

Sociologists Engaging with Computers¹

Introduction to the Symposium on the History of CITASA, 1988-2005:

From Microcomputers to Communication and Information Technologies

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Abstract

This article introduces the Symposium on the History of CITASA, the Communication and Information Technologies section of the American Sociological Association from 1988 through 2005. It traces this history from the interest of those who founded the original Microcomputing section in developing computer applications for doing sociological research and teaching. It discusses the fit of this interest to the continuing “war” in the organization of computing between computer center centralization and individually autonomous decentralization. It explains the expansion of the scope and membership of the session to encompass the sociological study of communication and information technologies.

Keywords

sociology of the internet, communication and information technologies, computer applications, centralization, individualization

Early Years

Why care about the history of what is now called the Communication and Information Technologies section of the American Sociological Association (CITASA)? To me, there are at least two reasons.

The first reason is that many members do not have a perspective as to where the section has come from. They do not have any sense of the many changes that CITASA has gone through

since its founding in 1988. Immersed in the moment, they lose the perspective of history on the issues that CITASA has faced and where it might be heading.

The second reason is broader. The twists and turns of the section give insight into the shifting ways in which sociologists have engaged with computing and associated technologies – as creators, users, teachers and scholars. This makes the institutional history of CITASA – contained in the three articles that follow – into a social history of the changing relationship of computers to society.

The Focus on Computing Developers Rather than Sociological Computer Users: Ronald Anderson’s first article in this symposium about the early years of the section provides several jumping off points. As first chair of the section, with a continuing interest for more than two decades, he has had a great vantage point.

Anderson’s article suggests that most leading early section members were interested in building applications and not in using the big mainframes of the time as analytic engines. Their main interest was in “technology for sociology” rather than “the sociology of technology” (Anderson, ##). As late as the rise of the Internet, “questions remained with regard to whether or not the section could serve as a professional home” for sociologists studying “the culture of cyberspace” (Anderson, ##).

The section’s pioneers were the sociological equivalent of the homebrew computing club, mainly interested in building software for research and teaching. They saw the section as a place to find community, professional legitimation, and good ideas. With bigger garages, they might have found fortune in Silicon Valley rather than tenure at a university. Yet some sociologists have become significant developers, such as: Edward Brent’s *Qualrus* software that helps grade papers by scanning text for keywords, phrases and language patterns; Lynn Richards, the co-founder of *Nud.ist*, *NVivo*, and *N6* textual analysis software; John Sonquist whose *Automatic*

Interaction Detector for statistical data pre-figured data mining by 15 years; Steve Borgatti, a prime creator of *UCInet*, the standard social network analysis package. Others have continued their interest in computer applications. For example, S. Roxanne Hiltz has blazed a pioneering career in online community and elearning (Hiltz & Turoff, 1993), and William Bainbridge recently edited the two-volume *Encyclopedia of Human Computer Interaction* (2004).

Anderson shows that while the early section focused on creators of software applications, it discouraged two large sets of potential members from becoming actively involved. One was what we would now call “newbies”: novices interested in learning about computing. They would have to go elsewhere to learn about computing (see also Grant Blank’s “middle years” article in this symposium).

The second set was the sizeable set of sociologists who were using statistical packages to analyze big heaps of survey data. In the 1980s, the statpacks all relied on big iron – large university-wide mainframes – because the CPU, RAM, and hard drives of early PCs would have choked on the size of the data sets and the demands for complex data analysis. Two mainframe programs, *DataText* and *Osiris* live only in nostalgia, but *SPSS* and *SAS* continue to this day as active statpacks, now also on PCs (Wellman, 2004a).

As Anderson points out, mere users were not encouraged to play with the computer specialists in the early days of the ASA’s “Microcomputer Users Group” that morphed in 1988 into the Microcomputing Section.² His careful description shows how the early section did not directly engage the largest – and at the time, the most important – sociological segment of computer mavens.

This was not a trivial matter. Numerically, heavy-duty computer users were – and still are – a large set of sociologists. Professionally, the advent of easy to use statpacks changed, liberated and democratized quantitative empirical sociology.

Recall the situation before the coming of statpacks. Only a few initiates at a computer center knew how to work the system: a Marxian *cum* Weberian situation. To do one statistical analysis on the computer, people had to cultivate the priestly group of programmers/technicians serving the mainframe and queue (and sometimes beg) for their attention. If the sociological users got a command wrong or wanted to do another analysis, they returned to the back of the technicians' queue. There was much alienation from the data. Only very crucial or large analyses were done on the computer by well-connected scholars. Others either avoided this sort of work or did most analyses by hand or by calculator, with the help of assistants.

The democratization brought by statpacks liberated scholars by enabling them to run their own data and ask their own questions. Such packages have empowered many sociologists to do their own computer-based statistical analyses instead of being forced to rely upon the High Priests of the Great Machine. They no longer have to queue and beg an expert to operate a user-unfriendly statistical package for them. They have become routinely able to do complex analyses from a number of perspectives instead of just talking about complex processes but measuring simple relationships. Analysts can easily check a variety of alternative causes and correlates and can take endless alternative views of our data. They can revel in their post-P(e)arsonian ability to try dozens of complex procedures, to view things in ten different ways, to obsessively clean and re-weight data, to transform the intractable, to hunt down pesky residuals, and to apply once-obscure statistical tests with exotic-sounding names (for more on this, see Wellman, 1998).

Indeed, the revolution soon spread to students. No more toiling with desk calculators, as I had to do in 1964, even at rich Harvard. The most adventurous professors taught this stuff early. The most exemplary and heroic I ever saw was James A. Davis' (1971) use of statpacks to teach introductory sociology through simple survey data analysis.

There was also an important feedback effect. As using statpacks became easier, more researchers turned to them. Consequently, the discipline in the 1970s and 1980s became even more immersed in quantitative analyses of large data sets, especially survey research. The good news is that scholars now had survey-based evidence to back up their assertions. The bad news is that the statpacks they used inherently treated individuals as discrete units of analysis (one person = one record), tilting consideration away from the structural connections among these individuals and institutions. Of course, statpack users have tried to infer something about social systems from the multivariate analysis of individual-level data. But they can only study social structure indirectly by organizing and summarizing numerous individual covariations. They are forced to neglect social properties that are more than the sum of individual acts and concentrate on the attributes that discrete individuals possess. They cannot directly study flows of information or other resources; discover clusters, cleavages or overlapping networks; or reveal underlying role structures. It is not coincidental that at the same time that survey research was at the peak of popularity (and the Microcomputing section was being formed), I was part of a movement arguing for an analytic turn away from treating individuals as independent units of analysis and moving towards considering them as members of social networks (Wellman, 1988; Wellman & Berkowitz, 1988).

The Tension between the Decentralization and Centralization of Computing: The longest civil war in computing is not the one between Apple and Wintel, but the one between centralized computing and decentralized computing. This war began when PDPs made non-mainframe computing possible in the 1960s, gained new intensity and extensity with the proliferation of personal computers in the 1980s, and continues today (Ceruzzi, 2003). Indeed, a senior Intel executive recently told me that one of their chief dilemmas is whether they “bring people to bits or bits to people”.

The most widespread conflicts have been in the organizational world, with centralized computer centers jockeying for position with those who want to operate their own PCs – and their own modified software. It is a battle between those who want to control the organization’s use of software and those who want to do their own personalized thing. Our late section member, Rob Kling, was influential in studying this. Although trained and employed as a computer scientist, he took a Weberian approach, showing how the operators of centralized computing systems used bureaucratic rationality to justify maintaining a single centralized system for an organization. He (and his colleague Suzanne Iacono, now an NSF mandarin) demonstrated how the centralizers marshaled a host of arguments: the need for standards, the need for security, the greater cost savings in people and equipment, and the need to conserve the energy of scarce technicians (Kling and Iacono, 1984a, 1984b, 1988; Kling, 1995, 1996; see also Wellman & Hiltz, 2004).

With the advent of “microcomputers” in the 1980s, individualism prevailed for a time, but not totally. Improved computer networking systems often led to organizational use of relatively “thin clients,” with software or files often only accessible on the mainframe to PC/terminal users who logged in. Today, this sort of thing goes under the rubric of “Internet services,” with a myriad of uses accessed online: such as *Google* and *Yahoo*’s mapping programs, photo albums such as *Flickr*, or even online statpacks.

By contrast, PC makers – hardware and software – have been the apostles of decentralization, with Microsoft having the strongest voice. Thus, Bill Gates’ now-famous “The Internet Tidal Wave” memo warned his senior executives in 1995 that the lowering cost of communications would engender the “scary possibility” (p. 4) of ubiquitous Internet use that would threaten the stand-alone Wintel model. The goal for Microsoft was to preserve decentralization while building on the Internet’s connectivity.

The centralization movement continues to be a Gates-ian concern, but he now seems to be embracing centralization more. In a very recent memo to top executives, Gates urged Microsoft to move “quickly and decisively” to embrace the “sea change” of focusing on delivering Internet-based software and services” (October 30, 2005). Where Gates identified the *Netscape* browser as the key adversary in the 1990s, it is now the *Google* platform built around Internet services (Linn 2005). Senior Microsoft executive Ray Ozzie warns: “Our business as we know it is at risk.... We must respond quickly and decisively [to] the Internet services disruption” (Ozzie, 2005; Niccolai, 2005).³

Yet James Witte, the current (2005-2007) chair of CITASA believes that “a personalized, decentralized individual technology hub is likely to be the norm for American society” even as “software is being created to be explicitly and deliberately social” (personal communication, November 10, 2005). Perhaps the *Google/Microsoft* shift will be to loosely coupled networking rather than to centralization. However, it may be networking with high centrality, much like Apple’s selection and delivery of *iTunes*.

Like current CITASA chair Witte, the founders of the “Microcomputer” section were squarely in the decentralization camp. Of course, those sociologists using mainframe statpacks longed for usable and user-friendly PC versions, a longing unrequited until the improvement of PCs in the mid-1990s. Even today, with the Internet more reliable and ubiquitous, I – and many others – remain wary of the claims of Internet systems centralizers that life will always be good because we can always logon, drop-in, and compute. We have had too many system crashes, losses of connections, surveillance fears, and inability to connect in remote and less developed areas. All proponents of complete reliance on Internet services should be required to get out of their high-tech corporate offices and experience home-based systems failures, FBI surveillance, and trips to broadband-free areas. Indeed, at this very moment (November 9 2005, 2230 EST), I

am experiencing frustratingly slow-speed 22 kB/second service on my supposedly broadband connection that promises 300 kB/second. I can barely send an email, much less use complex Internet-based software services.

The Middle Years: Skilling and Deskillling

Ron Anderson's article notes that CITASA's founders discouraged membership interest from newbies who wanted to know how to use the new PC beasts of the 1980s. DOS was a formidable beast in the late 1980s, and computers crashed (and lost data) with regularity. However, the founders saw their *métier* as developers of new systems rather than as teachers of newbies. They valued the section for providing a forum to network with peers. How did this forum pan out?

Grant Blank, the author of the second "middle years" article in this symposium, joins Anderson in providing food for thought. Like Anderson, he has been a section stalwart since its founding, serving actively in a variety of posts. Blank argues that the section's emphasis on skilled computer development was probably the cause for section membership rapidly declining by 27% percent: from 331 in the second year of founding (1990) to 243 in the middle year of 1994 (see Table 1 and Figure 1 in the Appendix). There continued to be ups and downs, with an upward bounce to 282 in 1997, followed by a consistent decline to an all-time low of 147 in 2002 –less than half the initial membership size.⁴ As the American Sociological Association's policy is to consider terminating sections with memberships of less than 300, the section was in chronic crisis for a decade.

Why the decline? The section had become the domain of specialists, and there were not that many of them. Not only were newbies not encouraged to join, sociological enthusiasts of the now-burgeoning Internet did not find the section to be their scholarly forum. Blank shows that one section chair made an abortive proposal in 1993 for the section to become even more specialized, by changing its name (and focus) to "Computational Sociology". Section members

were committed scholars, but the burden of keeping the small, specialized section going while facing half-empty conference rooms was demoralizing.

It is ironic that the section's emphasis on skilled, specialized scholars came soon after the deskilling discussion initiated by Harry Braverman (1974). Braverman's influential argument encompassed technologies, contending that as technologies have come to do the skilled work, the labor force has become less knowledgeable, lower-cost, and more docile. Consider, for example, the deskilling involved in the replacement of *DOS* by the successively user-friendlier versions of *Windows*. Braverman argued that deskilling not only allowed organizations to pay low wages to most employees, it led to more organizational control. Where skilled artisans and professionals were precious – needing to be well paid and coddled – management could more easily threaten unskilled workers with replacement with by of the industrial reserve army.

In some respects, deskilling was another manifestation of the centralization-decentralization strain that has been endemic in computing. You cannot herd programming prima donnas as easily as deskilled assembly line programmers. Philip Kraft (1977) had shown that structured programming, modularization, canned programs and hierarchical teams had led to deskilling and more management control (see also Glass, 2005).

Yet, the burgeoning use of personal computers and the Internet in the 1990s – the CITASA middle years – ushered in important modifications to deskilled computerization. Not only was there vastly increased use of computers, but more people than ever before were playing with computer hardware and building or modifying software. The millionaire geeks of Silicon Valley appeared to outnumber the industrial reserve programmers. Possibly for the first time ever, a bespectacled techie geek – Bill Gates – was seen as a sexy, charismatic figure. Excitement was in the air.

CITASA's section members in these middle years were a skilled elite. Yet Blank shows that the proliferation of commercial software in this era led most microcomputing sociologists to turn away from doing their own programming – the original force behind the founding of the “Microcomputer Users Group” that became the section. Where such sociologists had quickly – and sometimes crudely – filled needs with programs, users now demanded more user-friendly and more reliable software. “What many students saw as an amateurish user interface tended to obscure or override, at least in their minds, the concepts that the software was trying to teach” (Blank, ##). Producing such polished software was harder to do, especially for academic sociologists who also had to teach, research, publish, and administrate. Blank notes that only the scholars interested in constructing social simulations continued to do cutting-edge programming.

What had been the domain of the skilled computer elite became the playground of a hugely expanded domain of point-and-clickers. The great majority were interested in using computers – which increasingly remained more usable – rather than in writing code. They were no longer dependent on a computer elite. Yet, while hugely growing masses happily turned on and logged in, the growing market for hardware and software also led to an increase in the numbers of programmers: both laboring as “microserfs” in large programming shop or happily hacking at home or in small groups with fame and fortune in their eyes (see Coupland's 1995 ethnographic fictional account).

Blank believes that the broadening public use of computing meant that “the relationship of computing to sociology as a whole had changed.” (##).. Computing had become more diversified and more accessible. There were more computer applications in the ether and earth than anyone had dreamed of a decade ago.

In response, the section changed its name to “Sociology and Computing” in 1994 but essentially continued in its ways. Would it catch the wave or drown?

The Contemporary Picture: Expanding Scope and Membership

In 2002, the section was in imminent danger of being shut down, having been below the ASA's survival floor for a decade (Table 1). At the same time, interest in computers was at an all time high, with governments, corporations and the public at large eager to know its sociology. Governments wanted to know how to respond to this raging amoebic beast. Corporations wanted to know about the kinds of consumers and businesses they would encounter online. The public was enthralled, making *Wired* magazine the *Vogue* of the late 1990s (see the review in Wellman, 2004b). All of these groups asked the same questions:

- Who was using computers, and who was using the Internet? These were separate questions because until recently, many computer users were not Internet users.
- What were they doing with computers and the Internet?
- What was computer/Internet use doing to them – and to the society around them?

Clearly, there was a demand for the sociological analysis of computing. And, in the relative absence of sociologists doing that work, this demand was rapidly being filled by others. Many were pundits making things up deductively, such as asserting that the Internet would inherently become a global village independent of place (e.g., Barlow, 1995). Others were researchers doing laboratory experiments that were isolated from real-world conditions, asking, for example, if Internet contact fostered more problem solving than in-person contact (Sproull & Kiesler, 1991; Kiesler & Sproull, 1992). Computer scientists were especially active, building “groupware” with little awareness of its social context. Whether corporate or university based, they were better funded than social scientists and had a great time demonstrating their “apps” at CHI (computer-human interaction) and CSCW (computer supported cooperative work) conferences. Yet, computer scientists rarely looked up from the screens to see how computer-supported interactions fit into the whole array of communications (in-person, phone, etc.) and

into the social systems in which both people and computers were embedded. Power was ignored; gender was, at best, a control variable. Only a few sociologists got involved, including Manuel Castells' pathbreaking *Information Age* trilogy (e.g., 1996; revised 2000), and the authors in Peter Kollock and Marc Smith's *Communities in Cyberspace* (1998). In the later book, Milena Gulia and I (1998) vented at the computer scientists' assumptions about online "virtual community" that ignored more than a century's worth of community sociology.

With a declining traditional market for their intellectual wares and an eager, expanding new market for understanding the sociology of the Internet, it is not surprising that the section changed its orientation. Indeed the wonder is that it took so long to do so. Recent section chairs David Elesh and George Dowdall were active leaders in this transformation, and they tell the story well in the third article. After much informal discussion, the keys were the appointment of a committee at the August 2001 annual section meeting to explore means to revive the section, and the acceptance of this committee's report a short time later in October 2001.

The composition of the committee was fascinating and largely foretold its findings:

1. All three members – Keith Hampton, Eszter Hargittai and Anabel Quan-Haase – were principally scholars of how people use computers. Although Hampton and Hargittai have been experienced, enthusiastic website builders, their scholarly thrust was in studying others' use rather than in building their own applications.

2. All three were well under thirty years old; this was a generational change.

3. All had the confidence that coming from major universities often inspires.

4. All were high-energy, confident enthusiastic people from with a can-do spirit.

5. Hargittai had already received within-section credibility by reviving the section's website, while Hampton had presented the major Netville study at the ASA annual meeting (Hampton, 2001; Hampton & Wellman, 1998).

6. As part of the generational change, Hargittai and Quan-Haase were still graduate students while Hampton had just finished and was starting Assistant Professor life at MIT.

7. I was the dissertation supervisor of two – Hampton and Quan-Haase – and a friend of the third, Hargittai.

Not that I led any plot. What had happened was that we had returned from several ASA annual meetings sad about the decline of the section. At the same time, our NetLab was actively publishing research into the sociology of computing and attending high-energy conferences run by non-sociologists: CHI, CSCW, Group, Work Flow, etc. We had also met many kindred spirits: at our own and other universities, inside and outside of sociology. The advent of the Association of Internet Researchers brought together many social scientists in its first annual conference (2000), surprising most of us at the widespread scholarship about the internet and ICTs.

We knew enthusiastic scholarship was abundantly present. It needed to be tapped, communicated with, and encouraged to participate. So I grumbled, went off to write some papers, and the youth wing of the party acted.

David Elesh and George Dowdall, the authors of the third article in this symposium tell this story well. They show that the three musketeers did a fine job of thinking through section needs and using their positive energy to add the sociology of computing (and other ICTs) to our section's mandate. It was an expansion of focus – the applications interest remained – and a rebranding with a new name.

What's in a section name? Why “Communications and Information Technologies” instead of continuing to use “computing” in the title? Hampton says that as part of the expansion of mission, the committee wanted to position the section to comprehend all forms of

communication and information technologies. With the rapid proliferation of smart webphones, PDAs, GPS, et al., their prescient and expansive rebranding is commendable.

Why avoid the more standard formulation of “Information and Communication Technologies” or “ICTs”? Hampton says that this non-standard wording was a deliberate marketing ploy to help a too-small section. By avoiding the standard ICT appellation, we would surprise and perhaps intrigue people. By putting “Communication” first, we would appear higher up in the annual ASA membership form and perhaps garner a few more members. Interestingly enough, the original “Microcomputing” name has persisted in the odd ASA document until this year.

Elesh and Dowdall became the first, and quite proactive, chairs of this rebranded and hopefully expanded section. They soon recruited me to help as membership committee chair.

Section leaders agreed that the basic need was to expand section membership. As the smallest section in the ASA, CITASA always feared being shut down as non-viable, and its small numbers had grown somewhat sleepy. So its leaders set out to make sociologists (and fellow travelers) aware of the section’s existence and reorientation. In this, they were greatly aided by Marc Smith’s securing of an annual charitable donation by Microsoft and by Ronald Anderson’s private donation of support for the awards for the best student paper and the best computer application.

As Elesh and Dowdall report, the section has put this support to good use. By subsidizing student membership, CITASA was able to increase its membership even more than we had expected, with the magic (ASA-mandated) 300 figure reached in September 2005. By funding a mini-conference, CITASA was able to show intellectual life and expand beyond the one regular session (and one hour of roundtables) that the ASA had allotted to our tiny section.

There has been much collaborative activity. In addition to invigorated Council members, CITASA has had highly professional young recent graduates (and graduate students) filling key posts: Gina Neff, then a graduate student, became secretary-treasurer. She also was roundtable organizer for several years, corralling an increasingly wide range of scholars that included applications developers as well as researchers into the Internet. Concomitantly, graduate student Nalini Kotamraju put out an attractive and smart newsletter (online of course), and Keith Hampton did double-duty until recently as webmaster and list-serve manager. I acted as the list-serve's *tumbler* at its start, posting frequently to provide visible activity and to stimulate responses by others.⁵

Size matters, as the ASA, Godzilla and incessant penis spams tell us. But greater size can lead to a decline in quality. Fortunately, quality has increased even though CITASA has doubled in size in the past three years. It also became younger because of the influx of eager students and assistant professors – they are now the heart of the section. Moreover, the hot, rapidly developing Internet attracts many scholars and substantial funding. As the philosopher Sophie Tucker once said: “I’ve been rich and I’ve been poor. Rich is better.”⁶ Although there is a ways to go, CITASA not only has more papers, but better papers. It not only has more members, it has enthusiastic members. Size can matter.

As for the future, current CITASA chair Jim Witte points out that while teaching and research application development will probably always be part of the section’s mission, the section’s shift in emphasis that began several years ago needs to be maintained. Understanding the impact of technology on social interaction is a fundamental sociological question. Given the centrality of communication and information technology in today’s society, CITASA members’ research and teaching stand squarely in the sociological mainstream. At

the same time, it is incumbent on section members to keep pace with the implications and origins of technological change, and also to be aware that models and methods of diffusion may take different forms as technology expands its global reach (personal communication, November 10, 2005).

Like Witte, I do not want to end this introduction on a triumphalist note. For one thing, a major point of this introductory article is to show that the complex path that the section has taken is, in itself, sociologically interesting. For another thing, there is more to be done. One concern is whether the sizeable student membership will continue, especially if students have to start paying for section membership.

Another concern is intellectual: The section's focus on applications has expanded to include the study of community and work, on and offline. Yet there are still very few studies of other technologies, such as mobile phones. Where is the ethnomethodology of the Internet? Where is the grappling with macrosociological issues, such as the nature of the labor force or the rise of the networked society? Huge areas await study.

Elesh and Dowdall – indeed, all the authors of this symposium – tell fascinating stories. Yet, a hot area can become an uncomfortable hot seat unless scholarship keeps pace. My hope – and expectation – is that there will be even more fascinating stories to tell a decade from now.

Biosketch

Barry Wellman learned how to keypunch in the basement of Emerson Hall, Harvard in 1964 and has never stopped using computers to process words and numbers. Professor of Sociology at the University of Toronto, he currently directs NetLab, with research links to the Centre for Urban and Community Studies and the Knowledge Media Design Institute. In addition to his more than 200 published articles, he has (co-)edited *Social Structures: A Network Approach*

(1988), *Networks in the Global Village* (1999), and *The Internet in Everyday Life* (2002). His current research focuses on how ICTs help Canadians to live “connected lives” in an era of “networked individualism”.

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Endnotes

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²*Googlefight.com* reports that the term “personal computer” outnumbers the now-passé term “microcomputer, 5.2:1. (November 9, 2005, 2200 EST).

³ Ozzie has been in the centralizing game for quite a while, as the developer of the uber-centralizing *Lotus Notes* organizational communication and coordination system, now owned by IBM.

⁴ The ASA calculates official membership numbers each September 30. I use the 1990 number of 331 rather than the founding number of 355 because sections enrol an atypically high number of members in their first year. Friends of section founders join the section in the first year to help it achieve the initial minimum of 300 members required for the ASA’s recognition.

⁵ *Tummeliers* were boisterous people hired by Catskill resorts to add liveliness to resort living, in other words, to cause a happy tumult. The comedian Jerry Lewis (now aged 80) was the most famous; Mike Meyers (*Austin Powers*) and Bette Midler are more contemporary analogues. The resorts’ heyday of catering to New York Jews was from the 1930s through the 1950s.

⁶ The origins of this proverb are obscure. It is copiously found in quotation lists on the web. The problem is that these lists do not give bibliographic information about where quotations were first said. (Some websites wrongly attribute this one to the performer Cher, born several generations later.) In this case, it is clear that Tucker used the proverb copiously in her comedy acts – which I remember well from my childhood.