# Probate Court Inventories and Colonial American History: Historiography, Problems, and Results

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The varieties of history are infinite but in the most recent scholarly generation "Social history" has mushroomed more than other types as a vast army of new Ph. D.s and a few established practitioners tell the story of the non-élites - "the people." Under the general rubric of social history, econometricians, demographers, cliometricians, and quantifiers have joined the traditional qualitative historians in an attempt to recreate the lives of racial and ethnic minorities, women, immigrants, poor people, rich people, average people, servants, labourers, farmers, clerks, merchants, and so on. Scholars seek to measure the quality of life of these groups by asking questions like: what were their living conditions? what share society's wealth did they own? how high were their chances for upward or downward mobility? what were their marital and parental patterns? how did they make a living? Colonial American historians in increasing numbers are discovering a vast body of primary evidence that sheds considerable light on groups and questions like these - probate court inventories.

## The following laws were passed by the first generation of colonists:

After the death and decease of any person possessed of any estate, be it more or less,... three men which are appointed to order the affairs of the town where any such person deceaseth, shall within one month after the same, at furthest, cause a true inventory to be taken of the said estates in writing... every inventory to be exhibited into the public court (A Connecticut law of 1639).

A probate court shall bring in a "true inventory of all the known lands, goods, and debts of all deceased persons." Even "travelling merchants, seamen, and other strangers" should have the inventories taken (A New Hampshire and Massachusetts law of 1649).<sup>2</sup>

Similar laws were passed by all of the English colonies in North America. The inventories, specific and detailed, list separately every item in a decedent's possession, and give the estimated price the item would bring in a forced sale.<sup>3</sup> The enumerated items range from pants to pots to

- \* Department of History, University of Winnipeg.
- 1 Public Records of the Colony of Connecticut, I (10 October 1639), 38.
- <sup>2</sup> New Hampshire Provincial and State Papers, XXXI (1649), XI, XII.
- <sup>3</sup> Gloria Lund Main, "Probate Records As A Source For Early American History," William and Mary Quarterly, XXXII (January, 1975): 89-99. I do not wish to duplicate the work in the above article which was published after I began work on this present essay. Main's work and mine differ significantly she discusses the problems and opportunities in probate records through analysis of the records themselves while I use a bibliographic approach. My essay supplements rather than duplicates hers and readers will profit most by reading both.

ploughs; some inventories contain thousands of items from wealthy estates while others poignantly list the scanty belongings of less successful new world inhabitants. If the laws had been scrupulously followed, which they were not, and all property owners had been inventories as was intended, we would have a record of every possession in the colonies and its value. The estates of enough of the deceased were inventoried, however, to leave an exciting body of evidence that is leading towards a major reassessment of our knowledge of early American society.

The present essay traces the historiography of probate inventories as sources for colonial America, examines the methodological problems inherent in their use, and surveys the results based on them. The historiography is characterized by two pioneering landmarks that are heavily criticized by today's practitioners; the methodological problems are many but are gradually being solved; and the results, wide-ranging and suggestive, question many previously accepted conclusions while empirically verifying others.

### I. — HISTORIOGRAPHY

Several social historians in the twentieth century utilized probate inventories but it was not until 1955 that the inventories went from being qualitative sources used to add a little descriptive flavor to a pleasant narrative to being quantitative sources capable of sustaining arguments based on statistical proof. James Truslow Adams as early as 1927, in an influential analysis of pre-Revolutionary society, Provincial Society, 1690-1763 (New York, 1927) relied heavily on probate inventories to describe house furnishings, clothes, and social customs. Thus he described one South Carolinian's table linens worth £600, contrasted the opulent wardrobe of a wealthy decedent with the spartan clothes of a poor one, and suggested that forty-five glasses left by another revealed a great deal of revelry in local life.4 This usage of inventories is certainly interesting and informative but because it is merely illustrative the knowledge it imparts is exceedingly imprecise. Was the South Carolinian's linen supply typical of all of the colonial gentry. How much buying power was represented by £600? If one man had forty-five beer glasses in his inventory, what percentage had none. Because it failed to deal with questions like these and because it did not place inventory evidence in some perspective so it could be identified as part of a historical universe, work done by historians using inventories was tantalizing but essentially antiquarian. Lorenzo Greene's extensive qualitative use of inventories in a monograph that established him as the leading scholar of the subject, The Negro in Colonial New England (New York, 1942), so impressed one reviewer that she wrote "it is not probable that any significant additions will be made to the body of facts here presented." "Little hope" remained that any of the evidence remained unexplored.<sup>5</sup> Greene's use of inventories strictly as

<sup>&</sup>lt;sup>4</sup> ADAMS, Provincial Society, 71-76.

<sup>&</sup>lt;sup>5</sup> Elizabeth Donnan, "Review of Lorenzo Greene, The Negro in Colonial New England," American Historical Review, XLVIII (July, 1943): 797-798.

traditional literary sources, so impressive in 1942, if done in the 1970s, would undoubtedly be heavily criticized as myopic by today's reviewers.

Robert E. Brown, Middle-Class Democracy and the Revolution in Massachusetts (Ithaca, New York, 1955), is known by most colonial historians as the benchmark of the consensus school of thought on the nature of colonial politics and society. Brown challenged a half-century of historical writing that had stressed the élite nature of the colonial world and his work has been at the centre of a twenty-year debate it triggered. However, besides his historiographical contribution, Brown also took an immensely important methodological step when he used probate inventories quantitatively and subjected them to statistical analysis. Brown collected large samples of Massachusett's inventories and from them made precise statements about the percentage of men who could satisfy the property qualifications for voting status, the amount of property held by the vast majority of Massachusetts' farmers, the degree of upward economic mobility the typical poor immigrant achieved, and so on. Brown's conclusions shocked and dazzled most colonial historians and when the criticisms came rolling in on what is still referred to in debates as "the Brown thesis" much of it centred on his quantitative use of inventories. No one disputed that what Brown attempted methodologically was brilliant; they disputed instead whether or not the attempt was successful and the general conclusion of the profession seems to be that it was not. In one of a large number of articles and reviews by different historians, John Cary, "Statistical Method and the Brown thesis on Colonial Democracy," William and Mary Quarterly, XX (April, 1963), 251-257, demonstrates that while the attempt is audacious many unsolved problems surrounded the statistical use of the inventories. The main defects, the unreliability of the samples, the changes in currency and inflation that made some of the comparisons meaningless, and the possible biases of evidence caused by the failure to have inventories for all of the decedents and by the fact that the age of the decedents was not representative of the then living population, made even Brown, who has been redoubtable in defending his thesis, less sanguine about inventories as statistical evidence. When he and B. Katherine Brown tried to duplicate the Massachusetts' work in a study, Virginia: Aristocracy or Democracy? (East Lansing, 1964), they used probate inventories much more sparingly and relied primarily on tax lists.

Jackson Turner Main, The Social Structure of Revolutionary America (Princeton, 1965), written a full decade after Brown's work on Massachusetts, constitutes another milestone in the use of inventories. Main makes heavy use of additional sources such as tax lists, merchant accounts, and newspapers, but bases the guts of his analysis of the Revolutionary years on inventories drawn from diverse parts of all the colonies. In his bibliography, Main calls probate inventories "the most valuable and almost untapped source materials for the socio-economic history of early America." Under his analysis the inventories reveal that conclu-

<sup>&</sup>lt;sup>6</sup> J. MAIN, Social Structure, 288.

sions about the democratic or élitist nature of colonial society vary depending upon both the region of the colonies and the economy of an area within the region — frontier, subsistence-farming, commercial-farming, or urban. Main generally asked questions concerned with economic matters such as the relative distribution of wealth among classes and the types and amounts of wealth men of different classes amassed. His methodology, while clearly quantitative, contains nothing that would be frightening or mysterious to the average non-mathematical historian. It relies primarily on computing percentages based on the total wealth of each inventory. Thus urban areas had the greatest differentiation of classes and the widest gap between the rich and the poor, and lawyers had the wealthiest estates of any occupation while farmers possessed greater wealth than artisans.7 Knowledge of colonial society reached a new degree of sophistication with Main's work and although it has methodological problems related to the biases caused by the older age of probated decedents than the general population and the exclusion of some estates, it remains the starting point for early American social analysis.

In the eleven years since the publication of *The Social Structure of Revolutionary America*, a score of historians and a few economists have made extensive use of probate inventories. The two most important works from the standpoint of inventory methodology are the long journal articles by Alice Hanson Jones, an economist, and the as yet unpublished doctoral dissertation of Gloria Lund Main. Both use probate inventories almost exclusively as their sources and both refine the methodology to new standards of purity by using techniques that would seem complex to the non-quantitative scholar. Both are concerned primarily with economic development but neither shies away from asking significant social questions.

In "Wealth Estimates for the American Middle Colonies, 1774," Economic Development and Cultural Change, 18, no. 4, part II (1970), and "Wealth Estimates for the New England Colonies About 1770," Journal of Economic History, XXXII (March, 1972), Jones examines the economic structure of the late colonial world at one instant in time through samples drawn from one region in 1774 and from another in 1770. She determines for each area the mean wealth for the probated persons and the percentages of types of wealth the probated persons held — capital, consumer, savings, etc. and then through highly developed formulae dares to translate the wealth of the probate into the wealth of the then-living population and to make comparisons between the living standards and buying power of colonial Americans with Englishmen of the same era and Americans of the 1960s. The personal wealth of the colonists, slightly higher for the average Middle-colony free male than for the average New England free male, compared highly favorably to European counterparts and most counterparts from pre-industrial societies today, and was actually about ten per cent higher than figures for early national America in

<sup>7</sup> Ibid., 101-105.

1805. Jones believes the figures represent a "high" standard of living and that "the U.S. was not a poor country in 1774 even by modern standards."8 The level of living, probably the highest achieved for most people in any country up to that time, argues strongly against the old Whig contention that the colonists were badly exploited by the English Navigation Acts. Of particular interest to colonial historians are some of the internal comparisons Jones makes; Middle colonists were slightly wealthier than New Englanders and New Englanders tended to have a greater percentage of their wealth invested in land while the Middle colonists did so in servants, slaves, livestock, and cash. 10

One crucial methodological point Jones makes is that the largeness of a sample is seldom the test of its reliability. Her New England sample only numbers 381 inventories yet can be defended as a valid and unbiased sample of that year by any appropriate statistical tests. 11

Jones' work, which is being expanded eventually to include all of the mainland colonies, provides the most precise picture of living levels and economic development for one moment in colonial society that is now available and makes the picture all the more meaningful through her imaginative internal and external comparisons.

Gloria Lund Main, "Personal Wealth in Colonial America: Explorations in the Use of Probate Records From Maryland and Massachusetts, 1650-1720," (unpublished Ph. D. dissertation Columbia University, 1972), provides a detailed investigation of changes in patterns and composition of personal wealth in two colonies over a seventy-year period of time and in doing so introduces new tools and techniques for correcting the age and exclusion biases and for measuring the distribution of wealth among classes. Perhaps the most significant new aspect she introduces to history written from inventories is her use of time comparisons which of course are essential to an understanding of growth and development. Ironically, Main's thesis supervisor, Stuart Bruchey, one of the foremost students of early American economic growth, had lamented earlier in 1965 "the paucity of quantitative evidence" for estimating the growth of the colonial economy and cited it as the chief reason why the new economic historians would never produce a definitive work on colonial economic growth.<sup>12</sup> Among the important trends she discusses, Main demonstrates that in both Massachusetts and Maryland wealth did not become more concentrated in the upper elements in a constant ongoing process but that within the general rise of an unevenly skewed distribution were small reversals and declines, that Southerners increasingly invested their capital in slaves because personal wealth grew faster as a consequence of increasing slave holdings, that 1691-1700 was the crucial decade in which wealthy

Jones, "Middle Colonies," 130-134.
 Jones, "New England Colonies," 104, 105.
 Ibid., 103

<sup>11</sup> Ibid., 99.

<sup>12</sup> Stuart Bruchey, The Roots of American Economic Growth, 1670-1861 (New York, 1965), XXIII.

planters started switching in large numbers from white unfree labour to black slave labour, and that this increasing investment in slavery accounts to a large extent for the decline of English trade with the South in this period.<sup>13</sup> She also develops for the period 1650 to 1720 an occupational structure for Boston, 31 per cent unskilled workers, 33 per cent artisans, 29 per cent traders and merchants, 5 per cent professionals and major civil officers, and 2 per cent a combination of several types, and for Maryland, 84 per cent farmers, 7 per cent farm labourer, 3 per cent artisans, 2 per cent traders and merchants, and 2 per cent professionals and major civil officers, by either using the designation given the decedent by the estate's appraisers or in case no designation was made by inferring occupation from the goods inventoried. 14 Main draws wide-ranging conclusions about agriculture that range from documenting the north's perference for cattle to the south's preference for swine, to establishing that a mature slave in good health was valued at more than the entire head of livestock inventoried in an average estate.15

#### II. — PROBLEMS

Though inventories are perhaps the best quantifiable source for Colonial American history, as G. Main wrote recently, the reason they have been so little used is that they seldom are capable of unqualified use without some elaborate mechanical operations to correct biases. <sup>16</sup> Practical problems also abound but with them as well as with methodological difficulties, solutions are emerging.

One of the practical problems has been easy accessibility to the inventories. There is no national archive for them and they are all kept within the original state. In some states such as Connecticut, New Jersey. Delaware, and South Carolina, probate records are centralized in a state library, while in most of the original states they are kept in widely dispersed county court-houses. New Hampshire and New Jersey have published condensed versions of the inventories which give the raw total of the inventory but not the specific details, while Virginia has microfilmes all of its probate records and makes the microfilm available through the mails. Local historical and genealogical societies have sometimes published certain portions of records and hence some selected samples are also available in published forms. The most promising source of inventories without widespread travelling comes from the Genealogical Society of the Church of Jesus Christ of Latter-Day Saints. They have microfilmed almost all colonial probate records and will allow historians to use their microfilm either at their main vault in Salt Lake City, Utah, or at one of their branch genealogical libraries. They would not, for instance, send microfilm to me in Winnipeg but they would make it available to me at their Minneapolis branch library.

<sup>13</sup> G. MAIN, "Personal Wealth," 302, 301, 202, 317.

<sup>14</sup> Ibid., 126, 135.

<sup>15</sup> Ibid., 167, 174.

<sup>16</sup> G. MAIN, "Probate Records," 95.

Despite the local nature of probate records, they follow basically the same form in all of the colonies because they all copied the same British model.<sup>17</sup> The only major difference among them is that all of the New England colonies except Rhode Island inventoried land as well as all other personal wealth while the Middle and Southern colonies inventoried only personal wealth.

One of the immediate problems encountered when examining an inventory is determining the currency the inventory was taken in and what it was worth. In most colonies inventories were taken in a bewildering number of different units: Sterling, Country Pay, Old Tenor, Middle Tenor, New Tenor, or Lawful Money. Differences between types of currency can be massive: New Hamshire Old Tenor was exchanged at 20 to 1 for Sterling in the 1750s — or slight but significant — lawful money was usually reckoned at 1 1/3 to 1 for Sterling in the 1760s. Obviously, computations that did not take account of the differing units would be meaningless and the currencies must always be translated into common units. This is not as difficult as at first it would seem; the currencies of most colonies have been treated in monographic articles or books. Some of these such a Joseph Felt, Historical Account of Massachusetts' Currency (Boston: 1839) are widely cited and can be used with great confidence, while others such as Henry Bronson, "Historical Account of Connecticut Currency," New Haven Colony Historical Society Papers, Vol. I (New Haven: 1865), 1-192, are little known but still authoritative and reliable. Two general treatments of currency, Curtis Nettels, The Money Supply of the American Colonies Before 1720 (Reprinted 1973, Clifton, New Jersey), and Leslie Van Horn Brock, "The Currency of the American Colonies, 1700-1764," (unpublished Ph. D. dissertation University of Michigan, 1941) are indispensable guides for the years they cover. Donald Kemmerer and C. Clyde Jones, American Economic History, (1959), provides a thorough bibliography of work on colonial currency. 18 A book-length manuscript by John McCusker that will list all exchange rates for the Colonies is to be published in 1977 by the Institute of Early American History and Culture and will be the most comprehensive guide to the subject ever compiled. If the secondary sources for a particular colony's currency do not exist, the colony's General Assembly records usually furnish enough primary evidence to establish valid exchange rates.

Inflationary changes in value, the twin problem to currency changes, is more difficult to solve. Every colony experienced slow steady inflation throughout the first three decades of the eighteenth century but in the late 1730s it became rampant in New England for over a decade until currency reform at imperial behest in the 1750s stabilized exchange rates. A few excellent secondary sources such as Alice Bezanson et al., Prices in Colonial Pennsylvania (Philadelphia: 1935), Felt's study of Massachusetts, and Nettels' study of the money supply readily provide information for

<sup>17</sup> Ibid., 91.

<sup>&</sup>lt;sup>18</sup> I would like to thank Alice Hanson Jones for bringing the bibliography in *American Economic History* to my attention.

a particular colony or time but generally inflation in most colonies is not adequately treated. Most colonies' assemblies, however, fixed the price at which Spanish dollars would be exchanged for local currency, and inventories usually give silver prices in local currency; both of these provide a base from which inflationary changes can be calculated.

To convert a sample of probated decedents to a sample that reflects the then-living population is the most difficult mathematical problem historians encounter. The probated decedents, as was previously mentioned, do not include all men in society nor all women in society who owned property at their death and were probate potentials. What percentage of the possible probates actually left inventories is a subject of debate among historians but clearly differs between times and places. Historians have generally calculated what percentage of men were inventoried by comparing the actual number of inventories extant for a period with the number of deaths that could be expected for the period from normal mortality rates. Kenneth Lockridge, "A Communication," William and Mary Quarterly, XXV (July, 1968), 516, estimates that only 40 per cent of all men were inventoried in New England in the eighteenth century. William Davisson, "Essex County Price Trends: Money and Markets in Seventeenth-Century Massachusetts," Essex Institute Historical Collections, CIII (1967), 144-185, estimates 25 per cent were inventoried in Essex County between 1640 and 1682, while Philip Greven Jr., Four Generations: Population, Land, and Family in Colonial Andover, Massachusetts (Ithaca, New York: 1970), estimates 45 per cent were in Andover which is in Essex County. Jones estimates that while New England had inventories taken for only 32.7 per cent of its people in 1771, the Middle Colonies had them taken for 63.8 per cent in 1774.19 G. Main shows that even within New England, inclusion rates fluctuated from a possible low of 25 per cent of all men for Boston in the late seventeenth century to a possible high of 90 per cent in Connecticut in the same time period.<sup>20</sup> She argues that coverage generally declined with time.<sup>21</sup> In the South, Russell Menard, P.M.G. Harris, and Lois Green Carr, "Opportunities and Inequality: The Distribution of Wealth on the Lower Western Shore of Maryland, 1638-1705," Maryland Historical Magazine, LXIX (Summer, 1974), 169-184, estimates that in seventeenth-century Maryland only an insignificant number of white men's estates were not inventoried. Indeed the authors calculate that the number of extant inventories exceeded the number of probable deaths.

Who comprised the group missing in inventories also is a matter of conjecture and debate. Because inventories are generally recorded chronologically in folio volumes it is clear that they are not lost but were never taken. At one time it was thought that only people without property were not inventoried but obviously the indigent people of the colonies never approached the number left out of the probating process. More to the

<sup>&</sup>lt;sup>19</sup> Jones, "New England Colonies," 116; "Middle Colonies," 114.

<sup>20</sup> G. MAIN, "Probate Records," 98, 99.

<sup>21</sup> Ibid., 98.

point, we know of many people who by all accounts were wealthy but were not inventoried and conversely of people who were near indigent and were inventoried. Jones, in a thoughtful and logical guess, suggests that distance from the courthouse, the number of heirs, the possibility of contention over the estate, or the season and weather could all be factors affecting the taking of an inventory.<sup>22</sup> Whatever the reason, all historians who have worked with inventories agree that probably the majority of the uninventoried decedents fall into the lower two-thirds of society and hence bias the samples from the inventories. A careful estimate made by Alan Tully, "Economic Growth and Opportunity in Mid-Eighteenth-Century Pennsylvania," (Histoire sociale-Social History, VIII (May, 1976): 111-128), suggests that the bias could be very slight and that in Pennsylvania the lower 40 per cent of people on the tax records were only under-represented in inventories by 10 per cent.

To correct for the exclusion bias and for the bias caused by the fact that the decedents were older than the living population both of which incline the inventoried people to have accumulated more wealth than the general population, multipliers must be introduced to convert the inventories to a valid sample of the then living population. Jones, using logic based on a number of assumptions, provides formulae whereby this can be done.<sup>23</sup> Daniel Scott Smith, perhaps the foremost student of colonial quantitative methodology, in "Underregistration and Bias in Probate Records: An Analysis of Data From Eighteenth-Century Hingham, Massachusetts," William and Mary Quarterly, XXXII (January, 1975): 100-110, also provides formulae based on empirical evidence from Hingham in which he feels historians can place a great deal of confidence because they agree so closely with Jones' formulae arrived at by indirect methods. Still one needs to know the age of each inventoried decedent to apply all of these formulae. Terry Anderson, "Wealth Estimates For the New England Colonies, 1650-1709," Explorations in Economic History, 12 (April, 1975): 151-176, develops formulae, that, although not as precise as the above ones, allow for correcting the biases without knowing the inventoried decedents' ages. He relies upon a stable population model. G. Main, "The Correction of Biases in Colonial American Probate Records," Historial Methods Newletter, 8 (December, 1974): 10-28, through carefully comparing the known populations of two areas in Massachusetts and Maryland with the probate inventories arrives at a "generalized approach" for correcting the age and exclusion biases. If one cannot establish the ages of probated decedents in any given sample, Main provides a way of correcting for the age bias based on whether or not the inventoried person was a householder which is almost always apparent from internal evidence in the inventory. Main's formulae will allow an historian to correct for biases in his own geographic area of research, without extensive additional research but she cautions against employing uniform multipliers; every area and time requires different corrective factors. The crucial vari-

<sup>&</sup>lt;sup>22</sup> Jones, "New England Colonies," 116.

<sup>&</sup>lt;sup>23</sup> Jones, "Middle Colonies," 117, 118.

ables that differ, besides the probating process, are the mortality patterns and the age structure of the living population.

The difficulty of developing uniform corrective factors is indicative of another problem that confronts historians working with inventories; the regional and local nature of colonial society. Historians have long known that each of the colonies was a small world unto itself and possessed a social structure if not totally different at least distinct from its neighbors. Historians now further recognize that within colonies not only were there at least four distinctive types of economies and social structures as J. Main pointed out but there were also distinctive local social and economic patterns that related to the date of an area's settlement and the number of generations of settlers, and to the population density.<sup>24</sup> To evaluate these structures in even one colony requires that many samples be taken from many different types of areas to cover the full range of possible experience. Hence, the very diversity of the colonies ensures that samples will only be valid for small universes. Jones' samples represent accurately only one year and G. Main's samples represent accurately only certain counties from select colonies. This practical fact probably means that much of the work done from probate inventories will follow the tradition of colonial historians of the last twenty years and will take the form of monographic articles or books on single localities, colonies, or regions, and knowledge will be fragmented for a number of years until syntheses based on them appear.

#### III. - RESULTS

The published work based on probate inventories has increased so rapidly in the last ten years that it now embraces a wide variety of topics. However, more of the work centres on wealth distribution than any other subject. The most original and significant hypothesis advanced about colonial America recently, Kenneth Lockridge's suggestion in "Land, Population, and the Evolution of New England Society, 1630-1790: And An Afterthought," Stanley Katz (ed.), Colonial America: Essays in Politics and Social Development (Boston, 1971), 466-491, 473, that perhaps late eighteenth-century New England was "overcrowded" and had exceeded the level of population density that best supported a healthy vital farming community, was based on land acreage per person estimates partially arrived at through inventories. Lockridge found that the 65 acres the average decedent owned, when adjusted downwardly to compensate for the exclusion and age biases, was too small a parcel of land to sustain

GREVEN, Four Generations and Daniels, "Long Range Trends of Wealth Distribution in Eighteenth-Century New England," Exploration in Economic History, XI (Winter, 1973-74): 123-135, and "Democracy and Oligarchy in Connecticut Towns: Patterns of General Assembly Office-holding, 1701-1790," Social Science Quarterly (Dec., 1975): 460-475, show how settlement date affects a town's social structure. Darrett RUTMAN, in a provocative recent essay, "People in Progress: The New Hampshire Towns of the Eighteenth Century," Journal of Urban History, I (May, 1975): 268-292, shows that population density may be more crucial to a town's social patterns than settlement date and numbers of generations though, of course, the two are closely related.

a family in a town that had a high birth rate, partible inheritances, and little mobility. Consequently, the "overcrowding" caused a decline in the birth rate, some reversion to primogeniture with land assets, and a propensity for young men to leave the community. Charles Grant, Democracy in the Connecticut Frontier Town of Kent (New York, 1961), with inventories as his source, had hinted at the same processes occurring in Kent though he did not explicitly develop all their implications. Lockridge also contrasts the distribution of wealth revealed by inventories in 1660 and in 1765 and finds that property was far more unevenly distributed at the latter date.<sup>25</sup> J. Main had earlier shown that in Revolutionary America property became more unevenly distributed as the economy of an area passed from frontier to subsistence to commercial to urban stages.<sup>26</sup> Donald Koch, "Income Distribution and Political Structure in Seventeenth-Century Salem, Massachusetts," Essex Institute Historical Collections, CV (1969), 50-77, used inventories to show that as Salem became increasingly differentiated as an urban center from the rest of a rural county, its distribution of wealth became more unequal than that of the county. Bruce C. Daniels, "Long-Range Trends of Wealth Distribution in Eighteenth-Century New England," Explorations in Economic History, XI (Winter, 1973-74), 123-135, establishes that once an area was clearly urban its wealth distribution was markedly more unequal than the surrounding countryside and it maintained a reasonably steady level of inequality throughout the eighteenth century. This study also follows non-urban areas through the course of the colonial portion of the eighteenth century and shows that they were increasing the inequality of their wealth distribution and that each new frontier area in New England while relatively egalitarian in its wealth distribution was less egalitarian than previous ones. Daniels' conclusions are based on raw inventories that were unadjusted for biases and he assumes that since the biases were reasonably constant his figures are valid for relative comparisons but are, of course, not accurate in an absolute sense. Gary B. Nash, "Wealth and Proverty in Three Colonial Cities: The Social Background to Revolution," Journal of Interdisciplinary History (April, 1976), when coupled with Jones' findings of a greatly differentiated wealth structure in the Middle Colonies, suggests that the trend towards greater inequalities in wealth distribution also occurred in other regions.<sup>27</sup> Nash shows that, although Philidelphia and New York lagged behind Boston in the early eighteenth century in concentrating their wealth in the upper elements of society, by the eve of the Revolution all three cities had similar distributions that were heavily skewed towards the top 5 per cent of society. He further shows that, contrary to the theory of economic development employed by most economists, the concentration of wealth in the hands of an entreprenurial élite did not benefit all ranks of society. The poor in the three cities did not just lose ground relatively as all of society became wealthier

<sup>&</sup>lt;sup>25</sup> Lockridge, "Land, Population," 476.

<sup>&</sup>lt;sup>26</sup> J. MAIN, Social Structure, 7-43.

<sup>27</sup> I wish to thank Professor Nash for an advance copy of his article before it went to press.

but had shrinking real assets and were actually poorer in absolute terms.<sup>28</sup> Similarly, an imaginative examination of southeastern Pennsylvania by an historical geographer, James T. Lemon, The Best Poor Man's Country (Baltimore: 1972), shows that while land values increased tenfold between 1730 and 1790, wealth in inventories increased only fourfold and most young men found land priced beyond their means. Pressures of partible inheritances and high birth rates caused the drastic increase in land prices and resulted in high geographical mobility as cheaper land on the frontier served as a "safety value" for the excess sons.29 However, Tully, using inventories for Chester County, Pennsylvania, concluded that all of the county was growing progressively wealthier over the course of the 1730s, 1740s, and 1750s and that the higher and lower elements of the society maintained a constant percentage of the total wealth and that the "overcrowding" model and the increasing inequalities in wealth distribution did not apply to all areas of Pennsylvania. 30 Menard, Harris, and Greene show through their analysis of inventories in one area of the Chesapeake that if wealth did tend to become more unequally distributed with the passage of time that the overall line leading towards greater differentiation was not straight and contained fluctuations and cycles.<sup>31</sup> G. Main described a similar fluctuating trend for the seventeenth century.<sup>32</sup>

Patterns of increasing wealth concentration and overcrowding affected the basic institutions of society. Greven's study of family life in colonial Andover, Massachusetts, uses inventories, other probate records such as wills, and other quantifiable materials to analyse how the declining availability of land affected relationships between different generations of families. He demonstrates through an analysis of inventories of the second generation of Andover men that the third generation of men faced a relative scarcity of land. The fertility of the second generation put demographic pressures upon the land and, accordingly, as the third generation matured, land prices responded to the pressure and went up considerably. The scarcity and higher value of land clearly correlates with the increased emigration of Andover younger sons who felt the need to seek their futures elsewhere. The inventories of the fourth generation men reveal that Andover land was no longer a source of prosperity for all and many men declined in status and suffered downward mobility. The declining standard of living can be seen most graphically in the smaller tracts of land, often as low as thirty acres, on which men were ekeing out liv-

<sup>&</sup>lt;sup>28</sup> Nash, "Wealth and Poverty," Table 3, pg. 28 (in manuscript).

LEMON, Best Poor Man's Country, 88-89, 96-97.

TULLY, "Economic Growth and Opportunity," 15-18.

MENARD, HARRIS, and GREENE, "Opportunity and Inequality."

MAIN, "Personal Wealth," 302. All of the above work on wealth distribution can profitably be compared to Lee Soltow's analysis of property-ownership between 1850 and 1870. Soltow, basing his work on censuses, concludes that wealth ownership was remarkably stable over this twenty year period and that the percentage of people who owned real estate was "shockingly low". The top 2 per cent of wealtholders owned between 35 and 45 per cent of the wealth but there was a significant amount of "self-betterment [...] in the jungle of inequality." See Lee Soltow, Men and Wealth in The United States, 1850-1870 (New Haven: Yale University Press, 1975), 179-183.

ings. Greven also shows that with smaller inventories and farms go smaller families — as land decreased so did birth rates.<sup>33</sup>

John J. Waters Jr., The Otis Family in Provincial and Revolutionary Massachusetts (Chapel Hill: 1968), and Daniels, "Family Dynasties in Connecticut's Largest Towns, 1700-1760," Canadian Journal of History, VIII (September, 1973), 99-110, show that this degree of downward mobility was not experienced equally by all families. Through the use of inventories and other evidence available for different generations these studies trace the upward mobility of the Otis family in Massachusetts and the Pitkin, Huntington, and Burr families in Connecticut. At the middle of the eighteenth century, while perhaps much of New England was feeling the effects of being "overcrowded," as the Andover families were, these few families had become an élite with a strong economic and political base. The vast holdings of New England's premier families can best be seen in their inventories. Of course, these élite families while increasing their political and economic power also did have an increasingly difficult time amassing enough property to provide "gentlemanly" livings for a large number of sons and even members of the élite married later, had fewer children, and had more of a propensity to leave the home communitv. 34

Terry Anderson builds a microeconomic model that shows per capita real wealth rose at an annual rate of 1.6 per cent between 1650 and 1709. This rate, higher than estimates made from qualitative work, suggests that seventeenth-century New England was growing at a rate similar to modern developed areas. Even with this rapid growth, Anderson finds that wealth per capita in New England in 1690 lagged considerably behind that of England, £25 5s compared to £39 5s. Inasmuch as Jones shows that by 1774 the New England colonies had surpassed the per capita wealth of England we can extrapolate that in the colonial portion of the eighteenth century New England continued to have a high growth rate. Although there is three-quarters of a century between the periods they study and one cannot assume that fluctuations did not occur in this time, a comparison of Anderson's findings on occupations with Jones' shows the increasingly commercial nature of New England's economy. In the late seventeenth century 65 per cent of the population were farmers and 3 per cent were merchants: in 1774 only 54 per cent farmers and the merchant class had climbed to 14 per cent.35

Historians also use inventories to study price fluctuations. In his article on Essex County price trends Davisson charts the prices of 56 separate items yearly for about a half-century and compiles an accurate

<sup>33</sup> GREVEN, Four Generations, 127-165, 224, 227.

<sup>&</sup>lt;sup>34</sup> For example the Pitkin family of Hartford though extraordinarily wealthy did have the same demographic characteristics of poorer families. The fourth generation married later, had fewer children, and had a greater propensity to leave their hometown than the third. Daniels, *Connecticut's First Family*, Connecticut Bicentennial Series (Pequot Press, 1975), Chap. I.

<sup>35</sup> ANDERSON, "Wealth Estimates," 151, 161, 171.

price index. He shows that although land gained greatly in value over a fifty-year period the gains were not steady and the long range trend obscured many sharp upward and downward fluctuations. Prices of different goods responded differently; horses and oxen were at their highest value in the 1640s and steadily declined in price as more became available. Conclusions Davisson draws for Essex County illustrate nicely how local data can shed light on questions of major significance. He concludes that the establishment of the Massachusetts' Mint and the issuance of the Pine Tree Shilling stabilized prices and eliminated the wildest of price fluctuations, that Essex County prices corresponded closely if not perfectly to those of London, and that the price of affected goods always responded sharply to the passing of a new Navigation Act thus suggesting that the trade acts were of vital interest to the local villagers.<sup>36</sup>

Davisson in a companion article, "Essex County Wealth Trends: Wealth and Economic Growth in Seventeenth-Century Massachusetts," Essex Institute Historical Collections, CIII (1967), 291-342, uses the same sample of inventories for a different purpose — to analyse the nature of seventeenth-century Essex County's economy. From finding a large and increasing number of mercantile debts, merchants' stock, and sailing ships, he concludes that the county had a significant non-agricultural sector to its economy and that Salem was already a commercial entrepôt by the middle of the seventeenth century. That Essex County residents prospered in this economy can be shown by the steady increase in the mean value of estates as the seventeenth century progressed. The increase in mean personal wealth may have been as high as 300 per cent between the 1640s and 1680s. Much of this dramatic increase was due to the large amount of land that merchants increasingly amassed as they searched for lucrative areas of investment for their profits.37 This extraordinary growth rate could not be typical of all of New England, but Davisson's results lend strong support to Anderson's contention that New England economic growth rates were high and the New England colonies were exceptionally prosperous until the dislocation caused by the Revolution.

Aubrey Land, "Economic Base and Social Structure: The Northern Chesapeake in the Eighteenth Century", Journal of Economic History, XXV (December, 1965): 639-659, and "Economic Behavior in A Planting Society: The Eighteenth-Century Chesapeake," Journal of Southern History, XXXIII (1967): 469-485 is similar to Davisson's work on Essex County in analysing a region's economy by using inventories. His research shows that the tobacco economies were far more variegated and complex than is traditionally thought and that the economic and political leaders of the countryside seldom based their fortunes solely on planting but were instead entrepreneurs with well-rounded economic operations. The rich planters looked very unlike those of "the moonlight and magnolias variety" and far more like shrewd businessmen who combined agriculture with merchandising, land speculation, manufacturing, or money-leading.

DAVISSON, "Essex County Price Trends," 165, 166, 170, 156, 162.
 DAVISSON, "Essex County Wealth Trends," 303, 311, 318.

These great planters, who had much more in common with the economic leaders of the north than was ever suspected by historians, constituted only a fraction of the eighteenth-century's population, from 2.5 per cent to 6.5 per cent, while the vast majority of the men designated as planters were 'dirt' farmers or at the best petty slaveholders of very limited means. 38

The economic picture of southeastern Pennsylvania that Lemon paints in *The Best Poor Man's Country* is based partially on inventories. Through an analysis of them he shows that contrary to folklore only slight differences existed in the average wealth of different national groups in eighteenth-century Pennsylvania. The wealthiest, the English, averaged £270 per estate, while the lowest two groups, the German speakers and the Scotch-Irish and Scots, each averaged £254. When wealth was compared by religious affiliation, however, Quakers and Mennonites, whom one would expect to have greater wealth because of their greater initial affluence and their earlier arrival, in fact held a significantly larger amount than other denominations. <sup>39</sup>

Lemon also analyses through inventories the livestock composition of farms at various times in the eighteenth century. Generally, the average number of animals per farm declined as farms became smaller and increasingly concentrated on growing grains for export. Cows declined from a high of 9.6 per farm in 1728-1737 to a low of 7.2 in 1783, horses declined from 6.7 in 1728-1737 to 3.3 in 1790, and swine from 9.7 in 1713-1716 to 5.8 in 1761.40

John Demos, A Little Commonwealth: Family Life in Plymouth Colony (New York and London: 1970), that relies heavily on inventories as sources, is most imaginative and exciting of social history. Demos combines quantitative evidence from inventories with highly theoretical paradigms borrowed from the social sciences to formulate several provocative hypotheses while at the same time providing interesting narratives and descriptions. For example, he reconstructs the clothing patterns of Plymouth colonists from the lists of items valued in inventories, destroys the old mythology about the austere black-and-white wearing Puritans, and then based on the fact that in all of the inventories he sampled he failed to find any special clothing for children over six, speculates that Puritans had different notions of childrearing than later generations. If the little Puritan boy looked like a miniature model of his father perhaps he was expected to behave as an adult from an early age. Demos then finds strong support in the qualitative literary sources for this hypothesis of a lack of a Puritan childhood and, using psychological theory, further speculates what meaning this held for Plymouth society. Demos also reconstructs average house sizes and furnishings from the inventories and concludes that the average house, small and cluttered, afforded no privacy, which must also have had significant affects on the psyches of

40 Ibid., 162.

653.

<sup>38</sup> Land, "Economic Behavior," 475, 476, 477-486, 472; and "Economic Base,"

<sup>39</sup> LEMON, Best Poor Man's Country, 15-20.

the colonists.<sup>41</sup> The descriptive architectural aspect of Demos' work is complemented in two other analyses of home furnishings based on a large number of inventories: Abbott Lowell Cummings', Short Introduction To Rural Household Inventories (Boston: 1964), and Elizabeth Adams Rhoades, "The Furnishings of Portsmouth Houses, 1750-1775," Historical New Hampshire (Spring, 1973), 1-19. One can get a strong subjective sense of the economic growth of colonial New England by comparing the small cluttered houses of seventeenth-century Plymouth with the elegant spacious houses of late eighteenth-century Portsmouth.

Another social history, David Flaherty, *Privacy in Colonial New England* (Charlottsville, Virginia: 1972), uses the inventories collected by Cummings to bolster an argument that privacy was a real concern to Puritans. Almost every inventory listed bedcurtains that were hung from rafters around a married couple's bed to ensure some degree of intimacy and privacy for sexual relations.<sup>42</sup>

Leadership in society is one of the subjects that lends itself best to analysis through inventories. Most studies that examine the socioeconomic origins of colonial leaders such as J. Main, The Upper House in Revolutionary America (Madison: 1967), and "The Democratization of the Legislatures," William and Mary Quarterly, XXXIII (July, 1966): 391-407, and James Kirby Martin, Men in rebellion: Higher Governmental Leaders and the Coming of the American Revolution (New Brunswick, New Jersey: 1973), rely heavily on inventories. One of the problems encountered when trying to establish on a quantitative basis the relative ranking of an individual in society is to find a scale against which to measure the individual. To remedy this problem partially, money-value definitions of different deciles of probated decedents for differing types of towns in differing time periods are provided in Daniels, "Defining Economic Classes in Colonial New Hampshire, 1700-1771," *Historical New Hampshire*, XXVIII (Spring, 1973): 53-62; "Defining Economic Classes in Colonial Massachusetts, 1700-1776," Proceedings of the American Antiquarian Society, LXXXIII (October, 1973): 251-259; and "Moneyvalue Definitions of Economic Classes in Colonial Connecticut, 1700-1776," Histoire sociale—Social History, VII (November, 1974): 346-352. These definitions provide scales for town types and for each colony as a whole against which specific individuals can be measured and ranked.

Other groups besides leaders can be singled out for analysis from inventories. Russell Menard, "From Servant to Freeholder: Status Mobility and Property Accumulation in Seventeenth-Century Maryland," William and Mary Quarterly XXX (January, 1973): 37-64, and "The Maryland Slave Population, 1650-1730: A Demographic Profile of Blacks in Four Counties," William and Mary Quarterly, XXXII (January, 1975): 29-54, has used them to focus on the lowest elements of Maryland society, indentured servants and black slaves. Menard questions the widely accepted assertion based on qualitative sources that only about 20 per

<sup>41</sup> DEMOS, A Little Commonwealth, 52-58, 36-47.

<sup>42</sup> FLAHERTY, Privacy In New England.

cent of seventeenth century servants became stable and useful members of society. By examining the inventories of a large number of former indentured servants he is able to establish that at least 50 per cent of them and probably more became solid citizens who died with a comfortable amount of property. Because there are no detailed censuses nor any good vital statistics for the seventeenth-century Chesapeake, Menard found inventories to be the best possible source for studying the quantitative dimensions of slavery. The inventories yield price information, data on the growth and distribution of slavery, provide an age and sex profile of the slave population since slaves were listed by age and sex in the planters' inventories, and give useful insights into white attitudes towards blacks and into possibilities for slave family life. The study concludes that male slaves outnumbered women among productive adults one and one-half to one, that mortality was higher among males than women because women outnumbered men among old slaves, that few planters owned large gangs of slaves in the seventeenth century, that the blacks were an isolated population in seventeenth-century Maryland due to the dispersal of their owners, and that this dispersal, when coupled with the sexual imbalance, placed formidable barriers to normal "affectionate relationships" between men and women and denied many blacks fundamental human needs. Menard discusses changes that occurred in slavery in the eighteenth century: slaves lived not in ones and twos but in large groups and hence the physical isolation ended, a differentiation of occupation among the slaves produced a slave social structure, and a balance between the sexes was achieved, thus allowing more possibilities for a normal family life. The ironic possibility exists, then, that as blacks and bondage increasingly became identified and as slave legal codes became harsher, the changing demographic conditions of the slave population enabled slaves to cope more with their situation.<sup>43</sup>

As Menard's work shows so well, one of the most valuable contributions inventory-based work has made to colonial historiography is to test empirically long held conclusions and assumptions that are based on highly subjective evidence. Consider for example the following statements all of which may not seem startling but are valuable corrections to earlier erroneous beliefs. About the same percentage of Southerners owned books during the Revolutionary era, 63 per cent, as northerners, 64 per cent. 44 Maryland raised enough wheat by the late seventeenth century to enable flour mills to operate successfully and though tobaccoraising in the South was ubiquitous only the poorest farmer specialized in it exclusively.<sup>45</sup> At times the printing of money by colonies stabilized prices and the economy instead of inflating them. 46 The distribution of wealth approached a degree of inequality usually associated only with the mid-nineteenth century as early as 1720 in urban areas. 47 Even time-hon-

 <sup>43</sup> Menard, "Maryland Slavery," 30, 33-35, 49-54.
 44 J. Main, Social Structure, 254-255.

G. Main, "Personal Wealth," 125, 127.
 Davisson, "Essex County Price Trends," 183.
 Daniels, "Long Range Trends," 133.

oured beliefs about the bedroom can be challenged; most night chambers did not have commodes or "chambers pots" as part of their indispensable equipment — less than one-third did. 48 Inventory-based work can also show that alternatives to present hypothesis can be supported by evidence. For example, contemporaries often commented on how much travelling was done by seventeenth-century blacks which historians traditionally cite as proof of the relative freedom under the prevailing slave codes. An alternative possibility is that slaves were driven to exploit opportunities to travel more than in the eighteenth century because the slave population was so dispersed and the sex ration was so imbalanced. 49

Historical museums also use probate inventories in visually recreating the past and frequently arrive at surprising conclusions. Plimoth Plantation relied heavily upon them when constructing its 1627 Pilgrim village and found from them that it had to discard the spinning and weaving equipment that are usually featured in Puritan recreations; the first ones did not appear until after 1630. Old Sturbridge Village, which is a reproduction of an early national period community in the era just after the end of the colonial period, probably makes the widest usage of inventories. It has furnished a country store based on evidence from them and found it had to discard the proverbial picket barrel; none of the rural merchant's inventories included one. The farm that Old Sturbridge refurnished entirely from inventory evidence shows that rural furniture was extremely sparse, plain, and functional as late as 1800. This farm replication suggests that many farm displays in other museums are atypical of the period and are based on romantic notions of early American farm life. 50

The above bibliographical essay illustrates needs and opportunities more clearly and fully than any lists of topics or "calls" for additional work. Most of the work already completed is for one time period or one geographic location or one type of economic and social area and affords the opportunity for similar work in other times, locations, and types. Timesequence studies, regional and inter-regional comparisons, and typologies based on standardized models and techniques are all badly needed to supply perspectives to the existing case studies and to stake out new claims. Of course, in addition to more of the same, the opportunities also abound for different questions to be asked of the data and new techniques to get

RHOADES, "The Furnishings," 11.

MENARD, "Slavery," 37. A major reassessment of the social structure of the Chesapeake area is made by three recent doctoral dissertations which are all based heavily on inventories. See Kevin P. Kelly, "Economic and Social Development of seventeenthcentury Surry County, Virginia," (University of Washington, 1972); Allan Kullikoff, "Tobacco and Slaves: Population, Economy, and Society in Eighteenth-Century Prince George's County, Maryland," (Brandeis University, 1976); and Russell MENARD, "Economy and Society in Early Colonial Maryland," (University of Iowa, 1975). sity of Iowa, 1975).

<sup>50</sup> I wish to thank Mr. James W. Baker, Librarian of Plimoth Plantation and Ms. Caroline Sloat, Researcher of Old Sturbridge Village, for their aid.

the answers.<sup>51</sup> Perhaps most lacking in the existing historical literature are comprehensive studies. Only J. Main's analysis of Revolutionary America and Jones' projected treatment of all the colonies' wealth patterns in the late colonial eighteenth century attempt comprehensive geographic treatments and neither of them have any time perspectives. However, given the wide nature of the possible variables and the limits of time and resources historians have to expend on data collecting and processing, subsequent primary source work probably will follow the past format and when new comprehensive pictures of colonial America are developed that incorporate the conclusions of quantitative historians, case studies based on probate inventories will be their largest source.

See G. Main, "Probate Records" for examples of new types of work that she thinks are feasible. Probate inventories are not as valuable a source for nineteenth-century America as they are for the colonial period because other sources such as good detailed censuses exist after 1790. However, one major study of the national period utilized them and practitioners of colonial history using inventories such as Professor Jones believe they could add a great deal to our knowledge of the nineteenth-century. See Robert Fogel and Stanley Engerman, *Time on the Cross*, 2 vols. (Boston: 1974), II, 24, 26, which uses inventories as its basic source for the efficiency of slavery and for slave prices, ages, sex, skills, and handicaps, and Jones, "Review of Riches, Class, and Power Before the Civil War, by Edward Pessen," *Journal of Political Economy*, LXXXIII (June, 1975): 673-675. Undoubtedly, after probate inventories are explored throughly as colonial sources, they will be used more by historians of the early national period.

Other kinds of probate records besides inventories also have vast potential as historical sources. Kenneth Lockridge, Literacy in Colonial New England (New York: 1974), uses signatures on wills to launch a major enquiry into education and modernization in early America. James T. Lemon, Household consumption in Eighteenth-Century America and its relationship to production and trade: the situation among farmers in Southeastern Pennsylvania," Agricultural History, XLI (1967): 59-70, uses widow's dowers as described in farmer's wills to determine the average amount of provisions adults consumed. Sons were told specifically in wills how much beef, pork, vegetables and so on to provide for their mothers per year.