## Peter Temin

## The Labor Market of the Early Roman Empire

Ancient Rome was a slave society. Hopkins was the first to assert that Rome was one of only five slave societies in recorded history, a view adopted quickly by Finley. This characterization is important because slavery is used as a sign of a non-market economy, which, in turn, is a classification within the *Gemeinschaft und Gesellschaft* conception of history as the account of progress from one to the other. The former is the informal economy of families and villages where social rules and obligations are dominant influences on behavior. The latter is the economy characteristic of modern, urban societies. In the classic view of Tönnies, "a period of *Gesellschaft* follows a period of *Gemeinschaft*." Tönnies, citing Marx, described the mechanism behind this progress "as a process of increasing urbanization." Marx and Tönnies were trying to make sense of changes in nineteenth-century society, in which the dramatic rise of urbanization loomed large.<sup>1</sup>

Polanyi, in *The Great Transformation*, located the center of this transition in the labor market. He argued that labor markets in the modern sense did not exist before the Industrial Revolution and the Poor Laws that accompanied it in England. This view is consonant with Weber's judgment that a critical component of capitalism was free labor. One way to identify a period of *Gesellschaft* is the prevalence of urban life, but an even more important key is

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The author would like to thank Roger Bagnall, Alan Bowman, Richard Duncan-Jones, Peter Garnsey, Keith Hopkins, Herbert Klein, Sheilagh Ogilvie, Dominic Rathbone, and Joshua Sosin for help and advice. He also thanks the Warden and Fellows of Nuffield College, University of Oxford, and the Simon R. Guggenheim Foundation for research support.

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Keith Hopkins, Conquerors and Slaves (Cambridge, 1978); Moses Finley, Ancient Slavery and Modern Ideology (London, 1980); Ferdinand Tönnies (trans. Charles P. Loomis), Community and Society (East Lansing, 1957), 231–233 (orig. pub. as Gemeinschaft und Gesellschaft [Leipzig, 1887]); Karl Marx (trans. Samuel Moore and Edwar Aveling), Capital (London, 1970; orig. pub. Hamburg, 1867), I, 352.

the presence of a labor market in which the services of labor can be bought and sold, which, Polanyi argued, emerged only two centuries ago.<sup>2</sup>

The widespread use of slavery in Rome is taken as a sign that *Gemeinschaft* dominated the life of the Roman republic and the early Roman empire. Finley, and others following his lead, argued that ancient economies were not market economies, but an alternate, even primitive, form of organization. Finley stated, "In early societies, free hired labor (though widely documented) was spasmodic, casual, marginal." According to Hopkins, the early Roman empire was "a society which had no labor market." Hopkins speculated as a result, "In a society without a market in free labor, recruitment by force (i.e. slavery) was probably the only method of securing large numbers of full-time dependents with particular skills."

This view is mistaken. A variety of evidence indicates that Rome had a functioning labor market and a unified labor force. Wage dispersion in the early Roman empire, to the extent that we know it, is indistinguishable from that in pre-industrial Europe. Roman labor contracts have a distinctly modern allocation of risks and rewards. In addition, Roman slavery was so different from modern slavery that it did not indicate the presence of non-market, traditional actions. Instead, ancient Roman slavery was an integral part of a labor force that shares many characteristics with labor forces in other advanced agricultural societies. Contrary to Finley, who asserted, "[A]ncient slavery . . . co-existed with other

<sup>2</sup> Karl Polanyi, The Great Transformation (New York, 1944); Max Weber (trans. Talcott Parsons), The Protestant Ethic and the Spirit of Capitalism (New York, 1930; orig. pub. in German 1905). More recent views reject the opposition of Gemeinschaft and Gesellschaft in favor of a more complex view that sees both ideal types as present in a wide variety of societies. This view, which also derives from Tönnies, questions which form of society is dominant, not ubiquitous, interpreting history as the shifting balance between Gemeinschaft and Gesellschaft rather than a total transition from one to the other. A society might be regarded as dominated by one mode or the other, but the sense that progress has eliminated Gemeinschaft is gone. See Thomas Bender, Community and Social Change in America (New Brunswick, N.J., 1978).

3 Ian Morris, "Foreword," in Moses I. Finley, The Ancient Economy (Berkeley, 1999; orig.

<sup>3</sup> Ian Morris, "Foreword," in Moses I. Finley, *The Ancient Economy* (Berkeley, 1999; orig. pub. 1973), 1–37, 68. Finley, *Ancient Slavery*, 68. In "Further Thoughts," Finley reaffirmed his positions, with "nuancing," that "free hired labor was casual and seasonal" and that "there was no genuine competition . . . between slave and free laborers" (185–186). Following Brunt, he acknowledged abundant free laborers in the largest cities, but he insisted that their employment was "strictly speaking casual" (Finley, "Further Thoughts," in *idem, Ancient Economy*, 177–207); P. A. Brunt, "Free Labor and Public Works at Rome," *Journal of Roman Studies*, LXX (1980), 81–100; Hopkins, *Conquerors and Slaves*, 14, 111.

forms of dependent labor, not with free wage-labor," and Schiavone, who added recently that "slavery . . . led to the eventual stagnation of the [Roman economic] system, blocking off other paths," the analysis herein finds that free hired labor was widespread and that ancient slavery was part of a unified labor force in the early Roman empire, not a barrier to economic progress.<sup>4</sup>

THE ROMAN LABOR MARKET A functioning labor market couples a labor demand with a labor supply. Two conditions must be filled, at least partially: Workers must be free to change their economic activity and/or their location, and they must be paid something commensurate with their labor productivity to indicate to them which kind of work to choose. Contemporary studies maintain that labor needs to be mobile enough to bring wages for work of equal skill near equality. Although this stipulation does not mean that everyone has to change jobs with great frequency, enough people must be able and willing to do so to keep payments to labor from being excessively higher or lower than the wages of comparable work in other locations or activities. Even in the United States today, which contains the most flexible labor market in history, wages for comparable jobs are not completely equalized.<sup>5</sup>

When these conditions are not fulfilled, there is no labor market, or perhaps only local, isolated labor markets. People might not be able to change their economic activities due to hereditary or guild restrictions. They might be restricted in what they can earn or be entitled to income for reasons unrelated to their work. Wages, in the sense of a return for labor services might be "spasmodic, casual, marginal." The choice between these two alternatives is important because the nature of the labor market is an important component to the nature of the economy as a whole. With a functioning labor market, an economy can respond to external influences like market economies do today. Labor can move

<sup>4</sup> Finley, Ancient Slavery, 68, 127; Aldo Schiavone, The End of the Past: Ancient Rome and the Modern World (Cambridge, Mass., 2000), 156.

<sup>5</sup> Labor productivity herein means the output of goods or services that results from a worker's employment, not the average labor productivity of all workers. In economics jargon, it is the marginal product of labor. George J. Borhas, "Does Immigration Grease the Wheels of the Labor Market?" Brookings Papers on Economic Activity, I (2001), 71: "There exist sizable wage differences across regions or states in the United States, even for workers with particular skills looking for similar jobs."

to take an advantage of a technical change that makes an activity more profitable or a discovery that provides an economic opportunity in a new place. In a local, non-labor market, labor would not be able to respond to changes in the external environment. The economy instead would continue to act in traditional ways, perhaps with a small gesture toward the new opportunities. The economy would be dominated by Gemeinschaft, not Gesellschaft.

The task of distinguishing these two conditions in the early Roman empire is rendered difficult, as always, by the absence of comprehensive evidence. The chief evidence for the absence of a labor market in the early Roman empire has been the mere presence of slaves. The question is not how many slaves were present, however, but rather how slavery operated. Slaves in the American South before the Civil War were not part of a unified American labor market because their activities and incomes were so restricted that they had no incentive to seek better working conditions. Slaves in the early Roman empire did not suffer under the same restrictions, but despite Rome's use of slavery, free hired labor was the rule, not the exception, in the rest of the early Roman empire.

The abstract conditions that define a labor market typically are related to labor markets in industrial economies; they need modification to apply to labor markets in agricultural economies. Most of the workers in such an economy are rural, working either in agriculture or in associated crafts and services; they rarely change occupations or residences without strong pressure. A rural labor market exists when enough of them are free to move in response to economic stimuli, thereby keeping rural wages at a moderately uniform level but also allowing for substantial geographical variation in both the level and the rate of change of rural wages. For example, migration and wages interacted in early modern Britain to keep wages similar, but by no means equal.

One possible move for a substantial fraction of rural workers in advanced agricultural economies is to a city. It is rare, both in past and current agricultural economies, for rural and urban wages to be equalized by migration. Economists do not regard this discrepancy as negating the existence of a unified labor market; they explain the difference by noting that new urban workers often are unemployed and that only the expected wage (that is, wage  $\times$ probability of earning it) should be equalized by migration. Living

costs are also typically higher in cities; urban wages can exceed rural wages for this reason alone. Urban wages that are double rural wages do not strain the ability of these factors to account for the discrepancy.<sup>6</sup>

Wages vary in a labor market by skill as well as by location. Almost all workers have skills, basic skills of agriculture and often more advanced skills as well. Economists call these skills human capital. Most ancient workers had few skills, including the ability to read, that is, little human capital. Craftsmen and some agricultural workers had competencies that did not depend on literacy and would receive a higher wage in a rural labor market for them. But these skills would not earn much, if anything, in urban areas. Although we tend to know more about literate workers—despite the relative paucity of them—than about less-skilled workers because of the literary bias of our sources, the great mass of workers in the early Roman empire were illiterate and—by modern standards—unskilled.

Recent scholarship has revealed the existence of many market prices and wages in ancient Rome, suggesting that the Roman economy was not substantially different from more recent agrarian economies. The abstract conditions that define a labor market in modern analyses, however, need modification to apply to labor markets in agricultural economies. Steinfeld has shown that workers were not free to change jobs at will until near the end of the nineteenth century. Even in the United States and Britain, two of the most market-oriented countries that the world has ever known, the rights of workers were sharply restricted. Both urban and rural workers were subject to prosecution if they left a job without their employers' permission. Steinfeld argued that work in these advanced economies was directed by a mixture of monetary and other incentives. This context permits no sharp distinction between free and unfree labor, only a continuum along which various economies, or even activities within an economy, can be placed. In his words, "Practically all labor is elicited by confronting workers with a choice between work and a set of more or less disagreeable alternatives to work."7

<sup>6</sup> John R. Harris and Michael P. Todaro, "Migration, Unemployment and Development: A Two-Sector Analysis," *American Economic Review*, LX (1970), 126–142.

<sup>7</sup> Hans-Joachim Drexhage, Preise, Mieten/Pachten, Kosten und Löhne im Römischen Ägypten bis zum Regierungsantritt Diokletians (St. Katharinen, 1991); Dominic Rathbone, "Prices and

Steinfeld's scenario is the standard against which to evaluate Roman labor markets. Wages were an important tool for the allocation of labor in eighteenth-century England, but their use was limited by the restrictions on labor mobility. Wages in such a system would not reach equality for similar skills, and most workers would not feel free to look around for a more lucrative activity.

Free urban workers in the early Roman empire were paid for their work and were able to change their economic activities. Hereditary barriers were nonexistent, and Roman guilds do not appear to have been restrictive. Workers in large enterprises, like mines and galleys, were paid wages, as in more modern labor markets. Workers engaged in more skilled and complex tasks received more elaborate compensation, probably for longer units of time than those doing wage labor, again as in more modern labor markets, even though explicit long-term contracts were not yet established. The force of competition under those circumstances probably brought wages and labor productivity into the same ball-park.<sup>8</sup>

Some of the work in the early Roman empire was done for wages and some under the duress of slavery. The early Roman empire even had salaried long-term free workers in Egypt. Craftsmen sold their wares in cities and also supplied them to rural and urban patrons in return for long-term economic and social support. Similarly, people who worked for, or supplied, senators and equestrians often worked for long-term rewards and advancement. The episodic nature of monumental building in Rome, accomplished largely by free laborers, gives evidence of a mobile labor force that could be diverted from one activity to another. Free workers, freedmen, and slaves worked in all kinds of activities; contemporaries saw the ranges of jobs and of freedom as sepa-

Price Formation in Roman Egypt," Economie antique: Prix et formatin des prix dans les economies antiques (Saint-Bertrand-de-Comminges, 1997), 183–244; Temin, "A Market Economy in the Early Roman Empire," Journal of Roman Studies, XCI (2001), 169–181; Robert J. Steinfeld, The Invention of Free Labor: The Employment Relation in English and American Law and Culture, 1350–1879 (Chapel Hill, 1991), 26. See also idem, Coercion, Contract and Free Labor in the Nineteenth Century (Cambridge, 2001). Labor mobility was reduced further in continental Europe by guilds and other restrictions. See Sheilagh Ogilvie, State Corporatism and Proto-Industry: The Württemberg Black Forest, 1580–1797 (Cambridge, 1997), for a description of labor conditions in early Germany.

<sup>8</sup> Tenney Frank, Economic Survey of Ancient Rome (1940), V, 248–252; Russell Meiggs, Roman Ostia (Oxford, 1973), 314.

rate—even orthogonal. In particular, rural slaves hardly comprised an undifferentiated gang of laborers; certain lists of rural slave jobs are as varied as the known range of urban or household "slave" jobs. Some rural laborers received piece rates and others, daily wages. Cicero, anticipating Marx, conflated legal and economic relations by equating wages with servitude.<sup>9</sup>

A labor market in the early Roman empire would have tended to equalize real wages in different parts of the empire. Suggestively, Cuvigny found equal wages of miners in Egypt and Dacia in Eastern Europe. Nominal wages of unskilled workers were unequal in Rome and Egypt, but the price of wheat and other goods differed as well. Real wages—the buying power of wages in wheat—were close, however; the hypothesis of equality cannot be rejected. These scraps of data provide evidence of a well-functioning labor market. Only the ability and willingness of workers to change jobs in response to wage differentials would produce such uniformity. 10

Moreover, in a functioning labor market, wages increase as the number of laborers decreases because of the competition to hire them; workers are more productive when fewer of them are available to work. It is hard to know of small changes in Roman labor supplies, but plagues led to rapid, large falls in the pool of available labor. Egyptian wages doubled after the major Antonine plague of 165–175 c.e. This clearly is the standard labor-market response to a sharp decrease in the supply of labor. It demonstrates that wages in the early Roman empire moved to clear markets, in this case to allocate newly scarce labor. 11

Employment contracts also give evidence of labor-market activity in which workers could choose their jobs. The modern division between wages and salaries finds its analog in Roman Egypt: "As a general rule permanent employees of the Appianus and re-

Roman Egypt after the Antonine Plague," ibid., XV (2002), 97-114.

<sup>9</sup> Rathbone, Economic Rationalism and Rural Society in Third Century A.D. Egypt (Cambridge, 1991), 91–147, 166; Brunt, "Free Labor"; Keith R. Bradley, Slavery and Society at Rome (Cambridge, 1994), 59–65; Marcus Tullius Cicero (trans. Walter Miller), de Officiis (London, 1913; orig. pub. 45–44 B.C.), XXI, 1.150–151; Hélène Cuvigny, "The Amount of Wages Paid to the Quarry-Workers at Mons Claudianus," Journal of Roman Studies, LXXXVI (1996), 139–145.

<sup>10</sup> Temin, "Estimating Roman GDP," paper prepared for a conference on ancient history,
"Innovazióne tecnica e progresso economico nel mondo romano," Capri, April 14–16, 2003.
11 R. P. Duncan-Jones, "The Impact of the Antonine Plague," *Journal of Roman Archeology*,
IX (1996), 108–136; Walter Scheidel, "A Model of Demographic and Economic Change in

lated estates can be distinguished by their receipt of *opsonion* (salary), a fixed monthly allowance of cash and wheat and sometimes vegetable oil, whereas occasional employees received *misthos*, that is 'wages.'" some of these "free" workers were tied to the estate for life, like those subject to the more modern worker contracts studied by Steinfeld, but others were free to leave when their jobs were done.<sup>12</sup>

Miners and apprentices had employment contracts. One dating from 164 C.E. shows that workers were paid only for work done and that they had more right to quit than the nineteenth-century workers described by Steinfeld:

In the consulship of Macrinus and Celsus, May 20. I, Flavius Secundinus, at the request of Memmius, son of Asceplius, have here recorded the fact that he declared that he had let, and he did in fact let, his labor in the gold mine to Aurelius Adjutor from this day to November 13 next for seventy denarii and board. He shall be entitled to receive his wages in installments. He shall be required to render healthy and vigorous labor to the above-mentioned employer. If he wants to quit or stop working against the employer's wishes, he shall have to pay five sesterces for each day, deducted from his total wages. If a flood hinders operations, he shall be required to prorate accordingly. If the employer delays payment of the wage when the time is up, he shall be subject to the same penalty after three days of grace.<sup>13</sup>

Most free workers were farmers, many of them tenant farmers, although employment categories in the countryside were fluid. Roman tenancy contracts allocated risks between landowners and tenants in much the same way as analogous contracts did in eighteenth- and nineteenth-century Britain. Major risks were borne by the landowners as events beyond the tenants' control, whereas minor risks were borne by tenants in return for the opportunity to earn more and keep their earnings: "Force majeure ought not cause loss to the tenant, if the crops have been damaged beyond what is sustainable. But the tenant ought to bear loss which is moderate with equanimity, just as he does not have to give up profits which are immoderate. It will be obvious that we

<sup>12</sup> Rathbone, Economic Rationalism, 91–92.

<sup>13</sup> CIL III, translated in Naftali Lewis and Meyer Reinhold (eds.), Roman Civilization: Selected Readings (New York, 1990; orig. pub. 1951), II, 948.

are speaking here of the tenant who pays rent in money; for a share-cropper *(partiarus colonus)* shares loss and profit with the landlord, as it were by law of partnership."<sup>14</sup>

We know a lot more about wages in England before industrialization than in the Roman empire. Wages for comparable work were similar throughout England, but they were not uniform. Agriculture was more prosperous in the South than in the North, and wages were higher in the eighteenth century. (This pattern was reversed in the nineteenth century when the North industrialized.) Substantial variation was evident within regions, due to the immobility of the population. A recent summary of the English data shows daily winter wages in the North to be only half of what they were in the South in 1700. They approached each other gradually during the next century and a half. 15

England is much smaller than the Roman empire was. If we use Roman data from Egypt and Dacia, a more suitable comparison is pre-industrial Europe. Clearly, labor had even less mobility between countries than within England, and wages varied more, though they did remain at the same general level. Allen demonstrated that wages within Europe began to diverge in the sixteenth and seventeenth centuries. By 1700, the real wages of masons in London and Antwerp were more than double those in other European cities.<sup>16</sup>

Based on this more modern evidence, we do not expect to find wages that are equal in distant places except by coincidence, but we expect wages to be similar. If the early Roman empire had a labor market that functioned about as well as the labor market in pre-industrial Europe, then wages in the early Roman empire would have been approximately equal. Real wages for similar tasks might have varied by a factor of two or three, as real wages did in eighteenth-century Europe, but they were not different orders of

<sup>14</sup> Peter Garnsey, Cities, Peasants and Food in Classical Antiquity (Cambridge, 1998), 139; Dennis P. Kehoe, Investment, Profit, and Tenancy: The Jurists and the Roman Agrarian Economy (Ann Arbor, 1997); Gaius, as represented in The Digest of Justinian, D. 19.2.25.6, quoted in David Johnston, Roman Law in Context (Cambridge, 1999), 64.

<sup>15</sup> Donald Woodward, Men at Work: Laborers and Building Craftsmen in the Towns of Northern England, 1450–1750 (Cambridge, 1995); Gregory Clark, "Farm Wages and Living Standards in the Industrial Revolution: England, 1670–1850," Economic History Review, LIV (2001), 485.

<sup>16</sup> Robert Allen, "The Great Divergence: Wages and Prices in Europe from the Middle Ages to the First World War," *Explorations in Economic History*, XXXVIII (2001), 411–447.

magnitude. As just described, this presumption is consistent with the fragmentary evidence about wages in the Principate.

The army must be distinguished from the private sphere, as in modern economies. Peacetime armies are often voluntary, recruited via the standard organizational lures—favorable wages and working conditions. Wartime armies, by contrast, often rely on conscription, which is a non-market process. Actions within armies are directed by commands, not by market transactions. Armies therefore represent at best a partial approximation to a free labor market and typically an exception to it. Since armies, unhappily, are present in almost all societies, we place this exception to the general rule to one side.

The wages of the Roman army, which was staffed by a mixture of attraction and conscription, stayed constant for many decades at a time. When the army was not fighting, which was most of the time, soldiers had to be set tasks to keep them fit and out of trouble, like building roads and public monuments. This construction work did not interfere with the labor market in Rome or elsewhere in the center of the empire since the army was stationed at the frontiers.17

Slaves appear to be like soldiers in that they are subject to command, but such was not necessarily the case in the early Roman empire, especially in cities. Unlike American slaves, Roman slaves were able to participate in the labor market in almost the same way as free laborers. Although they often started at an extremely low point, particularly those who were uneducated, many were able to advance by merit. Freedmen started from a better position, and their ability to progress was almost limitless, despite some prominent restrictions. These conditions created powerful positive work incentives for slaves in the early Roman empire.

ROMAN SLAVERY The prevalence of slavery in ancient Rome has stood in the way of comparisons with more recent labor markets since it seemed to indicate that a large segment of the Roman labor force was outside the market. Classicists have used evidence of modern American slavery to illuminate conditions in ancient Rome. Bradley, for example, opened his book on slave rebellions

<sup>17</sup> Brunt, "Conscription and Volunteering in the Roman Imperial Army," Scripta Classica Israelica, I (1974), 90-115; George R. Watson, The Roman Soldier (Ithaca, 1969), 45.

with a chapter on slavery in the New World. Although Bradley and Hopkins emphasized the complexity of Roman slavery, their use of modern evidence implicitly assumed that slave economies separated by two millennia were essentially the same. Slavery, however, is not always and everywhere the same. Roman slavery was at the opposite extreme from slavery in the southern United States; many Roman slaves—like free workers—responded to market incentives.<sup>18</sup>

Slavery has two dimensions. In the first dimension, which derives from anthropology, slavery varies between open and closed. Open slavery describes a system whereby slaves can win their freedom and enter into general society. In anthropological terms, freedmen and women are accepted into kinship groups and intermarry freely with other free persons. Closed slavery denies slaves acceptance into general society and forbids them to marry among the general population, even when freed. Roman slavery conformed to the open model. Freedmen were Roman citizens, and marriages of widows with freedmen were common. By contrast, "American slavery [was] perhaps the most closed and castelike of any [slave] system known." Relative to other workers, Roman slaves were not in the same predicament as modern American slaves.<sup>19</sup>

The second dimension along which slavery can vary is the frequency of manumission. Frequent manumission was a distinguishing feature of Roman slavery; slaves in the early Roman empire could anticipate freedom if they worked hard and demonstrated skill or accumulated a *peculium* with which to purchase it. Once freed, they were accepted into Roman society far more completely than the freedmen in closed systems of slavery. The promise of manumission was most apparent for urban, skilled, literate slaves, but it pervaded Roman society.<sup>20</sup>

<sup>18</sup> Bradley, Slavery and Rebellion in the Roman World, 140 B.C.-70 B.C. Bloomington, 1989).

<sup>19</sup> James L. Watson, "Slavery as an Institution, Open and Closed Systems," in *idem* (ed.), *Asian and African Systems of Slavery* (Oxford, 1980), 7. This classification differs from that in William V. Harris, "Demography, Geography and the Sources of Roman Slaves," *Journal of Roman Studies*, LXXXIX (1999), 62–75, which classified a slave system as open if slaves were imported and closed if not.

<sup>20</sup> Compare Edward Gibbon's magisterial pronouncement early in *The Decline and Fall of the Roman Empire* (New York, 1961), 36: "Hope, the best comfort of our imperfect condition, was not denied to the Roman slave; and if he had any opportunity of rendering himself either

The five slave societies noted by Hopkins can be classified according to these two dimensions. The classification can be seen easily in a two-by-two matrix, as shown in Table 1, where the five societies are placed in the appropriate boxes. Rome, as an open system of slavery with frequent manumission, is in the upper lefthand box. The southern United States and the Caribbean, as a closed system with almost no manumission, appear in the lower right-hand box. The slavery in ancient Greece and in modern Brazil were intermediate cases. Manumission was common, but freed slaves were segregated from the larger population. The remaining possibility, an open system of slavery with no regular manumission, finds no instance in these five societies.

Few people would choose to be a slave; almost all Roman slaves were forced into slavery as captives, children of slaves, abandoned children, or debt bondage. A Roman slave was subject to more cruelty in the early Roman empire than free people were. But even if many slaves were at, or near, the bottom of society and the economy, it makes sense to ask how hopeless was their position.

All people, even slaves, need to have incentives to work. Free people may work to increase their income; slaves may require other incentives—positive incentives, or "carrots" (rewards for hard or good work), and negative incentives, or "sticks" (punishment for slacking off or not cooperating). There is a large literature on the incentive structures of modern American slavery, possibly because its emotional content makes consensus elusive. But while disagreements remain on many points, most scholars agree that negative incentives dominated the lives of modern slaves in the Americas.

Positive incentives were more important than negative in motivating Roman slaves. Sticks can get people to work, but not to perform skilled tasks that require independent action. It is hard to distinguish poor performance from back luck when work is complex, and carrots are far more effective than sticks in motivating hard work. Consider a managerial job, like a vilicus (supervisor). A slave in such a position motivated by negative incentives could claim that adverse outcomes were not his fault. Beating him

Table 1 Varieties of Slavery in the Five Slave Societies

	FREQUENT MANUMISSION	ONLY EXCEPTIONAL MANUMISSION
Open systems	early Roman empire	
Closed systems	classical Greece, nineteenth- century Brazil	southern United States, the Caribbean

or exacting worse punishment would lead to resentment rather than cooperation and—one might confidently expect—more "bad luck." A vilicus motivated by positive incentives would anticipate sharing success; he would work to make it happen. The effort of an ordinary field hand, however, could be observed directly and easily; slackers could be punished straight away. Since field hands typically work in a group, positive incentives that motivate individuals to better efforts are hard to design.<sup>21</sup>

The cruelty in ancient slavery, as in early modern indenture, has been described often because it contrasts sharply with our modern sense of individual autonomy. Cruelty was a hallmark of the early Roman empire, as it has been of most nonindustrial societies. Imperial Rome appeared particularly to celebrate its cruelty probably because of its military orientation; ancient cruelty was by no means reserved for slaves. The vivid examples of violence toward slaves, however, do not offset the many competing stories of more benevolent slave conditions. The miserable condition of slaves working in the bakery overseen by Apuleius' golden ass do not so much illustrate the harsh conditions of Roman slavery as the dismal conditions of ordinary labor in pre-industrial economies. In these Malthusian economies, greater productivity resulted in larger populations rather than gains in working conditions or real wages. Almost all workers before the industrial revolution and the demographic transition lived near what economists call subsistence, which was not necessarily the edge of starvation, but the limit of endurance. Slaves were not the only ones to do the dangerous work in Roman mines; convicts and wage earners suffered there, too.22

<sup>21</sup> Stefano Fenoaltea, "Slavery and Supervision in Comparative Perspective: A Model," *Journal of Economic History*, XLIV (1984), 635–668.

<sup>22</sup> Slave revolts do not give evidence of predominantly negative incentives. The attested slave revolts were concentrated in a short span during the late republic, a time of great social

Some poor people regarded the life of a slave as better than that of a free man. Ambitious poor people sold themselves into long-term slavery that promised, however uncertainly, more advancement than the life of the free poor. Such a choice, however rare in the early Roman empire, would have been inconceivable in a closed system of slavery built on negative incentives. It was more like the process of apprenticeship in early modern Europe, revealing the integration of Roman slavery with the overall labor market.23

These observations relate mostly to urban slaves. We do not know how large a share of Roman slaves was urban, but it was substantial. Conventional estimates place the population of Italy in the Principate at around 6 million, 1 million of whom lived in Rome itself. Slaves are estimated to have constituted as much as one-third of Italy's population and one-half of Rome's. These estimates imply that one-quarter or less of the Italian slaves lived in Rome; the rest lived in smaller cities and the countryside—where they were less than one-third of the rural labor force. If so, slaves were not the dominant labor force either in the city or the countryside of the early Roman empire. Slaves in Egypt appear from surviving census returns to have composed about 10 percent of the population, spread thinly among the households. Two-thirds of the listed slaves were women, most likely working in households rather than fields. All of these educated guesses are highly uncertain 24

Manumission into Roman citizenship played an important part in urban Roman slaves', and some rural slaves', incentives. Manumission was common, but not universal. The state set rules for manumission but left the decision of which slaves to free in the hands of individual slave owners, who could use it to encourage the most co-operative and productive slaves. Slaves were often

upheaval. See Bradley, Slavery and Rebellion. Lucius Apuleius (trans. J. Arthur Hanson), Metamorphoses ("The Golden Ass") (Cambridge, Mass., 1989; orig. pub. 2d century), II, 9.2; Garnsey and Richard Saller, The Roman Empire: Economy, Society and Culture (Berkeley, 1987), 119, use this example to show the conditions of Roman slaves. Oliver Davies, Roman Mines in Europe (Oxford, 1935), 14-16.

<sup>23</sup> Jacques Ramin and Paul Veyne, "Droit Romain et Société; les Hommes Libres qui Passent pour Ésclaves et l'Ésclavage Volontaire," Historia, XXX (1981), 496.

<sup>24</sup> Hopkins, Conquerors and Slaves, 101; Roger S. Bagnall and Bruce W. Frier, The Demography of Roman Egypt (Cambridge, 1994), 48-49, 71; Scheidel, "Progress and Problems in Roman Demography," in idem (ed.), Debating Roman Demography (Leiden, 2001), 49-61.

able to purchase freedom if they could earn the necessary funds in a *peculium*, which served as a tangible measure of slave productivity. The right of slaves to accumulate and retain assets was an important part of the incentive structure. Slaves who were sold or freed kept their *peculium*, even though they technically could not own property. Slaves even owned slaves.<sup>25</sup>

Hopkins asked, "Why did Roman masters free so many slaves?" His answer was complex. On one hand, he noted that the promise of freedom was a powerful incentive: "The slave's desire to buy his freedom was the master's protection against laziness and shoddy work." Thus did he distinguish Roman slavery from that in the southern United States. On the other hand, however, he emphasized the similarity of these two types of slavery, emphasizing the role of cruelty and negative incentives. He devoted more space to slaves' resistance and rebellions than to their achievement and cooperation. Although he perceived the apparent sharp line between slavery and freedom as only part of a continuum of labor conditions, he failed to break away from the prevalent view of American slavery at the time of his writing. This imperfect analogy still haunts the field; when Bradley wanted to explain why Roman slaves rebelled, he quoted the accounts of modern American slaves 26

Garnsey's argument that ancient slavery was less harsh than slavery in the southern United States appeared near the end of an intellectual history of ancient Greece and Rome that did not emphasize Roman slavery as a distinct labor system. Garnsey noted, "The prospect of manumission gave [Roman] slaves an incentive to work and behave well." He drew out the implications of this proposition for the idea of slavery, particularly for Christians. This article draws implications for the economic role of Roman slavery in the Roman labor force.<sup>27</sup>

Bradley devoted a chapter to manumission in his study of Roman slavery, but he minimized its role as an incentive. Stressing the uncertainty in the lives of slaves, he concluded, "Above all,

John A. Crook, Law and Life of Rome (London, 1967), 187–191. If a slave used his peculium to purchase his freedom, his former owner acquired possession of the slave's earnings.
 Hopkins, Conquerors and Slaves, 115–132; Bradley, Slavery and Rebellion.

<sup>27</sup> Garnsey, *Ideas of Slavery from Aristotle to Augustine* (Cambridge, 1996), 87, 97; Ronald Findlay, "Slavery, Incentives, and Manumission: A Theoretical Model," *Journal of Political Economy*, LXXXIII (1975), 923–934, determined the optimal timing of manumission for a profit-maximizing owner.

therefore, it is this absence of psychological and emotional security in slave life which offers the key to the continuing ability of Roman slave-owners to control and keep in subjection their slaves." He confused the random part of Roman life, to which all Romans were subject to a large degree, with the systematic part that motivates behavior. After all, even though getting an education carries a lot of risk even today, we urge our children to get an education to improve their chances of living a good life.<sup>28</sup>

The Roman incentive mechanism operated with considerable uncertainty. Some valuable Roman slaves received their freedom without having to pay for it, as a reward for special achievement or for noneconomic reasons. Manumission in the early Roman empire was not unlike starting a new company today. Success is a product of both skill and luck; the latter can be the more important factor. Yet, success only comes to those who try, that is, those who are willing to take risks. Manumission represented the same kind of opportunity for Roman slaves. If a slave tried, both skill and luck would play a part in his eventual success or failure. The risks inherent in the process would not necessarily have discouraged many slaves.<sup>29</sup>

Freedmen were granted Roman citizenship on an almost equal basis. The well-known association of freedmen with former masters worked to their mutual benefit. When people engaged in trade or made arrangements for production, they needed to know with whom they were dealing. Information about buyers and sellers was scarce. It was mitigated partially by identifying possible customers or vendors as members of known families. Slaves, coming to freedom without a family, naturally associated with their former owners' families. Because they retained the names of, and connections with, their former owners, they could be associated with their owners' family. Thus were former slaves able to integrate into the economy. Moreover, a productive freeman returned the favor by increasing the reputation and income of his

<sup>28</sup> Bradley, Slaves and Masters in the Roman Empire (Brussels, 1984), 143.

<sup>29</sup> This argument can be viewed as an expansion of remarks in John R. Hicks, A Theory of Economic History (Oxford, 1969): "There are two ways in which labor may be an article of trade. Either the laborer may be sold outright, which is slavery; or his services only may be hired, which is wage-payment" (123). Hicks acknowledged that slavery typically is a cruel, brutal institution, but he softened this indictment when slaves have personal relations with their owners and can take economic initiative, as in the early Roman empire. "Perhaps it should be said when this point is reached, the slave is only a semi-slave" (126n.).

former owner. Freedmen of course could marry other Roman citizens, and their free children were accepted fully into Roman society. Many widows married freed slaves to carry on a business activity.<sup>30</sup>

Freedmen probably identified themselves as such on their tombstones for two reasons. First, they were still part of their former owners' business family, and, second, they were proud of having shown the ambition and ability to win their freedom. Like today's self-made man, the freed slave worked for what he achieved; he was not the recipient of inherited wealth. This opportunity is the hallmark of open slavery and a functioning labor market.<sup>31</sup>

The continuum of incentives ranges from all negative, as in a Nazi concentration camp or the Soviet gulag, to all positive, as in a progressive school where no child is criticized and all children are winners. Most working conditions fall somewhere between these two extremes. Modern jobs clearly are near, but not at, the positive end; non-performance carries its penalties. American slavery was near the opposite end; the threat of punishment was ubiquitous, whereas rewards for good service were rare. Roman slavery, by contrast, was far closer to the positive end, although hardly as close as modern jobs. The lives of rural, illiterate, unskilled slaves in the early Roman empire were like those in American slavery. The working conditions of educated, urban slaves may well have approached those of free men. Hence, most Roman slaves, particularly urban slaves, participated in a unified Roman labor market.

COMPARISONS WITH OTHER SYSTEMS OF SLAVERY Table 1 compares manumission rates and the conditions of freedmen in different societies. The unique position of Roman slaves is clear from the availability of education for them, which resulted from the incentive structure of the Roman system and led to the integration of Roman slaves into the overall labor market. A few examples of

<sup>30</sup> See Garnsey, Cities, Peasants and Food, 30-37.

<sup>31</sup> Lilly Ross Taylor, "Freedmen and Freeborn in the Epitaphs of Imperial Rome," *American Journal of Philology,* LXXXII (1961), 113–132: "Many freedmen are known from their names alone, but we know of so many of them because they wanted to memorialise their life and achievements in the same way as more august senators and knights, erecting tombstones that have survived until today."

ancient working conditions, for both free and slave workers, illustrate the operation of this unified labor market.

Modern American slavery was a closed system. The New World slaves did not enter Eurocentric American society on easy terms; their opportunities were severely limited. Their descendants in the United States are still awaiting complete integration into society. The descendants of former African slaves have fared much better in Brazil, where manumission was more frequent. Even in Brazil, however, slaves only began to be freed with any regularity in the nineteenth century when pressure for the abolition of slavery rose. Yet, since freed slaves were still excluded by former Europeans, few positive incentives were available to them.<sup>32</sup>

The frequency with which Greek slaves were set free is unknown, but freed slaves in Athens did not become members of Greek society. They inhabited "a limbo world in which full political and economic membership of the community was denied them." Unlike Athenian citizenship, Roman citizenship was inclusive. This fundamental difference between the two may have determined how each society interpreted slavery. In any case, the prevalence and visibility of manumission among Roman slaves made Roman slavery far different than slavery in Athens.<sup>33</sup>

By the time of the Principate, most slaves were probably slaves from infancy, either as the children of slaves or unwanted children of free parents, since captives were few by then. A debate about whether slaves were replenished through reproduction or maintained through foundlings and the slave trade persists, but most scholars agree that the supply of captives had dwindled.

- 32 Roman slavery shared attributes with another modern institution, indentured service. Poor Englishmen who wanted to emigrate to North America in the eighteenth century but could not afford it often mortgaged their future labor to pay for their passage. Indentures lasted a fixed number of years, often fewer than five, and immigrants were able to resume life without stigma after their indenture was finished. While indentured, however, immigrants could not move, choose occupations, or even determine the certain particulars of their circumscribed lives. They were, in a descriptive oxymoron, short-term slaves. David W. Galenson, White Servitude in Colonial America (Cambridge, 1981).
- 33 Garnsey, *Ideas of Slavery*, 7. A few older ancient historians noted the comparatively benign quality of ancient slavery, although without referring to manumission and without distinguishing between Greek and Roman slavery. If Greek slavery was more similar to Roman than to modern slavery, featuring reduced positive incentives of an open slave system, the reason is by no means obvious. See Alfred Zimmern, "Was Greek Civilization Based on Slave Labor?" *Sociological Review*, II (1909), 1–19, 159–176 (repr. in *idem*, *Solon and Croesus* [London, 1928]); A. H. M. Jones, "The Economics of Slavery in the Ancient World," *Economic History Review*, IX (1956), 185–204.

Rules for manumission became explicit. Augustus enacted a law (lex Fufia Caninia) restricting the proportion of slaves that a slave owner could manumit at his death but also preserving the structure of incentives by forcing owners to decide which of their slaves to set free. Rights of freedmen were expanded. The incentive for slaves to act well became clear. Freedmen moved into skilled and well-rewarded trades and other activities, and their children born after manumission entered society with all of their rights.<sup>34</sup>

Manumission was common and well known in the early Roman empire. Livy recounted a legend about a slave who was freed in 509 B.C.E., the first year of the republic, as a reward for faithful service, albeit of a political rather than an economic nature. Although Livy could not have known whether the story was true, he thereby revealed attitudes in his own time. A legal principle of the era dealt with the status of a child born to a woman who conceived while a slave, was freed, and then enslaved again before giving birth. For this to have been an interesting question, the boundary between slavery and freedom must have been permeable.<sup>35</sup>

No counts of Roman manumission exist, but the myriad references to manumission and freedmen in the surviving records attest to its frequency. Scheidel assumed that 10 percent of slaves in the early Roman empire were freed every five years, starting at age twenty-five in a demographic exercise. Some of Scheidel's assumptions have attracted vigorous rebuttal, but not this one. These estimates and opinions apply to the totality of urban and rural Roman slaves. In the judgment of a modern observer, "Most urban slaves of average intelligence and application had a reasonable expectation of early manumission and often of continued association with their patron." In the judgment of another, "Roman slavery, viewed as a legal institution, makes sense on the assumption that slaves could reasonably aspire to being freed, and hence to becoming Roman citizens." <sup>36</sup>

<sup>34</sup> Scheidel, "Quantifying the Source of Slaves in the Early Roman Empire," *Journal of Roman Studies*, LXXXVII (1997), 157–169; Harris, "Demography." Bradley, *Slavery and Society*, 10, asserted that the *intent* of Augustus' law was to restrict manumission only to those slaves who had proved that they deserved freedom.

<sup>35</sup> Titus Livius (trans. B. O. Foster), *History* (London, 1919; orig. pub. 27 B.C.), I, 2.3–5; Ernst Levy (ed.), *Pauli sententiae* (Ithaca, 1945), II, 24.3.

<sup>36</sup> Scheidel's estimate of 10% was an intermediate one; the actual level could have been higher or lower ("Quantifying," 160). Harris, "Demography"; Paul R. C. Weaver, Familia

The Egyptian census listed no male slaves older than thirtytwo. Since the census counted household slaves only, this age truncation suggests widespread manumission rather than exceptionally high slave mortality. Female slaves generally were freed if they had more than three children, which may not have been uncommon in an age without family planning. Manumission on this scale must have been apparent to all slaves, certainly to all urban slaves, and a powerful incentive for them to cooperate with their owners and to excel at their work.<sup>37</sup>

Slave conditions in the southern United States were completely different. Manumission was the exception rather than the rule; American slaves could not anticipate freedom with any confidence. Manumission required court action in Louisiana, an onerous process that left traces in the historical record. An exhaustive count of Louisiana's manumissions showed that the rate in the early nineteenth-century was about 1 percent in each five-year period, an order of magnitude less than Scheidel assumed for the early Roman empire. Many of those freed were children under ten, and the majority of the adults freed were women presumably the children's mothers. Fogel and Engerman, champions of positive incentives in American slavery, reported even lower manumission rates at mid-century: "Census data indicate that in 1850 the rate of manumission was just 0.45 per thousand slaves"—that is, .045 per 100 slaves or 0.2 percent in a five-year period, two orders of magnitude lower than Scheidel's reasonable guess for Rome. American slaves, and particularly male slaves, had little anticipation of freedom and little incentive to cooperate in the hope of freedom.<sup>38</sup>

Caesaris: A Social Study of the Emperor's Freedmen and Slaves (Cambridge, 1972), 1: Alan Watson, Roman Slave Law (Baltimore, 1987), 23.

<sup>37</sup> Bagnall and Frier, Demography, 71, 342–343; Lucius Junius Moderatus Columella (trans. H. B. Ash), On Agriculture (Cambridge, Mass., 1934; orig. pub. 1st century A.D.), I, 1.8.19. Apparently, slave women had to have undergone either three live births or had to have three living children at the time of the next birth. The stipulation is clearer in Theodor Mommsen and Paul Krueger (eds.), The Digest of Justinian (Philadelphia, 1985; orig. pub. 553), 1.5.15, which deals with the disposition of triplets under a will that freed the mother at the birth of the third

Slaves in Baltimore had slightly more hope than others; they were freed with more frequency, although the interval between the decision to manumit and actual freedom was often long. Stephen Whitman, "Diverse Good Causes: Manumission and the Transformation of Urban Slavery, Social Science History, XIX (1995), 333-370. Gwendolyn Hall, Databases for the Study of Afro-Louisiana History and Genealogy, 1699-1860 (New Orleans, 2000); Shawn Cole,

In the absence of evidence that the prospects for slaves in ancient Greece were as bleak as those in the United States, the assumption herein is that the Greeks freed slaves with some regularity. Slavery in the Caribbean, by contrast, was more like that in the United States. In fact, given the tiny number of slave owners in the Caribbean, the probability of manumission may have been even lower than in the United States.

In Brazil, manumission began roughly at the outset of slavery, although many legal and circumstantial barriers prevented it from becoming a matter of course. Its pace was slow before the nineteenth century, but it accelerated rapidly during the last decades of Brazilian slavery. Rio de Janeiro contained 80,000 freed slaves in a total urban population of 200,000 in 1849. Brazil as a whole contained 1.1 million slaves and 2.8 million "freemen" in 1823 and 1.5 million slaves and 8.4 "freemen" in 1872. Non-white free persons had become a majority of the population in Salvador by 1872. Brazilian slaves often could earn enough to purchase their wives' freedom, although they frequently did not have enough to obtain their own. As in Louisiana, two-thirds of the freed slaves in Brazil and in Rio de Janeiro were women. A recent study of early nineteenth-century censuses in Sao Paulo confirmed the Brazilian predilection to manumit women rather than men—125 men for each 100 women among Brazilian slaves in 1836, but only 87 men for each 100 women among free coloreds. Any effect that manumission might have had on Brazilian slave workers as an incentive was diminished by the clear Brazilian pattern of freeing slave women rather than slave men.<sup>39</sup>

Successful freedmen intensify the incentive for manumission that merges the work of slaves and free workers. Even freedmen living a marginal existence can serve as models for slaves, since

<sup>&</sup>quot;Capitalism and Freedom: Slavery and Manumission in Louisiana, 1770-1820," paper presented at the National Bureau of Economic Research Summer Institute, Cambridge, Mass., July 17, 2003; Robert W. Fogel and Stanley L. Engerman, Time on the Cross: The Economics of American Negro Slavery (Boston, 1974), I, 150.

<sup>39</sup> Stuart B. Schwartz, "The Manumission of Slaves in Colonial Brazil, 1684-1745," Hispanic American Historical Review, LIV (1974), 603-635; Katia M. de Queiros Mattoso, To Be a Slave In Brazil, 1550-1888 (New Brunswick, N.J., 1986), 50, 164; Mary C. Karasch, Slave Life in Rio de Janeiro, 1808-1850 (Princeton, 1987), 66, 346; Meikoi Nishida, "Manumission and Ethnicity in Urban Slavery: Salvador, Brazil, 1808-1888," Hispanic American Historical Review, LXXIII (1993), 365, 376; Francisco Vidal Luna and Herbert S. Klein, Slavery and the Economy of Sao Paulo, 1750-1850 (Stanford, 2003), 162-163.

freedom is desirable, whatever the economic cost. But its attraction undoubtedly increases to the extent that freedmen are accepted, even prominent, in free society. Unlike in other slave societies, freedmen in the early Roman empire were citizens. In fact, they were ubiquitous in the late republic and early empire, engaged in all kinds of activities, including administration and economic enterprise. The number of men who identified themselves as freed on the tombstones during this period is astonishing. They may not have ascended to high Roman society, but their children bore little or no stigma. Their success was common knowledge. Seneca ridiculed a rich man by remarking that he had the bank account and brains of a freedman. In Finley's words, "The contrast with the modern free Negro is evident."

Why were freedmen so prominent? The process of manumission separated the more able from the others. The prospect of manumission was an incentive for all slaves, but the most active, ambitious, and educated slaves were more like to gain their freedom as a reward for good behavior or by purchase. The system did not work perfectly; many slaves were freed for eleemosynary motives or at their owner's death. But, for the most part, freedmen were accomplished individuals. It was good policy to deal with and hire them, and it makes sense to say so only because Rome had a functioning labor market. Contrast this scenario with that of freed slaves in the antebellum United States, where the infamous Dred Scott decision of the Supreme Court decreed in 1857 that freed slaves could not be citizens and "had no rights which the white man was bound to respect."

Freed slaves in Brazil lived a similarly marginal existence, not bound but not fully free either. Known as *libertos*, they and their children were clearly isolated from the main society and were not prosperous. Census material and related data always indicated to which group a free person belonged. Even though freed slaves were Brazilian citizens, their legal rights were "quite limited." *Libertos* "continued to owe obedience, humility, and loyalty to the powerful." The physical appearance of freed slaves in Brazil made

<sup>40</sup> Arnold M. Duff, Freedmen in the Early Roman Empire (Oxford, 1928); Susan Treggiari, Roman Freedmen during the Late Republic (Oxford, 1969); Lucius Annaeus Seneca (trans. John W. Basore), Epistulae Morales (London, 1932; orig. pub. 1st century), 27.5; Finley, Ancient Slavery, 98.

<sup>41</sup> Society became more rigid during the late empire. As opportunities for advancement in urban activities diminished, so did the incentive of manumission. Slavery began to evolve into a different institution. *Dred Scott* v. *Sanford*, 60 U.S. 393, 407 (1857).

them easy to distinguish. The marginalization of freed persons in North and South America demonstrates that slavery in these areas was a largely closed system—although Brazil was not as closed as the United States—in contrast to the open system of the early Roman empire.<sup>42</sup>

Education is a key to the nature of Roman servitude. American slave owners relied on negative incentives and discouraged the education of slaves because they were afraid of slave revolts led by educated slaves. Ancient slave owners used positive incentives, allowing, and even encouraging, slaves to be educated and perform responsible economic roles. Education increased the value of slave labor to the owner, and it increased the probability that a slave's children would be freed. Educated slaves had the skills to accumulate a *peculium*, and they would be good business associates of their former owners. Most freedmen worked in commercial centers, which provided an opportunity for advancement.

Educated slaves are markedly associated with positive incentives and uneducated slaves with negative incentives. Many educated Roman slaves were administrators, agents, and authors—for example, Q. Remmius Palaemon, who was educated in the first century C.E. ostensibly "as a result of escorting his owner's son to and from school," but probably had more direct exposure than simply acting as a paedagogus. In the Republic, Cato educated slaves for a year, in a sort of primitive business school, and then sold them. Anyone enacting such a plan with American slaves would not have been celebrated; he would have been ostracized, jailed and fined. The Virginia Code of 1848 extended to freedmen as well as slaves: "Every assemblage of Negroes for the purpose of instruction in reading or writing shall be an unlawful assembly. . . . If a white person assemble with Negroes for the purpose of instructing them to read or write, he shall be confined to jail not exceeding six months and fined not exceeding one hundred dollars "43

<sup>42</sup> Mattoso, *To Be a Slave*, 179–183. See also Schwartz, "Manumission"; Karasch, *Slave Life*, 362; Sidney Chalhoub, "Slaves, Freedmen and the Politics of Freedom in Brazil: The Experience of Blacks in the City of Rio," *Slavery and Abolition*, X (1989), 64–84; Nishido, "Manumission"; Douglas Cole Libby and Clotilde Andrade Paiva, "Manumission Practices in a Late Eighteenth-Century Brazilian Slave Parish: S o José d'El Rey in 1795," *Slavery and Abolition*, XXI (2000), 96–127. Brazilian freedmen were represented in many occupations, but they were concentrated at the lower end of the economic and social scale. Vidal Luna and Klein, *Slavery*, 172.

<sup>43</sup> Bradley, Slavery and Society, 35; Plutarch (trans. Bernadotte Perrin), "Marcus Cato," Par-

Many Roman slaves, educated or not, competed with freedmen and other free workers in a unified labor market. Various occupations emerged to meet the demands of urban residents, particularly rich ones. Skilled slaves were valuable to merchants and wealthy citizens because they could serve as their agents, in the much the same way as their sons could: "Whatever children in our power and slaves in our possession receive by manicipatio or obtain by delivery, and whatever rights they stipulate for or acquire by any other title, they acquire for us." Watson expressed surprise that the Romans did not develop a law of agency, but the Romans did have a law of agency—the law of slavery (and sons). As Hicks noted, slavery was the most common formal, legally enforceable long-term labor contract in the early Roman empire. A person with a long-term relation to a principal would be his or her most responsible representative. Slaves were more valuable than free men in that respect. Witness the frequent references to literate, skilled slave agents in the surviving sources.44

Columella (1.8.1-2) aptly exposed the difference between ancient and modern slavery: "So my advice at the start is not to appoint an overseer from that sort of slaves who are physically attractive and certainly not from that class which has busied itself with the voluptuous occupations of the city." This warning would not, and could not, apply to modern slavery, both because modern slaves could not indulge in "voluptuous occupations" like Columella's list of theater, gambling, restaurants, etc., and because a modern slave could not have been appointed as manager of a substantial estate.45

Implicit in Columella's advice is the ease with which slaves could change jobs. For example, when Horace was given an estate

allel Lives (London, 1914; orig. pub. early 2d century), II, 21; Va. Code [1848], 747-748. Education does not even appear in the index to Fogel and Engerman, Time on the Cross. So few Brazilians of any sort were educated that no contrast between slaves and free workers in this context is possible.

<sup>44</sup> Gaius (trans. W. M. Gordon and O. F. Robinson), Institutiones (Ithaca, 1988; orig. pub. c. 161), 2.87; Watson, Roman Slave Law, 107; Hicks, Theory. See Andrew Lintott, "Freedmen and Slaves in the Light of Legal Documents from First-Century A.D. Campania," Classical Quarterly, LII (2002), 555-565, for a vivid description of slaves and freedmen as agents in the records of a commercial house in Puteoli. Free people were also agents. Roman jurists began to correct the legal discrepancy between them and slave agents in the Principate (Johnston, Roman Law, 106).

<sup>45</sup> Columella, 1.8.1-2: "Igitur praemoneo ne vilicum ex eo genere servorum, qui corpore placuerunt, instituamus, ne ex eo quidem ordine, qui urbanes ac delicates artes exercuerit."

on which he employed five free tenants and nine household slaves, he chose a *vilicus* from an urban household with no apparent training in agriculture. The mobility of labor must have been even more pronounced for free labor. The demand for unskilled and semiskilled labor for particular tasks varied widely over time in both the country and the city. Agricultural demand varied seasonally; in the late republic and undoubtedly at other times, the peak rural demand for labor was satisfied by the temporary employment of free workers. Urban labor demand varied less frequently, but possibly more widely. Public building activity in the Principate was sporadic; workers must have been attracted to these projects in one way or another. The presumption among classicists is that free workers were hired for them, lured by the wages offered. If so, they also must have had ways to support themselves and their families when public building activity was low.<sup>46</sup>

Slave wages are not widely documented, despite the fact that some slaves must have earned wages to accumulate a *peculium*. The preceding discussion, however, indicates that slaves were interchangeable with free wage laborers in many situations. Although the evidence for monthly and annual wages comes largely from Egypt, and the information about slaves comes mostly from Italy, Roman slaves appear to fit Hicks' view of slaves as long-term employees. The analysis of slave motivation and the wide distribution of slave occupations suggest that slaves were part of an integrated labor force in the early Roman empire.<sup>47</sup>

Workers in the unified labor market of the early Roman empire could change jobs in response to market-driven rewards. As in all agricultural economies, the labor market worked better in cities than in the countryside. Slaves participated in this system to a large extent. The restrictions on labor mobility may have been no more severe than the restrictions on labor mobility in early modern Europe. Education was the key to the good life in the early Roman empire, as it is today. Roman workers appear to have received wages and other payments commensurate with their productivity, and they were able to respond, at least as fully as in

<sup>46</sup> Jean-Jacques Aubert, Business Managers in Early Roman Empire (Leiden, 1994), 133; Garnsey, Cities, Peasants and Food, 143–145; Brunt, "Free Labor"; M. K. Thornton and R. L. Thornton, Julio-Claudian Building Programs (Wauconda, Il., 1989).

<sup>47</sup> Hicks, Theory.

more modern agrarian societies, to the incentives created by these payments.

Marx and Tönnies may have been half right. They were not correct to assert that functioning labor markets, the hallmark of Gesellschaft, were new in the nineteenth century. Not only were labor markets present earlier in modern European history; they also were present in the early Roman empire. But, as they surmised, functioning labor markets were associated with urbanization. Rome was an urban society to an extent not duplicated again until the nineteenth century. Its connection with a labor market, however, can only be suggested speculatively herein, though the evidence is compelling.

"The Roman lawyer Gaius wrote that the fundamental social division was that between slave and free." The fundamental economic division in the early Roman empire, however, was between educated and uneducated—skilled and unskilled—not between slave and free. Saller summarized this view succinctly: "The disproportionately high representation of freedmen among the funerary inscriptions from Italian cities reflects the fact that exslaves were better placed to make a success of themselves in the urban economy than the freeborn poor: upon manumission many of the ex-slaves started with skills and a business."48

48 Garnsey, Cities, Peasants and Food, 134, citing Gaius, Institutiones, 1.9; Saller, "Status and Patronage," in Alan K. Bowman, Garnsey, and Rathbone (eds.), The Cambridge Ancient History. XI. The High Empire, A.D. 70-192 (Cambridge, 2000), 835.