guest), sit-coms (Friends reused this theme
again with Joey, Rachel & Ross) and women's serials.
 If the theme is transparent then the viewer may after viewing the preview
know the outcome and his response may be the disinterest he experiences for another re-
run. Is this really diverse programming? It is questionable that this is the type of
heterogeneity to which Justice Posner referred. Schurz, 982 F.2d at 1054.</DIV><DIV> </DIV><DIV> 1.4 Social, Racial, Age and Sex Related Perceptions of Diversity
 The inability of the index to address social, racial, age and sex related values
of diversity in programming is further illustrated by changes in racial viewing preferences.
Sit-coms have contributed to the D-P index in all but two of the years studied (1967 and
1974). Whereas in the 1960's there was very limited access for black African-American
(bAA) actors in major sit-com roles that is no longer the case. With the success of the
'Cosby Show' in the late 80's, the networks have targeted the growing appetite of bAA
audiences with successful programs such as 'Fresh Prince of Bel-Air', 'Kenan and Kel'
and the 'Burnie Mac Show'. With the exception of a few shows (e.g., the 'Bill Cosby
Show' and 'First Prince of Bel-Air') these programs attract relatively lower numbers of
white Caucasian (wC) audiences. In contrast, shows such as 'Frazier', 'Seinfeld' and
'Friends' have appeal to relatively lower numbers of bAA audience. These wC or bAA
preferred programs are different and presumably diverse. Since 'sit-com' viewing has
remained reasonably stable (17.3% in 1966 vs. 15.9% in 2002) then there must have been
a

considerable reduction in sit-coms appreciated by wC audiences to compensate for the
programs attracting bAA audiences. This implies a reduction in diversity for largely wC
audiences. Without a breakdown of the viewing preferences we cannot determine whether
the bAA audience has increased (if he did not watch 1960's sit-coms) or has remained
unchanged (if the bAA preferred sit-coms are viewed instead of the previous time spent
watching 1960's sitcoms).
 However, because the D-P index does not distinguish between the targets of
different sub categories it cannot reflect the very real changes in viewer diversity, which
have accompanied these significant changes in viewing preferences. Similarly, the D-P
index cannot reflect the continuing inability of the major networks to satisfactorily address
the tastes of Latino viewers (who with the exception perhaps of "George Lopez" do not
have shows which attract large community following) nor for that matter Asian-American
audiences (wasn't one character in Ali McBeal of Asian descent?).
 Similarly an example of an age related perception of diversity could be
drawn from music (e.g. a comparison of MTV versus a classical concert). An age trend
may be very subject specific, for example feature films and comic strip heroes are being
reborn and preferences may skip a generation or be largely age independent. An example
of a social perception of diversity could compare a sit-com such as 'Archie Bunker', which
appeals to generally a blue-collar audience with a white-collar audience's preference for a
program such as Alley McBeal. Finally, the soap opera "Days of our Lives" typically
drew its audience from women, while more men view football. These examples illustrate
at different sexes may have a different perception of what constitutes diversity.</DIV><DIV> </DIV><DIV> 1.5 Are Hours Viewed the Best Method of Measuring Diversity?
 News programs may significantly add to a viewer's perceived diversity yet
because of their format they are statistically weighted against in the analysis undertaken. A
station that

increases programming from one fifteen minute news slot at 6 PM, to news at 6,
9 and 11 PM in which the program is not a repeat but has actually updated the viewer
regarding latest developments in news events has arguably made a significant commitment
in this format to diversity. However, the three-fold increase would barely register in terms
of the H-H diversity index and may not register at all in the D-P index. In contrast, a
station that broadcasts a world cup soccer match, in addition to significant NFL and
college football broadcast commitments will register an increase on the H-H index (and
possibly the D-P index) because of the increased hours of sports viewing. However, to a
significant minority (majority?) of viewers, there has been no increase in diversity by
presenting the FAA Cup. The alternative code of football is still football and the
additional eight quarter programming hours do not add to diversity of viewing. Here the
format of the activity, two additional quarter hour news slots versus eight additional
quarter hours of soccer effects the contribution of the activity towards the index. While
news subcategory may have undergone a significant relative increase (up to 66%), the two
additional quarter hours will amount to less than 0.5% change in the subcategory and
almost certainly will not alter the D-P index. In contrast, the football broadcast (which
may represent only a 20% relative increase in sports programming) will result in a 2.5%
change to the programming subcategory and may thereby affect the index. Since news
programming makes a particularly important contribution towards localism through many
affiliate stations, a system that disfavors the diversity in this manner also is likely to
misrepresent localism.</DIV><DIV> </DIV><DIV> 1.6 Which Categories?
 Einstein is obviously aware that the use of the D-P index is open to criticism
as she investigates whether the data are skewed based on the use of categories
representative of programs from the 1970's. As a result she recalculated the D-P index
based on categories representative of the type of programming

the 'comedy' subcategory of 'variety'. If the show does not easily fit into only one
subcategory then there is a possibility of it being incorrectly classified. The question is
what effect would an error of misclassification of Ali McBeal have on the index?
 Based on the data in appendix 1, we observe an average and standard
deviation of 41.3 ? 5.8 % for the D-P index over all the years presented. Further, for each
year the value of the D-P index is within one standard deviation of this average value for
the great majority (16 out of the 23) years presented. If we just consider those years where
the data was more than one standard deviation outside of the average value, then the
magnitude of the deviation from the average plus or minus one standard deviation involved
between 0.5 to 3.4 viewing hours (average 1.9?1.0 hours). That is, in the most discordant
year if 3.4 hours of viewing (out of the 80 hours of weekly viewing) were incorrectly
classified then that year (1997) would have been within one standard deviation of the
mean. Basically the difference between the scatter associated with one standard deviation
and the largest dips (1997) or peaks (1968) in 'diversity' amounted to 3.4 and 2.2 viewing
hours respectively (i.e. if 3.4 out of the 80 viewing hours assigned in 1997 to 'sit-coms'
were better categorized as 'comedy' then the D-P index would have reported the data for
that year as being within one standard deviation of the mean; similarly if 2.2 out of 40
'western' viewing hours in 1968 would be better categorized as 'sit-com's then the high in
'diversity' would disappear).
 In the above discussion it is not necessarily assumed that no trend within one
standard could be meaningful. The purpose behind examining data, which lie outside one
standard deviation, was simply to consider the extremes of a possible problem. It should
be noted that without further information it is not possible to conclude one way or the other
the relevance of data within one standard deviation of the mean. We conclude that without
some measure of the error associated with the assignment of viewing hours to (sub)
categories we cannot know

whether any of the trends reported for the 'diversity' data are meaningful. Finally, without a rigorous statistical analysis e.g., determination of whether variables are dependent or independent (see section 4.3), then the value of both indices are severely limited. In addition, statistical based rules for excluding single outlying data points should be applied when appropriate.

2.2 Circular Argument of Concordance
Concordance between the D-P and H-H index should not be

asserted as confirming the analysis and undermining this critique. Einstein resorts to the H-H index to verify the results of the D-P index. If the D-P index is flawed, then what we have are the results of the H-H index (with there by no means insignificant limitations) to base our conclusions on verification of trends. That is, if the critique on the D-P index is accurate, then we cannot use the results of the D-P index to bolster our conclusions concerning the H-H index and vice versa.

2.3 Deciding Whether Trends are Valid or can be disregarded
What is most disturbing in the analysis of the results in general is the manner in which results, which are concordant, are used to verify the validity of the methodology and draw further conclusions whereas data that are at odds with either other aspects of the data or the theory that Einstein is proposing are ignored with no rationale. This part of the analysis is the least scientific. For example consider the Figures of Program Genres by % for 1966-1974 and 1989-2002. Einstein, pp. 8 and

9. (a) It is claimed that "the largest growth was in drama in the 1970's from 49.3 (1966) to 56.3% (1974)", however this could just as easily be ascribed to a one year growth (or perhaps a sampling bias?) occurring from 1973 (42.9%) to 1974 (56.3%); where the underlying trend from 1966 (49.3%) to 1973 (42.9%) would then arguably be described as a decline. (b) It is arguable whether the most statistically significant increase for the period 1966 to 1974 described in section 2.3(a) was in the

'other' category (which includes children's shows and sports), which was a more than two fold relative increase. The question of relative effects is addressed above (see section 1.5). (c) The statement that "Dramas have particularly taken off within the last two years." is also contentious and at least should be qualified with respect to other trends. While the viewing in 2000 (36.4) is smaller than 2001 (41.7), which again is smaller than 2002 (43.9), all these values are within one standard deviation (6.1%) of the mean 39.9% and may simply be normal scatter. The question of errors in the assignment and the implications are considered above (see section 2.1).

 3. Quality in Programming

 3.1 Can the Diversity Index reflect

Quality? Quality in programming is probably one of those

less conundrums that is easier to label with a truism "you know it

when you see it" than it is to define. At the same time, the

observer can quickly recognize the difference between a quality act

and a workmanlike performance lacking the substance, character, development

or sometimes just the finesse or glitter of class showmanship.

Einstein's more qualitative section on the programming selection process makes

clear that there has been a massive amalgamation of producers in the

broadcast-programming arena with the repeal of the FINSIN

rules. There is a real risk that concomitant with the dramatic amalgamation the

industry has undergone, the talent to produce quality programming will

somehow be lost. With these concerns in mind, there are a number of

questions, which remain to be addressed. Firstly, has the quality of

diverse ideas that go into the shows that are produced fallen, despite the

retention of 'diversity' as measured by the indices? This is not just an

extension of the question asked in sections 1.3 and 1.5 (although we note that

rehashing themes or padding programming via lengthy formats while it

may

increase diversity as measured by the indices, is not
increasing quality). There is an additional legitimate question whether the 'diversity' that
is measured can reflect changes in the quality of the

program. Because the categorization
of programming does not address

the entertainment quality, the indices cannot reflect
quality of programming.</DIV>

<DIV> </DIV>

<DIV> 3.2 Replacement

Decisions
 Even if we

can be assured there has been no immediate direct loss of talent

from the

amalgamation following FINSIN repeal, can we be sure that the basic elements of

quality programming have not been set adrift from their nurturing supports.

Can the
amalgamation of networks and previously independent programmers,

which resulted after
FINSIN was repealed, reduce diversity at some later

point (perhaps 5 years from now)?
For example, what will happen when

the current generation of outside producers who were
acquired by the

networks during the amalgamation retire? Has the repeal of the FINSIN

rules decimated the spawning fields of creative genius that led to the

diverse ideas on
broadcast TV? Finally, if not now, will the continued

success of the network stations in
developing programming finally result in

the demise of the independent producer resulting
in stagnation more than 5

years from now? We need to know where do the innovative
ideas come

from, is it the networks or the independents or a combination?

What role

do
the independents play in that process and is it critical?

Are the

networks now satiated and
self-sustaining, or will they continue to devour

independents as the need arises?
 Economists with a macro perspective

are always keen to point out that
amalgamation can reduce programming costs

and make goods available at a cheaper price.
In the case of the

broadcast market where the programming is not received by a paying
consumer,

one might imagine that amalgamation could lead to lower production costs and

thereby more diversity or higher quality (it is also arguable that the

efficiency gains of
amalgamation could be passed on to the

advertisers in the form of reduced rates who could then pass on savings to consumers in the form of reduced prices of advertised goods'). Because of the direct feedback of consumer dissatisfaction on program viewing, the broadcast stations do have substantial reasons to transform any increased efficiency into either a better quality or less costly good. Despite this desire, Einstein reveals that the actual costs of producing a half hour pilot have risen quite dramatically and are currently quite substantial (can approach \$2M). Einstein, p. 21. One can only surmise that the increased

efficiency of amalgamation has been used to slow an even steeper increase in costs that would otherwise have taken place? In any case, the consequence of this and the fact that all networks have limited budgets is that when a group of network executives are presented with a poor performing program they are often left with a Hobson's choice (either stick with a poor program or switch to a re-run, the cupboard is bare). Thomas Ward 1577-1639. However, either choice could result in the retention of diversity as measured by the current indices (if the program was replaced by a re-run, it could even result in an increase in 'diversity'), but intuitively we would expect that the action (or inaction) reduced diversity. We need to know, are there any trends in terms of networks shifting to independent producers (either through acquisition of the firm or a program) after being left previously with Hobson's choice decisions? Do the independents serve to infuse the networks with their vitality? In addition, should there be some lower factor for re-runs (or poor performing programs) applied to a diversity analysis?

3.3 A Template for Diversity and Quality in MVPD Programming

In the 1970-80's a number of foreign films which broke from the Hollywood style and told stories of interest had commercial success (e.g. 'Walkabout', 'Sunday Too Far Away', 'Picnic at Hanging Rock', 'Breaker Morant', 'Mad Max') and it was surmised by many that Hollywood had lost

direction. L.Corporus, Is There A Resurgence of Values in

Hollywood? http://www.r2rministries.com/
last
visited November 22, 2002. Although
clearly a generality,
there is a
public perception "that Hollywood makes one film a year
with 80
titles" M.
Colville-Andersen, http://www.euroscreenwriters.co
m
last visited
November 22, 2002. In contrast, the blossoming foreign
film
industries were by nature
based on the beliefs and commitment of
individual
scriptwriter's producers, directors and
actors. In these
foreign films
the plot was not 'a given', and while the audience may not
have left
with
that smug feeling one gets when the good guy 'wins out in the end', the

audience felt they had been a part of the drama. They had been

entertained.
 The wrong step that Hollywood made in the late
1970's
compared with the
foreign film industry exemplifies how a
conglomeration of
filmmakers (e.g., Warner Bros.,
MGM and Universal Pictures) could
simultaneously become bereft of direction and
flounder. This
should
serve to remind us not only that both broadcast and MVPD
programming
could
also flounder if the creative input is extinguished, but also more

importantly how essential it is to protect the goals of diversity,
localism
and competition.
In the case of the feature film industry
Hollywood
remains the central cog, but many see the
contribution from
international
participants as being intertwined with the current growth
and
success (e.g.,
the recent spate of U.S. remakes of French films such as Nikita, 3 Men

and a
Baby, Samurai). The development of the international film industry
could
serve as a
template for development of diversity and quality in MVPD

programming. Rather than
relying on one recipe for success,
the FCC
should encourage conduits to enable access of
the programming
infrastructure
for dynamic, imaginative and refreshing young writers,
directors,
producers
and actors who are not associated with the mainstream programming

process. Isn't this the 'critical mass' concept of outside
producers
and independent stations
that Judge Posner's argued promotes
diversity?

would be a measure of classification error. The level of classification error would then be superimposed on top of the categorization error. Note that even if the categorization process was shown to be independent of racial factors it does not mean that the index does not fail to reflect racial diversity (the argument in 1.4 about the growth of sitcoms that a baa audience prefers, which were not reflected in any increase in diversity would argue strongly against that conclusion). Thus it is emphasized that the classification error so determined would be at most a minimum

value.

4.3 Empirical

Approach

An alternative approach at estimating error would be to try and understand why

the categorization or classification is deficient as outlined in sections

1.1-1.6 and adjust the category, classification or process accordingly. Any reasonable adjustment to the process that did produce

a change in the measured diversity would lead to a measure of error. A

method to investigate the error in the indices might take into account the

length of time of duration of a program format and weight its contribution

to the indices accordingly. For example, it is arguable that an

increase in the programming of a news program should be weighted equally

with a retransmission of a 2-hour sports event (see section 1.5).

4.4 Are Social, Racial, Age and Sex Variables

Independent of Diversity? A more thorough statistical analysis of the

social, racial, age or sex related proclivities of classification and/or

categorization tasks should be able to determine whether the assignment of

programming to categories (the classification) or the actual choices of

categories (categorization) are independent of biases. By determining if

these processes are dependent or independent variables we would be in a

position of knowing whether some formulation of different demographic

representatives was necessary to carry out these tasks.

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4.5 Incorporating Dependent Variables into

Diversity

Ultimately, if we presume that the indices fail to reflect diversity and we find
that the variables investigated in 4.4 are not

independent, then we should in theory be able
to use this information to

optimize the acquisition of data that better reflects diversity.

By

changing parameters such as the social, racial, age or sex related characteristics of the
humans involved in these different aspects of the

data accumulation, and then recalculating
the indices, we would expect that

any statistically significant change in the indices would
reflect a better

measure of diversity.
 For example, one could turn to the biases of all the

people who run the program, to everyone from the author of the study (M.

Einstein) to the
FCC commissioners who decided the boundaries for the review

of diversity, localism and
competition and ultimately to the members of

Congress who charged the FCC with this task
and then ask what effect the

social, racial, age or sex characteristics would have on the
way they would

carry out their individual tasks associated with this

investigation.

Perhaps a more intuitive (but conceivably biased

approach) would be to
examine some of the findings in this critique and pose

the question what happens if we
adjust for the perceived problem.
 For

example, we recognize that sitcoms have a measure
of diversity based on the

racial characteristics of the actors.
 Therefore we could change
the

categorization or classification processes until the indices reflect a change in

diversity
for sit-coms of one period when the racial diversity was not

present compared with
another period when the diversity was present.

See also section 3.2.
Similarly, should not audience endorsement be better

encapsulated into diversity so that the
network that runs an unpopular

sit-com is penalized?
 Perhaps we need a more
sophisticated manner than

the Nielsen ratings of measuring viewer approval.
 For example
a system

that could take into account, that a program was merited as high quality despite

low viewer ship and appropriately rated compared to a popular program that did not have the same endearing properties. See also section 5.4.

4.6 Foreseeable Problems

One problem with this approach will be quantitative. What effect on the indices will be sufficient, are we satisfied with a 5% increase in diversity following the introduction of sitcoms that appeal to bAA? Because we are using change in the index as a measure of appropriate classification/categorization, we run into a circular problem that we can no longer use the index as a measure of the property (diversity). Another more general problem is the difficulty of re-tabulating the results for previous years. Not only do our perception of programming change with time, but also phenomena such as fore- and hindsight bias would come into play. Jeffrey J. Rachlinski, A positive Psychological Theory of Judging in Hindsight, 65 U. CHI. L. REV. 571 at 606 (1998). How a bAA audience viewed sit-coms in the 1960's is something that we can never know. All we can ask is how different age group bAA audiences in the 21st Century would view 1960's sit-com programming and hope that the differences of different age groups (perhaps those that did watch the programming first in the 1960's compared with those that had never been exposed to it) would be helpful in hypothesizing what the original response would have been in the 1960's.

5. A Time of Transition

If the FCC acted with the kind of foresight that Secretary of Commerce Wilson utilized in 1927, it would not be trying to consider the effects of changes in the ownership rules on diversity in the broadcast industry. If we look 10 years forward, in 2012, then the terrain may look exceedingly remote. There may be no broadcast industry 'per se'. There will, however, almost certainly be an MVPD industry. Ultimately, it is to this industry that we should look in our efforts to insure diversity. Having stated that, we must remain concerned that in the transition process, we do

arrangement
with HBO and has begun repurposing Monk. Einstein, p. 30. This
report
may be the beginning of a coming trend. A recent report by Tim
Goodman

suggests a correlation between the retention of programming and the
availability of
replacements. San Francisco Chronicle, November 6,
2002, pp
D1, D5. One could
imagine a scenario where a program such as
"Robbery
Homicide Division" produced and
owned by CBS unable to find a
competitive
spot amongst a strong CBS program lineup
might be shifted to
strengthen a
weaker ABC lineup. The network would argue it was
giving the
ABC
viewer a better line-up and possibly improving diversity (e.g., if CBS
had

better crime/detective script writers or directors the station could

generate more of these
shows but farm them out to ABC and claim that
they
were increasing diversity). However,
the fallacy of this
argument is
not difficult to penetrate. The viewer is entitled to the best

competition available and one of the successes of programming has
been the
ability to
create new and diverse ideas (e.g. RTV). A network
that
knows how to (re-) formulate a
successful program will have less
incentive
to go out into the market place and take the risk
of being
creative. Reducing the number of independent, creative programming

organizations
arguably reduces viewer diversity. Further, farming out reduces

programming sources and thereby increases the chances of the total
loss of
creativity in
broadcast and MVPD programming (see section
3.3).
Even assuming that MVPD does increase the diversity in
programming, what
of the remaining 13% of households who do not get
MVPD
service? We need to know
more about the situation of these
viewers to
evaluate the effect of the combined market on
diversity and
competition. Why have these broadcast viewers chosen not to obtain
MVPD,

is their resistance a reflection of the cost of MVPD service?
Alternatively, are they
discriminated by physical characteristics of
the
MVPD service, a personal preference
(either lack of interest in MVPD
or
interest only in local broadcasting) or is it a passive
choice
(general
disinterest)? Once we better understand why these households do
not

receive MVPD, we may be able to determine how much diversity,

localism and

competition this 'minimum user set' actually experiences and
therefore how
much there is
to sacrifice.
 With respect to the 'minimum
user set',
it would also be vital to understand
whether to expect further
reductions in
this group with time. The growth of MVPD has
been predicted to
be
limited in the future. Levy, J., Ford-Livene, M. and Levine, A.,
OPP

Working Paper Series #37, Broadcast Television, September 2002,
Table 1
citing
Television Bureau of Advertising, Inc. Television Households,
Trends
in Television, at
'http://www.tvb.org last visited October 26,
2002.
The basis for this claim is the 2% fall
in cable subscribers between
2000
and 2001and the limited growth (2%) of satellite over
the same
period.
However, it would appear that the decline in 2001 does not reflect a

long-term downturn in cable service. A more plausible
explanation is
that the decline
corresponds with a general down turn in consumer
interest
in TV as reflected in the
significant drop in advertising
expenditures in
2001 compared to 2000. The reasons for
the latter event
include the
normal decline experienced after a summer Olympics and the

presidential and
congressional elections. In addition, the dot com collapse and the

September 11, 2001 tragedy may have exacerbated the normal
downturn.
Levy et al
conclude, "It is premature to project any long-term
downturn in
advertising expenditures
based on the 2001 experience".
Id. It
is suggested that these factors that negatively
affected advertising
revenue
coupled with the general downturn in the U.S. economy are
relevant
to the
market for MVPD. The projections for total MVPD subscribers in 2010,

which
do not exceed 85% (Levy, J. et al., Broadcast Television), may be too

conservative.</DIV>
<DIV> </DIV>
<DIV> 5.2 Analog versus
Digital
 We are
concerned with the diversity of programming for the 'minimum user

set',
because they represent the group who are provided with the least
diversity
(provided
we dismiss the sub-group of the 13% who do not receive
either

broadcast or MVPD). In
addition, this group may also be threatened in the near future by the switch in the broadcast
signal from analog to digital transmission. We need to know how many of the broadcast
stations will be converted to digital? We should also interest ourselves with particular
characteristics of the 'minimum user set', in particular how often do they typically update
their TV receivers and is this at variance with the rest of the public? Our concern is will
they be able to receive the diverse programming that (hopefully) is available? Two
problems exist, the first that they do update their receivers but that a significant portion of
their diversity preferences will be transmitted in an inappropriate (analog) form.
Alternatively, if they do not update their TV receivers, but broadcast transmissions become
predominantly digital, then there is a risk that their diversity will be significantly reduced
b/c they cannot receive the transmission irrespective of what is actually available.
 We also need to concern ourselves with the economics of a local broadcast
station switching from analog to digital transmission. In those cases where broadcast
stations need to increase economies of scale to rationalize the expense of switching to
digital, some diversity and localism (particularly in the format of local news broadcast)
may be lost. A scenario can be envisaged where networks trying to economize, initially
group adjacent regions that were previously serviced by independent news services
together (a recent suggestions of a merger between ABC and CNN news underscore this
scenario http://www.newsscape.com/, last visited September 30, 2002). Local stations
that remain independent will presumably end up in the category of the buggy whip
manufacturer, never being able to justify the expense of upgrading for digital transmission?
The affirmative obligation of cable to carry local broadcast and the availability of
sufficient capacity will keep these stations and their diversity available for an interim
period only if the public is able to receive the analog transmissions.
 One

possible way
that the FCC could handle the receiver problem would be
to set
guidelines
for the TV manufacturing industry that all TV's sold after some date
(e.g.,

January 1, 2004) are digital with the ability to seamlessly switch
and
receive analog
signals. By doing so, the FCC will insure that
viewers,
irrespective of whether they update
their receivers or not, will be
able to
obtain the diversity, localism and competition in
programming
supplied by
broadcasters. The FCC may also choose to insure the separate

manufacture of rapid seamless switching devices for digital to
analog
conversion of
broadcast signals for installation on analog receivers

purchased prior to the specified date
(2004) so that older TV
apparatus can
also receive the newer digital transmissions. This
would
effectively
enable the second group referred to in the paragraph above to retain

access
to digital broadcast programming. In this regard it may also be
appropriate to
require seamless switching from cable to
satellite. If
satellite is being heralded as the
future competitor to cable, then
a level
playing field will be of enormous value as well as
being a desirable
future
feature for consumers (For example an audience in the future may

wish to
increase its diversity by subscribing to both cable and satellite
services,
while
others may want to mix and match different packages to
increase their
'diversity' of
choices).
 An alternative to seamless
switching, that
may also insure diversity in
programming would be to change the
rules, so
that not only cable, but also satellite was
subject to the 'must
carry'
rules. In addition, it would be necessary to then require the

MVPDs to
convert analog broadcast signals for retransmission as digital.
This would

insure diversity for those who received digital transmissions, while
presumably those who
received only analog signals could still
receive the
actual broadcast transmission. So
under this scenario,
those
viewers who switched to MVPD because geographic constraints
limited
their
reception would be serviced by MVPD, while those who did not could be

serviced by the broadcast transmission. We note that their

ability to receive is dependent
on whether they have analog or digital receivers and whether the broadcast transmission is
analog or digital. Even assuming there was no mismatch, this scenario clearly has a
problem even if broadcast continues to broadcast on analog and those who choose to
receive have an analog receiver. Both assumptions are time constrained. Broadcast
stations are starting to switch to digital and old analog receivers are being replaced.
 A third scenario for insuring diversity during the analog to digital transition
period would be to require MVPDs to undertake a universal service commitment. This
might entail the MVPDs making available the broadcast channels covered by the 'must
carry rules' at a rate that would insure >95 % hook-up and >98 % coverage of US homes.
If MVPD transmitted the broadcast programming digitally, then this would also relieve
stations of undertaking the costly upgrade of equipment to transmit digitally, at least in the
short term. If one was concerned that the rapid demise of the broadcast networks could
conceivably strike a death knoll for diversity, then this may be the best way to avoid that
problem. An added benefit may be that we guarantee broadcasters of retransmission as a
way to help the local stations to continue to operate independently. This may also be the
best method to insure that localism in programming was advanced. These local
independent broadcast stations could increase localism somewhat in the way the FCC may
have envisaged low power FM would have added to diversity in the radio broadcast
market. Depending on developments with broadcast the independent local stations may
become that reservoir of skill and talent that spawns new directors, with different themes
and ideas that will ultimately become the mainstays guiding MVPD programming and thereby
keep MVPD vital, diverse and competitive. See also section 3.4.
 There are a number of good counterarguments to the proposals put forward in
the third scenario. Firstly, does society have a responsibility to provide broadcast

equivalent services to the 13% of homes that do not currently receive MVPD, equivalent to
the universal service commitment for telephony? Secondly, isn't it really a historical
anomaly that grants the original broadcast stations the right to enter our living rooms. Once
we have switched our focus to MVPD and broadcast is a concept of the past, why should
the FCC or Congress be concerned with NBC, CBS and ABC right to entertain. These
networks did not pay for their licenses and now their time has run out. If diversity is
present through MVPD, then should not the broadcast networks stand or fall on their
merits? Otherwise we could be accused of creating a stage for aged silent movie stars in
the 1930's or vaudeville actors in the 1960's, long after their time had passed.
 On the other hand, the broadcast spectrum on which the networks, their local
affiliates and the independent stations broadcast is a valuable resource. If it is being
dedicated to an exceedingly smaller group of individuals then there may be an argument for
the return of that spectrum at some point in time. We need to ask the question; at what level
of viewer ship will we reassess the value of broadcast transmission? Clearly, if the
'minimum user set' could not afford MVPD services, then there might be a good argument
for continuing to provide the bandwidth necessary to service this segment of the
community. However, if this group is not economically disadvantaged then the rationale
for dedication of the spectrum would appear to be based heavily on diversity and
competition grounds. The third scenario may be a means of brokering a resolution of a
situation that has all the 'hallmarks' of an impasse.</DIV><DIV> </DIV><DIV> 5.3 National Ownership Rules
 We are concerned with ownership that affects the properties of diversity,
localism and competition in the MVPD market, which includes the broadcast stations.
What we should be restricting is the ability of any of the major broadcast networks from
becoming so dominant in the MVPD market that they are able to either directly or through
their leadership role reduce diversity,

localism
and competition. In the short term we may
also remain
concerned about
cross ownership of the broadcast networks (e.g., an NBC-
ABC merger
may
reduce diversity now, but eventually with the growth of non broadcast

MVPD
programming, these networks may become so small that such a merger is

allowable). It may be sensible to continue to place restraints
on
cross ownership of
broadcast in relationship to the constraints on
MVPD
providers. In other words, we need
to decide what are
appropriate
limitations for ownership of MVPD resources to advance
our goals,
and then
ask the question what will be the consequences of applying the same

rules to
the broadcast industry.
 The current restrictions limit cable to
65% of
households (80 % of MVPD
households) and an aggregate of 30% of MVPD

subscribers nationwide. FNPR FCC01-
263. In contrast,
broadcast
limits are 35% of TV households based on signal contours of
national

ownership. The system of constraints is like a card house, if you
pull
away one
card then the whole system is vulnerable to the charge of
'arbitrary and capricious'.
 If the national ownership limits
were
raised to allow a broadcast network to
purchase stations to enable
it to
reach 100% of the market then presumably similar
relaxation of the
constraints on MVPD would take place. The implications of such a

change are not clear. Particularly, what effect will this have
on
diversity and localism?
Presumably the networks will either
buy up
their affiliates to defend their broadcast market
domination, or
seeing the
change in the broadcast vs. MVPD regulatory 'winds', reposition
to
control
the MVPD market? Perhaps they will assume that the former (buying
up
control
of a network with access to 100% of the broadcast market)
will
enable the latter (a
corresponding channel on
MVPD)?
 Further what
will happen to the local independent stations contribution to

diversity if
the networks leave the broadcast market to reposition in or gain control
of the

MVPD market? If the FCC enacts rules to allow seamless
switching
between analog and
digital and broadcast/cable and satellite then
this may

give the local stations a chance to find a niche and survive independent of the network influence on MVPD. Presumably the present broadcast networks will either purchase their affiliates in order to insure 'must carry' on the MVPD provider, or if more cost effective simply contract with the MVPD provider. In the latter scenario the former network affiliate presumably becomes an independent broadcast station. Will conversion to digital transmission be necessary for the remaining local broadcasters to remain viable? If not, there is some real prospect of an increase in localism and diversity, not to mention reinvigorating programming in general as discussed in 5.3. The affirmative obligation of MVPD to carry local broadcast and the availability of sufficient capacity may allow these stations to act as a vehicle to launch a future network. Without knowing the outcome of so many of the questions posed above concerning diversity in programming, it would appear premature to change the rules for ownership of broadcast stations.

5.4 Interacting with the Viewer

Currently, the broadcast network stations have 15 MHz of bandwidth that was dedicated for HDTV but remains largely idle. One question that we should ask is would this bandwidth be suitable for innovative new ideas? At the same time, we need to ask whether our attempts to make calculated guesses on the effects that regulatory actions have on diversity are other viewer preferences are sufficiently precise. If in the near future, it becomes possible to have a more interactive means of gauging viewer preferences and satisfaction then we need to think seriously whether this is necessary and desirable and what constraints should be placed on our use of such information if gathered.

6. Conclusions

This study concludes that the indices used to measure diversity need to be validated before Einstein's conclusions regarding the repeal of the FINSIN rules on diversity can gain any credence. As currently performed, Einstein's analysis cannot support the proposition that repeal of FINSIN did not effect

diversity on
broadcast TV.
 Diversity and quality of programming are
susceptible to
the high costs of
production and the overall limited budgets
available. Increasing the efficiency of MVPD
by allowing
economies of
scale and streamlining may slow these ever increasing costs, but
the
more
effective weapon will be competition from the market place. The
challenge
lies
in changing to a more competition orientated MVPD market, while

preserving diversity and
localism.
 By taking advantage of
improvements in technology the restrictions on the
number of
broadcast
networks that were imposed by the physical limitations of the

broadcast
spectrum and that previously limited diversity can be
circumvented. The

recognition of broadcast and MVPD as a combined market and the
adoption of
appropriate
rules could have a positive effect on stimulating new
and
diverse programming. However,
before any changes are adopted,
well
characterized studies to determine the level of
diversity in
broadcast and
MVPD programming should be undertaken.</DIV>

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