

# Dear Prudence: W.F. Lloyd on Population Growth and the Natural Wage

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[T]hough the interest of the labourer is strictly connected with that of the society, he is incapable either of comprehending that interest, or of understanding its connection with his own. His condition leaves him no time to receive the necessary information, and his education and habits are commonly such as to render him unfit to judge even though he was fully informed. In the publick deliberations, therefore, his voice is little heard and less regarded...

Adam Smith [(1776) 1976a, I, xi, p.266]

The Reverend William Forster Lloyd, Student of Christ Church and former lecturer in mathematics, was elected as the third Drummond professor of political economy at Oxford University in February 1832. Following the requirements of the university statute which established the chair, Lloyd published the first of his lectures, titled "Two lectures on the checks to population", in the next year [Lloyd 1833]. Having read that pamphlet, the radical Francis Place wrote to Lloyd because they were both "fellow labourers for the benefit of the people". Place had concluded that Lloyd followed Thomas Robert Malthus and Thomas Chalmers in recommending "late marriages[,] the parties in the meantime living chastely", as the cure for excessive population growth and hence the condition of "the working people". Citing a lecture by the surgeon Dr. Michael Ryan, Place argued, however, that "women who refrain from sexual intercourse" until they were 28 or 30 years of age "are with few exceptions free from horrifying

and disturbing complaints of the organs of generation” [cf. Ryan 1833, esp. p.782]. Those “disorders have ... another lamentable consequence in rendering women unfit to produce healthy children ... Could the recommendation of M<sup>r</sup> Malthus be carried into practice it seems probable that the great body of people would be physically deteriorated [sic] and that if the practice were universal and continuous the human race might be extinguished.” There was, however, a remedy and a “small pamphlet originally published in New York by M<sup>r</sup> Robert Dale Owen will be left for you at Mess. Rivingtons shop in Waterloo Place.” Owen, like Place, was an advocate of birth control and the pamphlet was probably *Moral Physiology*, published in England in 1832, which “Place at once adopted ... for the furtherance of his views” [Field 1911, p.230; Owen 1831].<sup>1</sup>

Place presumably chose ‘Mess. Rivingtons shop’ because the title page of Lloyd’s pamphlet recorded that it was sold by the London bookselling firm of J.G and F. Rivington, one of whose premises was in Waterloo Place, Pall Mall. As the Rivingtons were booksellers for the Society for Promoting Christian Knowledge at the time, it might be suspected that they would have been less than enthusiastic had they known about the material that Place intended to leave for Lloyd. And while there might be some interest in contemplating the possibility that Lloyd went to a prominent London bookshop, asking for a parcel that had been left for him, presumably in a plain sealed wrapper, by a well-known advocate of birth control,<sup>2</sup> that scenario seems rather unlikely.

Place was not alone in characterising Lloyd as a Malthusian epigone. Nearly 150 years later, the sociologist William Peterson dismissed the volume of all Lloyd’s published lectures [Lloyd (1837a) 1968] as “a mere summary of Malthus’s *Essay* and similar elementary disquisitions on three other topics, all bound together in a work lacking originality, interest or scholarly purpose” [Peterson 1979, p.14]. In contrast to that drive-by shooting, the purpose of this paper is to show that, in providing an explanation for a long-period or natural wage, Lloyd’s population lectures

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<sup>1</sup> Francis Place to W.F. Lloyd, 2 August 1833, Place Papers, British Library, Add. Ms. 35.149. For Place and Owen, see Hines 1928; idem. 1930.

<sup>2</sup> Thomas Perronet Thompson had referred to “Place’s nasty theory” in 1831 [Johnson 1957, p.181]. See also Huzel 2006, pp.204-6.

presented a striking critique of Malthus' *Essay on Population*.<sup>3</sup> Adam Smith had argued in the *Wealth of Nations* that a natural wage would depend on the growth rate of the economy, habits, customs and the institutional setting which governed bargaining power. That setting included property relationships, where labourers had to work to survive while the wealth and small number of employers made it easier for them to combine, as well as the legislative framework which outlawed combinations of labourers [Smith (1776) 1976a, I. viii, esp. pp.83-5]. Lloyd also emphasized the superior bargaining strength of employers in his distribution analysis of 1837 when he explained why “the smallness of their number, joined to the superiority of their intelligence and other circumstances, gives to them a power which throws the workman entirely at their feet” [Lloyd 1837, p.105].<sup>4</sup> In his population lectures, however, written in the aftermath of the Captain Swing disturbances and the continuing debates over changes to the Poor Law, he put explicit consideration of bargaining power to one side, explaining the natural wage in terms of the population growth rate. What was distinctive about that analysis was the agency attributed to the mass of the population. For Lloyd argued that their behavior in having more children was a reasoned response, in conditions of ignorance and uncertainty, to the perceptions and incentives generated by the institutional setting (Section 1). This underpinned his references to the importance of property rights for understanding poverty and the role of the Poor Law (Section 2). While Lloyd owed a good deal to Malthus, his analysis was quite different in the type and extent of reasoning he attributed to the mass of the population. His treatment of behaviour, property rights and poverty was also markedly different from that of his predecessors in the Drummond chair, Nassau Senior and Richard Whately, who were important, in different ways, for the introduction of the new 1834 Poor Law which Lloyd vehemently criticized (Section 3). If Francis Place was mistaken in characterizing Lloyd as a Malthusian clone, the significance of Lloyd's analysis will also be obscured by reading his population lectures through a grid of later notions of rational economic behavior (Section 4).

## 1. Population Growth and the Natural Wage

In arguing that the “wages of the lowest description of labour, in every old country where competition has been tolerably free, have always bordered on the minimum necessary for

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<sup>3</sup> In a subsequent lecture, Lloyd referred to a long period outcome where the wage was “at its natural level” [Lloyd 1835, p.87]. For discussion of Lloyd as a critic of Malthus, see also the detailed account by Richard Romano [1977, pp.423-28].

<sup>4</sup> For Lloyd's value and distribution analysis, see Moore and White 2010.

maintenance”, Lloyd referred for support to an “observation of [Jonathan] Swift, a hundred years ago” [Lloyd 1833, pp.37, 38].<sup>5</sup> Although such wages were socially and geographically specific,<sup>6</sup> the implication was that the composition and amount of the commodities constituting the English ‘minimum necessary for maintenance’ had barely changed over the preceding century. Malthus had provided historical estimates of nominal and real (corn) wage rates in his *Principles of Political Economy* [Malthus (1820) 1989, Ch. IV, iv-v] and Lloyd’s first publication, *Prices of Corn in Oxford*, which appeared in the first year of the Swing disturbances, had attempted to provide a firmer basis for his own analysis. The objective of that detailed statistical study had been to obtain past and present information on English money wage rates and the price of provisions which governed “the condition of the labouring poor”. Lloyd complained, however, that deficiencies in the data meant that it was not possible to use the statistics “as the foundations of any further consequences” [Lloyd 1830, pp.iii-iv].<sup>7</sup> That could explain why, two years later, he referred to the authority of Swift and “other writers” when seeming to suggest that “one third of the people were ... extremely stinted even in the necessaries of life” [Lloyd 1833, p.38].

While a labourer’s consumption bundle included expenditure on clothing, lodging and furniture [Lloyd 1833, pp.35, 70], the pivot of Lloyd’s explanation for the long-period wage rate was the pressure of population on food as ‘the means of subsistence’. As this terminology suggests and as Lloyd clearly acknowledged, the broad terms of the argument were taken from Malthus’ *Essay*. However, in explaining the absence of a “preventive check” - the exercise of “moral restraint” in delaying marriage and children - Lloyd’s account of a subsistence condition for the mass of the population was shorn of the qualifications which Malthus had introduced after the first edition of the *Essay* [Winch 1996, pp.374-6]. In particular, Malthus had allowed that the preventive check could reduce population pressure. As he put it in part of a lengthy extract that Lloyd cited from the *Essay*, the preventive check

is peculiar to man, and arises from that distinct superiority in his reasoning faculties, which enable him to calculate distant consequences... [M]an cannot look around him,

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<sup>5</sup> A subsequent reference suggests that Lloyd was referring to Swift’s *Proposal for Giving Badges to the Beggars in all the Parishes of Dublin* [Lloyd 1833, pp.66, 67; cf. Swift (1737) 1824, p.395].

<sup>6</sup> See Lloyd’s subsequent reference to the difference between Irish and English wages [Lloyd 1837, p.70].

<sup>7</sup> Lloyd did record, however, that it was “satisfactory to see how accurately the [corn] prices at Oxford correspond with the Windsor prices in leading to the same results which Adam Smith deduced, in his digression concerning the variations in the value of silver, at the end of his first book” [Lloyd 1830, pp.iv-v; cf. Smith (1776) 1976a, I, xi, esp. pp.268-75].

and see the distress which frequently presses upon those who have large families ... without feeling a doubt whether, if he follow the bent of his inclinations, he may be able to support the offspring which he will probably bring into the world ... [Such] considerations are calculated to prevent, and certainly do prevent, a great number of persons in all civilized nations from pursuing the dictate of nature in an early attachment to one woman [Malthus 1817, 1, pp.18, 19; cited Lloyd 1833, pp.4-5].<sup>8</sup>

While Lloyd agreed with an analytical focus on the ‘distinct superiority of human reasoning faculties’, his critique of Malthus’ argument regarding the ability to ‘calculate distant consequences’ led to a further difference in their respective explanations of poverty.<sup>9</sup> For Malthus, although “human institutions appear to be, and indeed often are, the obvious and obtrusive causes of much mischief to society, they are, in reality, light and superficial, in comparison with those deeper-seated causes of evil, which result from the laws of nature and the passions of mankind” [Malthus 1817, 2, p.246]. While Lloyd acknowledged that passions were important in explaining behaviour, he argued that the decision by members of the labouring class to have more children was the result of their using a ‘reasoning faculty’ and that, if the effects were dire, they could be traced to the “institutions and conditions of society” [Lloyd 1833, p.17].

Given that “man is a reasoning animal”, Lloyd depicted human behavior as governed by weighing a “present pain or inconvenience” against a resultant “future benefit” or the “gratification of a present desire” against an “eventual evil” [Lloyd 1833, pp.7, 20], where the exercise of “prudence” was necessary to take future consequences into account. Prudence depended on both the “motives” and “disposition” of an actor. Motives derived from “circumstances external to the minds of ... individuals, operating from without upon the reasoning faculty, and furnishing the considerations and grounds upon which they determine to be prudent”. Actions based on motives thus reflected the incentives generated by external circumstances. Motives alone, however, would not result in fully prudent behavior which required the use of disposition. This was “internal to the mind itself, namely the strength of the reasoning faculty, combined with the degree of self-

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<sup>8</sup> I have followed Lloyd in using the fifth edition of Malthus’ *Essay*. Any emphases in material quoted here appear in the original texts.

<sup>9</sup> Lloyd defined poverty as “misery produced by want” which was equated, in effect, with “scarcity in the means of subsistence”. He argued that the English population doubled in fifty years [Lloyd 1833, pp.9, 12].

command possessed by the individuals and their consequent sensibility to prudential considerations” [ibid. p.46]. As will be explained below, Lloyd thought that, while there was some evidence of “motives for prudence” in the relevant section of the labouring class, the “prudential disposition” was nonexistent [ibid. p.58], so that his explanation for the lack of a preventive check was principally concerned with motives.

In explaining motives, Lloyd argued that it was understandable why labourers would increase the size of their families to increase their income. Their only resort was to increased labour because property ownership was polarizing under the impact of enclosures, coupled with

the revolution in manufactures, by which small capitalists have been thrust out of the market, the accumulation of farms, which in agriculture has produced a similar effect, the decay of monopolies, and the increased productiveness of land ... while the right of primogeniture has maintained nearly a stationary condition, or has perhaps caused even a retrogradation in the number of landed proprietors [ibid. p.68].

Family employment was available as “the extended use of machinery ... [in the manufacturing sector,] by performing those parts of operations requiring mere force, has opened a wider field for the employment of women and children, thereby, in a great measure, relieving the head of a family of the burden of its maintenance” [ibid. p.69]. Children could be employed from the age of eight or ten with the prospect of that age being lowered by further technological change. Making due allowance for the “natural passions”, the consequent lack of “a prudential disposition” with regard to family size followed from the “substantial benefits” of marriage and because it appeared that “no individual [would] benefit from abstinence” [ibid. pp.25, 48, 35].

The explanation for why it seemed that no individual would benefit from abstinence turned on a further argument regarding cognition and behaviour which I will term the diffusion problem. Although Lloyd used examples rather than explaining it in more general terms [Lloyd 1833, pp.18-19], it can be summarised, using a later terminology, as follows. If a person is one of a number of participants whose actions contribute to an aggregate result in which all the participants share, the perceived private cost(s) and/or benefit(s) may not be the same as the aggregate (or social) cost(s) and/or benefit(s). This is because the aggregate effects will be shared by all participants and not simply by a particular individual. With only a small number of participants, each person will be able to identify and take into account both the private and social results. But that will not be the case with a large number of participants. For while the

private cost(s) and/or benefit(s) are clear, the social effects due to the actions of a particular person would, as Lloyd put it, “be so small as to elude perception, and would obtain no hold whatever on the human mind”. So, for example, with a “multitude” of participants who have access to a common resource, “the motive for economy [in using the resource] entirely vanishes”, because only the private cost(s) and/or benefit(s) will be registered [ibid.]. The social costs of overusing the resource, which may be highly damaging in the aggregate, will thus appear to be unconnected to the individual actions that produced them.<sup>10</sup>

The effects of each individual’s behaviour in contributing toward a future event would become “evanescent” in a “large society” because of the diffusion problem so that, “in the absence of any countervailing weight, the conduct of each person is determined by the consideration of the present alone ... [T]he effect is, that, though the reasoning faculty is in full force, and each man can clearly foresee the consequences of his actions, yet that conduct is the same as if that faculty had no existence” [Lloyd 1833, p.21]. The phrase ‘can clearly foresee the consequences’ might suggest that each person is fully aware of the results of their actions. Lloyd’s discussion indicates, however, that each person is acting in ignorance of their contribution to the aggregate effect. With regard to population growth, each labourer was unable to see the effects of aggregate behavior and hence had no reason to restrict the size of his family:

Each, therefore, will feel ill effects, corresponding precisely, in character and quality, with the consequences of his own conduct. Yet they will not be the identical effects flowing from that conduct; but being a portion of the accumulated effects resulting from the whole conduct of the society in general, would, therefore, still be felt, though the conduct of the individual should be changed. Thus it is that the universal distress fails to suggest to the individual any motive for moral restraint [ibid. p.22].<sup>11</sup>

Most importantly, with the mass of the population dependent on their labour for income and with the incentive to have more children, it could not be concluded that a population “pressing too

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<sup>10</sup> An analogous argument had appeared in William Paley’s *Principles of Moral and Political Philosophy*, which referred to behaviour where “the particular consequence is comparatively insignificant”, by contrast with the overall or “general consequence”. An example was forgery where the particular consequence was the loss to the person who accepts a forged bill, while the general consequence was “the stoppage of paper currency” [Paley 1786, p.69].

<sup>11</sup> Lloyd assumed that all relevant household decisions were made by the adult male.

closely against the means of subsistence” was the result of a “fault ... in the people themselves ... [rather than] with the constitution of the society, of which they form a part” [ibid. p.23].

Lloyd’s emphasis on reasoned behaviour by the labouring class was reinforced by a further argument explaining the failure of moral restraint. While he initially assumed that all labourers could find employment, he made clear that, in “the actual business of life, we commonly find some labourers out of employment, and more at one time than another” [ibid.p.26]. Nevertheless, unemployment had no role in constraining the birth rate. This was because the “uncertainty” of the “failure of employment” could only be calculated and acted upon if it was “periodical, that is ... to recur at known intervals, and to continue during periods of known duration”. There was, however, no such periodicity. Hence it was not feasible for labourers to act “on account of an obscure anticipation of a danger which is not near, which may perhaps never be realized, or which, on the contrary, may fall on them with such force, as utterly to overwhelm them, notwithstanding their best precautions”. With the lack of predictability, it was possible for a labourer to think that he and his family might experience uninterrupted employment for over a decade. Given that “vast degree of uncertainty in the prospects of a labouring man ... the natural consequence is that he must act at random” [ibid. pp.41-2, 45].<sup>12</sup> In this regard, Lloyd had previously remarked that, when considering to have more children, a labourer taking into account the possibility of unemployment “would reckon it hard, were he the person, on whom, in a particular instance, the lot should fall.” The situation was like a “lottery [where], since the chances of all are equal, we must in idea consider them as divisible” [ibid. pp.29,30]. This, then, was another reason for the absence of moral restraint. The adverse effects of population growth were due, therefore, to decisions made under conditions of ignorance or of uncertainty where it was impossible to calculate the risk of events which a labourer might experience.<sup>13</sup>

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<sup>12</sup> Presumably if a person acted ‘at random’ on that score, the other factors explaining population growth would have full effect.

<sup>13</sup> The lack of predictability suggests that Lloyd was referring to unemployment, rather than to seasonal underemployment. He argued that unemployment was explained by “partial causes” such as shifts in the patterns of demand for particular commodities and “oscillations in the currency” [Lloyd 1833, p.26]. His more detailed analysis in later lectures confirms that unemployment was a prevalent occurrence [Lloyd 1835]. However, because it could not be satisfactorily explained by the “universal overproduction” of commodities [Lloyd 1834, pp.6-7], unemployment was not capable of a systematic explanation as required in a long-period analysis and was thus treated as a market-period event.

Having discussed the motives for the behaviour of the labouring class, Lloyd turned to the analysis of 'disposition', which combined the "strength of the reasoning faculty" with a "degree of self-command" or "the habit of attending to future consequences" [ibid. pp.46, 54]. He argued that the ability to exercise this degree of prudence depended on a formal education or on "experience" which was principally a function of age. Learning thus played an important role in Lloyd's explanation of behaviour, which was consistent with his reference to the importance of habits [ibid. p.53]. Formal education was, however, irrelevant for the labouring class because of "constant labor at an early age". Experience could also play no role because labourers had families when they were in their twenties, making decisions on which their elders had no influence as the young were economically independent through paid work. This was quite different from the situation facing "the higher and middling classes of society", where the older generation had "command of wealth" in the family and could thus constrain the young. If that constraint was explained in part by "procrastination", another feature of age [ibid. pp.59, 61, 63], there was a further component of behaviour to take into account: "the mind can only attend at one time to a definite number of considerations ... [W]here the thoughts and feelings are deeply engaged on a present benefit, little power of attention remains to be bestowed upon the future" [ibid. p.55]. When Lloyd argued that "distant futurity, like a distant object, is diminished to our perceptions; and seldom sufficiently awakens our fears, or fixes our attention" [ibid. p.53], he might have been referring to an attribute of human nature. Nevertheless, it was not a fixed characteristic of behaviour as it could be changed by learning. The problem was that, because of the 'constitution of society', education and experience could play no role in constraining population growth.

Lloyd thus depicted behaviour as driven by passions, emulation and habits, which meant that behaviour could be altered by education and experience. Given those characteristics, economic actors used their reasoning faculty by comparing the perceived good and evil effects of their actions. Fully prudent behaviour was, however, predominantly class-specific, where classes were defined in terms of property relationships and hence the ownership of the means of production. Different class behaviours were explained by different incentives and opportunities which reflected the increasing concentration of property ownership, the growth of the manufacturing sector and the way in which aggregate effects appeared to be untraceable to individual behavior. If the absence of moral restraint by the labouring class was due to the lack of a formal education or of experience, it was the form of employment opportunities within the set of property relationships that principally explained population pressure. As Lloyd put it, "were capital as uniformly

distributed, and as easily obtained, as is the ability to labour, then ... the capitalists would be as badly off as are at present the labouring classes" [Lloyd 1833, p.72].

## 2. Common Property Rights

Lloyd also used the diffusion problem in his discussion of property rights. Referring to the reasons for enclosures of common ground, he posed a series of questions: "Why are the cattle on a common so puny and stunted? Why is the common itself so bare-worn, and cropped so differently from the adjoining inclosures?" The reason was that, if one person put more cattle in their own field which had only a "sufficiency of pasture", there would be no net benefit. On a common, however, "only a small part" of the food "is taken from his own cattle" with a consequent net private benefit. All would behave in the same way, thereby going "beyond [the point at] which no prudent man would add to his stock" on enclosed ground. This story was a metaphor. In the existing state of things, "the field for the employment of labor is in fact a common" because, in both cases, "the commons ... must be constantly stocked to the extreme point of saturation" [Lloyd 1833, p.30, 31, 32]. While Lloyd did not make clear whether people realized the cumulative effect of adding more cattle, his use of the 'field of employment' metaphor elsewhere in the lectures [ibid. pp.29, 38, 65, 69] suggests that the commons outcome was due to ignorance, rather than a deliberate decision to pursue a self - destructive outcome.

The enclosure of common ground was still a contentious issue in the early 1830s and, to take one example, it would be surprising if Lloyd was unaware of the disturbances at Otmoor near Oxford. Turning in part on the extinguishment of the de facto right to graze cattle on waste land, the disturbances continued for much of the period that Lloyd lectured [Reaney 1971; Eastwood 1996]. He returned to the issue of the commons at the close of his population lectures, noting that the "common reasons for the establishment of private property in land are deduced from the necessity, of offering to individuals sufficient motives for cultivating the ground, and of preventing the wasteful destruction of the immature products of the earth" [Lloyd 1833, p.71]. An example of those reasons can be found in Jane Marcet's *Conversations on Political Economy*, where, in discussing the grounds for private property, Mrs. B. suggested to Caroline:

Suppose that this earth was a paradise, and yielded spontaneously all that is now produced by cultivation; still without the institution of property it could not be enjoyed; the fruit would be gathered before it was ripe, animals killed before they came to maturity; for who would protect what was not their own: or who would economise when all the

stores of nature were open to him? There would be a strange mixture of plenty, waste and famine.

In this country, for instance, where the only common property consists in hedge-nuts and blackberries, how seldom are they allowed to ripen? ... [If the earth] were possessed in common, who would set about cultivating this or that spot of ground? [Marcet 1816, pp.55-6].

Subsequently, when Caroline cited a passage from Oliver Goldsmith's *The Deserted Village* (1770) to illustrate her qualms about enclosures, Mrs. B. would have none of it: "You should recollect that we do not admit poets to be very good authorities in political economy". The commons give "a few lean cattle", while enclosures "fatten a much greater number of fine cattle ... [so that] the quantity of subsistence will be increased ... [The] poor ... will fare the better for it". In any case, enclosures would provide increased employment for the poor who would also "receive an indemnity for their loss of right of common" [Marcet 1816, p.154].

If Lloyd was less sanguine than Marcet on that matter, the *Conversations* suggests how Lloyd could have produced his commons metaphor by using the diffusion problem to rework some standard reasons justifying enclosures. At the same time, the metaphor entailed a more general point regarding property rights. Having noted the 'common reasons for the establishment of private property in land', Lloyd argued that the theory of population added another reason for private property which was that, "since the earth can never maintain all who offer themselves for maintenance, it is better that its produce should be divided into shares of definite magnitude". He then argued that landowners "should be able to command definite shares [of food as] ... a necessary consequence of their ownership" [Lloyd 1833, pp.71, 72]. Inequality in property ownership was necessary to stimulate the production of wealth:

After the necessary wants have been supplied, the most powerful motive to exertion is the spirit of emulation, and the desire of rising in the world. Men are attracted upwards by the example of others who are richer than themselves. At the top of the scale this attraction is wanting. At that point, therefore, it is necessary that there should be a title to wealth without the labour of producing it. A state of perfect equality ... would bring back society to ignorance and barbarism [ibid. pp.74-5].

This was not simply an apologia for inequality of ownership as Lloyd added that there was a "limit" to the "concentration" of property. With a marked concentration and a large class of

landless labourers, there was a rationale, analogous to that for property ownership, to “justify the appropriation of the field of employment, and a monopoly of labour. But, since such a monopoly is not easily attainable, we are led to look for an equivalent in the diffusion of a sufficient degree of property throughout the whole fabric of society” [ibid. p.75].

As these were the closing sentences of the lectures, they might, if read in isolation, suggest that Lloyd was a radical reformer, at least with regard to the existing concentration of landed property. The use of a phrase similar to ‘an equivalent in the diffusion of a sufficient degree of property’ in a later lecture indicates, however, that he was referring instead to a right of subsistence under the Poor Law.<sup>14</sup> Lloyd was thus part of a tradition, dating from the seventeenth century, which argued that there were two key sets of property rights. The first was a negative or exclusive right so that, for example, enclosures were justified on the basis that they increased agricultural productivity and hence the agricultural surplus. The second was a positive or inclusive property right, whereby the dispossessed landless labourers could claim a right to subsistence from the landowners and which could thus provide a rationale for a Poor Law [Horne 1990]. Lloyd argued in subsequent lectures that, while there was a definite right to subsistence, the population principle had compromised the domain of the application of the Poor Law, which should be restricted to the unemployed, as well as the sick, old and orphans.<sup>15</sup> Indeed, a liberal use of the Poor Law under those conditions would provide the “true method of promoting moral restraint, or prudence with respect to marriage” [Lloyd 1836, p.70].<sup>16</sup> Far from necessarily increasing the population growth rate, a Poor Law could reduce it.

It has been suggested that, in his discussion of the spoiling of the commons Lloyd was referring to a postenclosure travesty of the commons. It was the usual practice with each enclosure to set aside a small *cow common* for the poor and dispossessed, often on less than choice land. These were not true commons, and it is not surprising that these so-called commons

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<sup>14</sup> “[A] qualified right of property in the earth, such as that which can be effected by the poor-laws, ought to be extended to as many families which inhabit it, as can be maintained in comfort out of the produce” [Lloyd 1836, p.59]. See also Lloyd 1837, pp.38, 40.

<sup>15</sup> Summarising his position, Lloyd argued that “the principle of our proposed poor-law becomes relief to the impotent and work for the able-bodied” [Lloyd 1836, p.7].

<sup>16</sup> Referring to the “burden of maintenance” of a family in his population lectures, Lloyd argued that, “In agriculture, the poor laws, as they have been administered for the last thirty-five years, have absorbed almost the whole of this burden” [Lloyd 1833, p.69].

developed into wretched examples of overgrazing, ill-managed livestock, and general squalor. Most references to postenclosure ‘commons’ pertain to these uncommon commons that were little more than dumping grounds for the poor, the displaced, the criminal, and other deviants [Levine 1986, p.92].

This is, I think, a misunderstanding of Lloyd’s argument. As was indicated above, there were still enclosure disturbances during the 1830s and Lloyd indicated that he was drawing on ‘common reasons’ given for implementing enclosures. Setting his discussion of the population principle in the context of the natural rights tradition provides a context for suggesting how, using the diffusion problem, he could have formulated his commons metaphor, with its rationale for exclusionary rights.<sup>17</sup> If the diffusion problem could justify enclosures, it could also be used to explain why the poor were unable to protect themselves from poverty because of the ‘constitution of society’. That, in turn, provided support for the inclusionary right to subsistence under the Poor Law.<sup>18</sup>

### **3. Passionate about Reasoning**

Lloyd’s analysis of population growth was consistent with Malthus’ conclusion that “the tendency of population to increase beyond the means of subsistence may be seen in almost every register of a country parish in the kingdom” [Malthus 1817, 2, p.85]. This position was subject to increasing criticism in elite circles by the early 1830s. In his lectures as Drummond professor, for example, Nassau Senior had claimed that “there is a natural tendency in subsistence to increase in a greater ratio than population” and that, if population growth was excessive, it could only be a “symptom of misgovernment” [Senior 1829, pp.49, 52]. Responding to Senior, Malthus acknowledged a future “possibility, and even the probability of the labouring classes ... being

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<sup>17</sup> Malthus criticised the ‘cow system’ suggested by Arthur Young where, to offset the effect of harvest scarcities, every agricultural labourer should be granted an allotment on, for example, the commons, which would be sufficient to grow food and support one or two cows. Malthus rejected that suggestion, principally because it would encourage early marriage and was a ‘bounty’ on children. As there was no reference here to spoilage of the commons, however, it seems doubtful that it played a role in the formulation of Lloyd’s argument [Malthus 1817, 3, pp.234-50].

<sup>18</sup> Garrett Hardin subsequently claimed to have based his ‘tragedy of the commons’ analysis on Lloyd’s population lectures [Hardin 1968, p.1244]. Hardin, however, replaced Lloyd’s analysis with a story constructed in an institutional and property rights vacuum where the utility-maximising participants knew the outcomes of their actions [White 2009].

altogether in a better situation than they are now". Nevertheless, there was "a much less *tendency*" for the labouring classes to show "restraint and self-denial" than to marry and Senior was simply incorrect in denying the tendency for population growth to exceed subsistence which explained "the continued poverty and misery of the labouring classes" [ibid. pp.65, 71, 72]. Herein lay a conundrum for those in the Whig government who were intent on changing the (old) Poor Law. If there was a surplus population in England, reducing, let alone abolishing, allowances would result in a deterioration of living standards for the poor, generating social disruption on the scale of the Swing disturbances. The 1834 report of the Royal Commission on the Poor Law, in which Senior played a pivotal role, cut through that Gordian knot by arguing that much of the existing Poor Law expenditure was due to "fraud, indolence, and improvidence", rather than a surplus population [Dunkley 1981, pp.130, 131, 134, 135]. If it is misleading to depict the 1834 Poor Law as a reflection of 'Malthusian' arguments, it is also evident that Lloyd's analysis, with its defence of the right to relief, would have been decidedly unwelcome so far as his predecessors in the Drummond chair were concerned.<sup>19</sup>

It should be emphasized, however, just how different Lloyd's analysis was from that of Malthus who attributed "the greater part of the sufferings of the lower classes of society exclusively to themselves". Malthus did acknowledge that part of the responsibility could be laid at the door of "the higher classes of society", particularly because they had legislated the (old) Poor Law which increased the birth rate and promoted "that carelessness and want of frugality observable among the poor [who] ... seem always to live from hand to mouth. Their present wants employ their whole attention; and they seldom think of the future ... [A]ll that they earn beyond their present necessities goes, generally speaking, to the ale-house" [Malthus 1817, 3, pp.142, 108; 2, pp.332, 334].<sup>20</sup> If the Poor Law encouraged fecklessness, drunkenness and dissipation, those effects did not "entirely obscure the light of nature and reason on this subject ... [S]till they contribute to make it comparatively weak and indistinct" [ibid. 3, pp.140-41]. The key point for Malthus was that the behaviour of the labouring classes was primarily driven by passions. As suggested in the title of

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<sup>19</sup> While Whately regarded the "doctrine" that population growth would outstrip the means of subsistence as "mischievous", he attempted to create the impression that any apparent difference between Malthus and Senior rested on a misunderstanding of the meaning of a 'tendency' [Whately 1832, pp.185, 248-50]. For discussion of how Lloyd's lectures were part of the contest between the dons of Christ Church and the Noetics of Oriel, with whom Whately and Senior were associated, see Moore and White 2010.

<sup>20</sup> The Poor Law also reduced employment outside the workhouses and increased the "price of provisions" [Malthus 1817, 2, pp.332-4, 346].

the last chapter in his *Essay*, the only realistic basis for a “rational expectation” of the preventive check becoming more widespread in the long term, so that “the impulses of passion” could be “in some degree modified by reason”, was that the lower classes could be ‘infused’ with knowledge of the population principle (and, indeed, of political economy more generally) by means of a “parochial” school system, coupled with a “*very gradual* abolition of the poor-laws” [Malthus 1817, 3, pp.106, 200; 2, p.369]. It was because the poor were ignorant, unable to register the significance of the evidence for their own behaviour, that they were subject to the blandishments of “the most successful supporters of tyranny”, that is, radicals such as William Godwin and Tom Paine, who attributed “the distress of the poor ... to human institutions and the iniquities of governments” [ibid. 3, p.158]. Reason was not completely absent, but it was in short supply.

If, like Malthus, Lloyd was critical of proposals for “systems of equality”,<sup>21</sup> he eschewed any explicit reference to religious matters, thereby bypassing any comment on the claim, which featured in Malthus’ *Essay*, that the poor were violating the will of God.<sup>22</sup> If he made no mention of drunkenness and dissipation, Lloyd also gave no impression of an ignorant and credulous mass subject to the blandishments of “inflammatory and seditious publications” [Malthus 1817, 3, p.319]. Indeed, the different tone of Lloyd’s account is indicated by his suggestion that

The late war ... was owing, in a very considerable degree, to the apprehension entertained by the aristocracy of the contagion of the French revolution. But they would have had less ground for apprehension, had the bulk of the people been easy in their condition. Few will deny that an easy command of subsistence is almost a panacea for discontent among the lower classes” [Lloyd 1833, p.9].

Referring to Malthus’ *Essay* in a subsequent lecture, Lloyd observed that “its leading principles, though not, I think, all of its conclusions, have stood their ground” [Lloyd 1836, p.5]. This should not obscure the point that Lloyd’s 1832 lectures were a sustained critique of the explanation for the basic principle of population growth in the *Essay*. Indeed, Lloyd stood out in the contemporary

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<sup>21</sup> Even here, however, there was a subtle difference. Malthus argued that the radicals’ proposals would produce an unprecedented population problem, greater than “in any society that has ever yet been known” [Malthus 1817, 2, p.252]. While Lloyd argued that, in a ‘system of equality’, the diffusion problem meant that “universal distress fails to suggest to individuals any motive for moral restraint”, the result would be the same as in “the existing state of things” [Lloyd 1833, pp.18, 23].

<sup>22</sup> For example, the “common people ... are acting directly contrary to the wishes of God, and bringing down upon themselves various diseases” [Malthus 1817, 3, p.109].

debates for the way in which he depicted the labouring class reasoning in conditions of ignorance and uncertainty which were due to the 'institutions and conditions of society'. Assuming a uniform human nature, Lloyd explained different class behaviours by the institutional structure of property relationships. His suggestion, which was unusual in contemporary British political economy, that probability calculations (where they could be made) might underpin behavior, presumably reflected his previous lecturing on mathematics at Oxford.

Despite their analytical differences, Lloyd, Malthus and Senior used similar basic categories from moral philosophy to explain behavior, which Senior summarized in his critique of Malthus: "reason, in some degree or other, is as natural to man as passion ... [M]an is a rational animal ... having a tendency towards the ends, which he pursues through the intervention of forethought, as well as towards those which he pursues at the dictates of passion" [Senior 1829, p.77]. Senior, like Malthus, characterised animal behavior as "irrational", but this was not relevant for describing human beings in a "state of civilization". Even when he queried whether the actions of speculators "can be called reasoning", Senior explained that their behaviour was driven by "imagination", rather than "judgement" [Senior 1836, pp.31, 18]. That framework of reference, which may have owed something to Adam Smith's *Theory of Moral Sentiments*, depicted behaviour as driven by passions which could be tempered by the use of reason.<sup>23</sup> To describe Malthus as using a distinction between rational and "irrational" behavior with the latter defining the poor [Huzel 2006, pp.21, 25], erases that framework by imposing a later conceptualization of rational economic behavior.<sup>24</sup> Reading Lloyd within that framework of rational behavior will also create problems in understanding his arguments.

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<sup>23</sup> For Smith, passions included those of the body (including the sexual) and the imagination, and could be characterised as social, unsocial and selfish [Smith (1759) 1976b, Part I, ii]. A referee has reminded me that, for David Hume and Smith, the sexual passion would generally be overwhelmed by the urge for a person to better their position in society. In the quotations cited above, however, where Lloyd and Malthus use the word passion, it seems to principally refer to the sexual.

<sup>24</sup> See, for example, the argument that behaviour which cannot be explained in an asymmetric information model, but is of critical importance and hence must be taken into account, should be characterised as irrational [Stiglitz 2010].

#### 4. Free Riding?

An example of the difficulties which follow reading Lloyd's analysis in the terms of a later conceptualization of rational economic behavior concerns Lloyd's statement, made when referring to his general argument about the diffusion problem, that "there is a want of appropriation to each person of the consequences of his own conduct. All suffer through the act of one, and no encouragement to moral restraint is offered to individuals" [Lloyd 1833, p.28]. It has been suggested that, in this passage, Lloyd "observed that a 'free-rider' effect might threaten Malthus' argument" about the possibility of moral restraint [Waterman 1998, p.315; see also idem. 1991, p.142; Hollander 1997, p.910n]. If Lloyd made no mention of Malthus at that point, his analysis was quite different because the concept of free-riding as understood today requires that the actors have full information about the private and social effects of their behaviour. Free-riders take advantage of the behaviour of others because it is in their private interest to do so, ignoring any possible social effects as there is no coordinating mechanism to induce them to behave otherwise. For Lloyd, however, each member of the labouring class was unaware of the complete effects of their own behaviour and hence of all behaving in the same way. Any consequent lack of moral restraint was due to the ignorance of the actors.

Elsewhere in his population lectures, however, Lloyd did consider what might appear to be a free-rider problem. Referring to Malthus's discussion of how an increase in the real wage would follow a general postponement of marriage, Lloyd argued that such abstinence could not "generally prevail" because, as he had previously explained, there were clear benefits from marriage and no apparent "individual benefit to be derived from abstinence". Supposing, "for the sake of argument", that abstinence from marriage "generally prevailed" in the labouring population, he asked what would "hinder individuals, who do not enter into the common feeling, from taking advantage of the general forbearance?" The answer was that nothing would do so, because, after comparing private costs and benefits, each labourer's "individual act could produce no sensible effect on the market for labour and he might ... justly expect his children to have the same advantages which he had himself possessed" [Lloyd 1833, pp.34, 35, 36; see also p.37]. As the language which Lloyd used here regarding cognition and incentives was the same as when he discussed the general problem of a lack of moral restraint, the argument was a variant of his general position. That is, while arbitrarily supposing a 'common feeling of abstinence for the sake of argument', Lloyd asked how some who did not accept that 'feeling' would behave. While they would have children, it was not because they were aware that they were free-riding on others' abstinence.

Rather, it was because they could see no reason for doing otherwise, given their ignorance induced by the diffusion problem. It was thus quite consistent for Lloyd to refer to those marrying early as ‘taking advantage of the general forbearance’ in that they would calculate their private cost and benefits. However, because they were ignorant of the more general consequences of their behaviour, Lloyd was not setting out a version of a free-rider problem.<sup>25</sup>

Lloyd’s analysis in that context followed from the assumptions he made about information and the question he posed. The question was: could a higher wage regime exist in a long period, given the behaviour of the labouring class that depended on the prevailing set of property relationships, institutions and limits to human cognition? He emphasised that point in a further comment on Thomas Chalmers’ claim that a widespread “common and Christian education” could permanently increase real wages without any “authoritative compulsion” [Chalmers 1832, pp.552, 554; Lloyd 1833, pp.36-7]. That claim, which evidently drew on Malthus’ *Essay*, has been described as an ‘invisible hand theorem’ of higher wage rates [Waterman 1991, pp.142-3]. For Lloyd, however, any beneficial effects of such education would be overwhelmed by the other incentives that prevailed in the existing state of things. A significant improvement in real wages could only occur with an

improvement ... in the structure of society, which shall furnish hopes of an advancement in station, leaving less to chance, and, at the same time, producing a degree of isolation, by which the consequences, whether good or evil, flowing from the actions of individuals, may be more fully appropriated to the authors of them [Lloyd 1833, p.38].

If Lloyd did not make clear here what precise measures were needed for that improvement, his reference to ‘producing a degree of isolation’ serves to emphasise how the diffusion problem was at the centre of his analysis.

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<sup>25</sup> A referee has suggested that, if a free-rider is defined as a “party that enjoys a benefit accruing from a collective effort, but contributes little or nothing to that effort”, then, on Lloyd’s supposition of a ‘common feeling of abstinence’, those who marry early are “indeed ‘free riders’”. The problem here is that, as the suggested definition does not specify any assumptions about knowledge, it could describe a situation where a benefit accrues to a party who is quite unaware of the cause and, therefore, does not deliberately fail to contribute toward the cost. Such a case is difficult to separate from one where the party simply receives an economic rent, with no necessary connotation of free-riding.

## Conclusions

Lloyd's 1832 lectures provide an example of how, in Classical political economy, a long-period wage could be explained using a framework which, at least in broad outline, owed a good deal to Malthus, while turning the analysis in unusual directions. In particular, Lloyd depicted the mass of the population responding in a reasoned manner to the incentives generated by the class structure of the society. The decision to have more children took place in conditions of ignorance, where the complexity of an event precluded the possibility of identifying a relationship between cause and effect, and of uncertainty, where it was not possible to calculate the probability of possible events. If, in the former case, the requisite information could be obtained by formal education or experience, that possibility was precluded by the prevailing 'institutions of society'. Both his explanation for population growth and his defence of a right to relief under the Poor Law meant that Lloyd was markedly at odds with his predecessors in the Drummond chair.

Although the population lectures leave a generally bleak impression, Lloyd subsequently indicated he thought it would be possible to reduce the population growth rate by a revamped Poor Law. Indeed, he had struck a decidedly optimistic note at one point in his 1832 lectures. After referring to the "evil" (admittedly "mingled with the good") consequences of "manufactures, or machinery, or the accumulation of farms", he remarked: "I see no reason for believing any of these [evils] insuperable, and I have no doubt but that the progress of political science will in time discover a remedy for most" [Lloyd 1833, pp.70, 71]. That lecture was delivered after the appointment of the Royal Commission into the Poor Law in February of the same year, which suggests that Lloyd did not expect that any drastic changes would follow the Commission's report. In his subsequent lectures criticizing the report and the resulting legislation of 1834 [Lloyd 1835; 1836], Lloyd more carefully explained his argument for the right to relief in his long-period analysis of value and distribution [Lloyd 1837]. That analysis took as given the explanation for why population growth would drive the natural wage to a subsistence level, thereby returning to his concerns of 1832, albeit in a far more alarming political context.

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