Beyond Universal Service: Characteristics of Americans Without Telephone Service

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The purpose of this paper is to explore the characteristics of Americans who lack home telephone service. The paper draws on F.C.C. and Census data. It covers the period 1980-1993, thereby encompassing the distribution of telephone service before and after the break up of AT&T. More specifically, we focus on the elderly, the poor, women and children, Blacks and Hispanics, rural Americans, and renters and home owners, as groups who are particularly affected by the lack of telephone service. We suggest that the members of these groups who lack telephone service exhibit both singular and overlapping characteristics. Thus, their lack of telephone service constitutes a social challenge to policy makers, above and beyond the economic issues usually associated with universal service. The stakes are high, for ultimately their continued existence at the margins of telephone service contributes to their isolation from the mainstream of the evolving information society.

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II. Some findings with respect to Americans who lack telephone service.

General Observations

Of all American households, 92.9% have telephones, an additional 1.7% have a phone available near by, but for 5.4% no phone is available. (Table 1, Belinfante, A. 1989). Despite the recession, the percentage of households without telephone service has dropped to 5.8%, or 5.7 million households (Belinfante, A. 1993, July).

The Elderly

The elderly have faired better than younger parents with children. All income groups of retired persons achieved the national average or better for reception of telephone services. Only for those receiving Supplemental Security Income did penetration of telephones fall between 79.7% and 84.9% (Tables 46, 47, Belinfante, A. 1989).

The Poor

When households are ranked according to income measures, the disparities become clearer (See Figure 7). Only 68.9% of those families receiving food stamps have telephones (Table 32, Belinfante, A. 1989). In households containing 4 or more persons receiving food stamps, one-third do not have telephones. But it does not follow that those without telephone service are some kind of permanent underclass that no policies can assist. The recession has seen families ranging from farm workers to middle managers on food stamps. So, while it is true that many households receiving food stamps for 12 months or more went without phones (69.4%), 35.6% of households receiving food stamps for 1 month went without phones (Table 34, Belinfante, A. 1989). It seems likely that in the first shock of unemployment, some families gave up telephone service. Such decisions parallel similar ones made during the depression, and contributing to the dip in the trend of household penetration.

Similarly, those receiving public assistance and welfare fell below the national average for telephone penetration. When correlated with welfare income received, these households averaged between 65.3% and 72.1% (Table 48, Belinfante, A. 1989). Thus, between one-third and one-fourth of households receiving aid exist without telephones. That equals 9,950,972 households (Table 79, Belinfante, A. 1989). Penetration rate drops even farther for households completely dependent on public assistance; only 56.5% of these households had phones (Table 85, Belinfante, A. 1989)

Another measure of poverty is the extent to which households receive energy assistance from the local utility company. 78.6% of households receiving energy assistance had telephones (Table 36, 37, Belinfante, A. 1989).

By comparison, in those households receiving income from interest, dividends, rents, and/or estates, telephone penetration averaged between 97.3% and 98.7 (Table 49, 50, Belinfante, A. 1989).

The income threshold seems to be around \$20,000. Households with incomes above \$20,000 have telephone penetration at the national average or Above. But once a

¹We caution against taking these changes in single percentage points as completely accurate, though they represent the best that can be done statistically. A small rise or decrease in penetration may reflect measurement as much as actual change.

households with 94.1%. That is, for all household sizes, Whites are at or above the national average for telephone penetration (Table 8.1, 9.1, Belinfante, A. 1993).

Not surprisingly, the employed fare better than the unemployed; but here again ethnicity makes a difference. Whereas, in 1993, 9.5% of unemployed whites go without telephones in the home, the lack of a telephone jumps to 20% of unemployed Blacks and 15.3% of unemployed Hispanics (Table 10.1, Belinfante, A. 1993).

Rural Americans

Among farm households, 94.9% possess telephones, slightly above the national average (Table 15, Belinfante, A. 1989). But in America's smaller communities, those with populations between 50,000 and 250,000, the rate of telephone penetration drops to 92.7%, while for those living in communities outside of any metropolitan statistical area penetration drops even lower to 90.1% (Table 13, Belinfante, A. 1989).

Renters and Home Owners

Renters are less likely to have a telephone. Whereas, only 2.2% of home owners live without telephones, 10.7% of renters go without telephone service (Table 12.1, Tenure by Telephone in Owner Occupied Housing Units: 1980, 1990. U.S. Bureau of the Census (1990) Furthermore, of those in public housing [Table 18], only 78.3% have phones (Table 17, 18, Belinfante, A. 1989). For those living in mobile homes or trailers, access to telephone service was significantly lower; only 83.1% had telephones. Finally, Americans living on hotel rooms, boarding houses had the least access of all; only 59.8% had telephones (Table 16, Belinfante, A. 1989).

Among the variety of dwelling conditions, one particular trend bears special consideration -- single person households. The growth of single person households is a continuous trend throughout the 20th century and does not appear to be abating. The implications are for an increased demand for interconnectedness and a commensurate rise in social aloneness (See Figure 5) (Tables Series P-20, No. 458, (1991) Household and family characteristics: March 1991).

Differing Rates of Adoption

Figures 1 and 2 depict the rates of household penetration for selected media. Immediately, one can see the steep rates of penetration for radio, television, and video cassette recorders (VCRs), juxtaposed against the shallower rates of penetration for the telephone and cable. In addition, where saturation levels are apparent, radio and television show higher levels than does the telephone. In fact, most of the groups discussed in this paper who lack telephone service have radios and TVs. We suggest that these differing rates of penetration provide a clue to the gap between radio and TV on the one hand and the telephone on the other. That is, radio and TV represent one-time purchases while the telephone must be reconsidered each month. So, for families on the edge of poverty, the telephone can quickly become an unsustainable service; whereas, the earlier purchase of a radio or TV need not be reconsidered. Therefore, we maintain that were the telephone more like radio and TV in the form of purchase, it would achieve a higher penetration rate as well.

Finally, the level of media density in the home has gone up in the last 20 years. In the 1980s, American households experienced an implosion of media density. In light of the data presented here, this phenomenon does not appear to have spread evenly, nor with

and subjective. So, if any solution can be found, it should not attempt a direct answer; moreover, it must keep in mind that citizens are active information seekers. Consequently, one approach is to specify spheres of obligation, by differentiating public needs from personal needs. A universal service oriented thusly obligates government to meet the demands of the public sphere, while facilitating the opportunities inherent in the private sphere. For example, in the public sphere, citizens need access to, and the knowledge of how to use, government services, and, they should have access to channels of communication which provide a public voice. In the private sphere, individuals should enjoy the opportunity to benefit from the wealth of the economy, to make intelligent economic decisions, and to maintain their privacy. More broadly stated, an informed and participating citizenry is the necessary condition to approach the ideal of a participatory democracy; whereas, an informed and economically capable public is a necessary condition for meeting the goal of a fair and open market.

That said, a concept of universal service derived from these considerations is not without difficulties. First of all, conceptual boundaries are never clear in real life. After all, in America the boundary between the public and private spheres constitutes contested terrain. But that may be an advantage, since the territory is well known and a socio-legal tradition already exists to show the way. Secondly, there is still no answer to the question of which information needs are to be met. However, there needn't be; the individualistic nature of the question guarantees that this will be a continuing issue for public discussion. In other words, given the predisposition of Americans to fear government when it is intrusive, and the market when it hurts, no codified compendium of information resources will last for long. The danger lies more in imbalances of power and influence. That is, because the stakes are high, the information resources available through universal service. at any given time, are likely to reflect a combination of special interests. If the public's voice is to be heard, it will probably emerge as citizens' groups become aware of the importance of information to their constituencies [A leading indicator of this trend can be observed in legislative proposals to promote truth in labelling, truth in lending, and truth in advertising.]. Once the issue of universal service information is understood as part of a public dialogue, the role of citizens' groups can be seen as growing in importance. Without them, universal service will still take on an information obligation, but only through the interests of business and government.

If that question is to find an answer, then the redefinition of universal service must find a place on the public agenda. In addition, its fundamental importance to the progress of the information society must be recognized. Indeed, so important is universal service to the shape of the information society, that it might better be understood as an information bill of rights. In pursuit of a democratic society, we might ultimately ask ourselves, what rights to information, and protections from information, belong to all Americans, regardless of their wealth, position, or language? If we direct our energies to answering that question, it should become evident that universal service is not really a single policy to be written by a government agency. Rather it is the guiding principle of the information society; and, as such, also a tension — always debated, always tested, always pursued.

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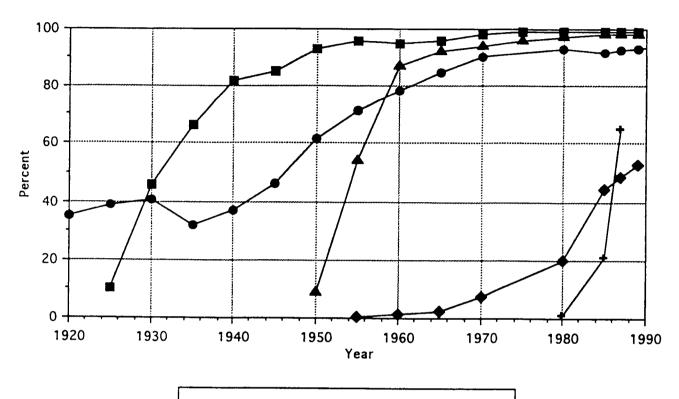
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2: Diffusion of Selected Media
Household Penetration of Selected Media
1920-1990



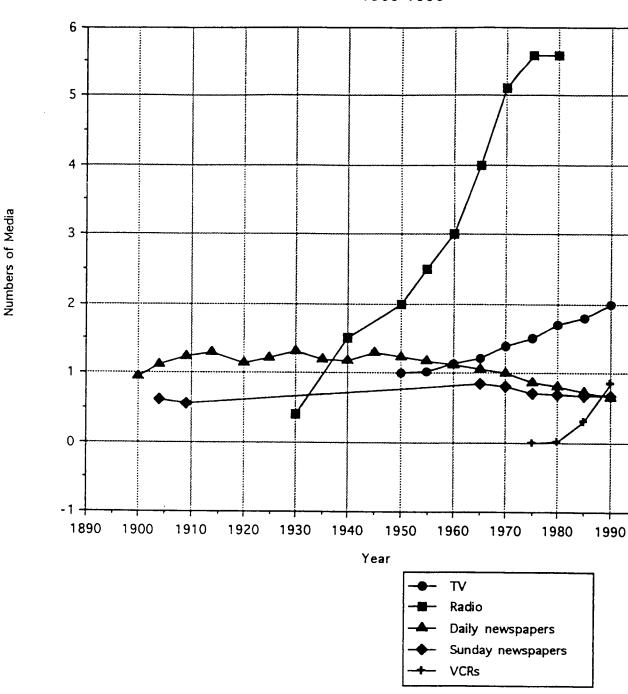
- Telephone, percent penetration per household
- Radio, percent penetration per household
- Television, percent penetration per household
- Cable, percent penetration per household
- + VCRs, percent penetration per household

Compiled from Series R 1-12. (1975). <u>Historical statistics of the United States.</u> colonial times to 1970 (Bicentennial Ed. ed.). Washington DC: GPO. Table 956. (1981). <u>Statistical abstract: 1981</u>. Washington, D.C.: U.S. Bureau of the Census. Table 884. (1992). <u>Statistical abstract: 1992</u>. Washington, D.C.: U.S. Bureau of the Census. Table 1.1, 1.3 Belinfante, A. (1991). <u>Monitoring report: Telephone penetration and household family characteristics</u> No. CC Docket No. 80-286). Federal Communications Commission.

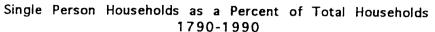
4: Average Numbers of Selected Media in the Home

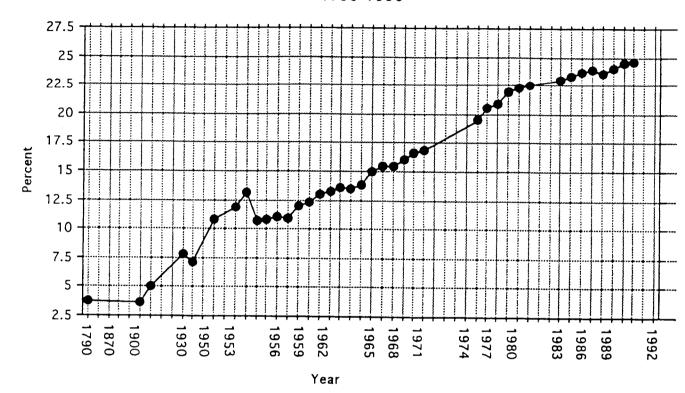
Average Numbers of Selected Media in the Home (Daily and Sunday Newspapers, Radios, TVs, VCRs) 1900-1990

20



5: Household Size





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6: Media Density in Households [Sources]

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8: Telephone Penetration 1983-1993

Year	Households with Telephones as percent	White Households with Telephones as percent	Black Households with Telephones as percent	Hispanic Households with Telephones as percent	Households without Telephones as percent	Households without Telephones in Millions							
							1983	92.4	93.1	78.8	80.7	8.6	7.4
							1984	91.8	93.3	80.1	80.7	8.2	7.1
							1985	91.8	93.3	80.1	81.2	8.2	7.2
							1986	92.2	93.6	82.0	81.5	7.8	6.9
1987	92.5	93.9	82.2	82.1	7.5	6.8							
1988	92.9	94.2	82.7	82.6	7.1	6.5							
1989	93.0	94.4	83.2	81.9	7.0	6.6							
1990	93.3	94.6	83.8	81.8	6.7	6.3							
1991	93.6	95.0	84.1	82.7	6.4	6.1							

Compiled from Table 1.1, 1.3 Belinfante, A. (1991). <u>Monitoring report: Telephone penetration and household family characteristics</u> No. CC Docket No. 80-286). Federal Communications Commission. (Figures for 1983 compiled in November, all other figures compiled in March.)