

Marx on the colonization of Irish soil

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Abstract: This paper explores how Marx conceptualised the presence of soil exhaustion within the first half of nineteenth century Ireland. It is a period of Irish history, according to Marx, that was itself divided by two stages of colonial domination. What determined soil depletion in the first period (1800-1846) were the excessive demands of the white crop rotation regime which had to operate under the social process of rackrenting. And this rental system was itself determined by the dominant position held by the colonial landowning elite. Maintaining the soil condition involved the tenantry, both peasants and cottiers, attempting to replace the traded (and therefore lost) nutrients to the Irish soil without adequate capital investments in improvements of the soil. This colonial rental regime came to its end with the occurrence of the potato blight in 1846 and the subsequent Famine. The new emerging stage of the colonial process (1846-1867 onwards) was what Marx titled 'Clearing the estate of Ireland', where the landlords 'cleared' their estates of the small peasantry and the cottiers. And in eliminating the peasant restorers of the soil's fertility, soil exhaustion occurred in the Post-famine period. Marx therefore highlights how the soil of the colonised can itself be colonised by that same process.

'Man is distinguished from all other animals by the limitless and flexible nature of his needs. But it is equally true that no animal is able to restrict his needs to the same unbelievable degree as to reduce the conditions of his life to the absolute minimum. In a word, there is no animal with the same talent for 'Irishing' himself' (Marx, Capital, vol.1 Appendix: 1068).

Introduction

On December 16th, 1867 in a public lecture Marx was reported to have made an extraordinary assertion with regard to how the Irish Famine was caused by soil exhaustion and even more significantly that that soil exhaustion was itself determined by British colonial domination of Ireland:

'The potato blight resulted from soil exhaustion it was a product of English rule' (Eccarius, 1971:141).

Although this is probably a rough summary of what Marx actually stated at the end of a speech on the Irish Question¹, it is still a provocative assertion that associated soil exhaustion with British colonial misrule. The following account is my attempt to explore this relationship between the Irish soil and British colonialism as conceptualised by Marx in his December 16th speech.

In the talk Marx gave an in-depth dialectical analysis of British colonisation of Ireland. And in a very innovative way he suggested that colonial Ireland was not an unchanging condition of existence but an ever-evolving process of domination (Slater and

¹ Outline of a report on the Irish Question to the Communist Educational Association of German workers in London – December 16, 1867 published in Ireland and the Irish Question, 1971:140-148.

McDonough, 2008). Accordingly, this process of colonialism was constantly passing through phases of evolution, ever changing its strategies of oppression. But as these concrete forms of repression were constantly emerging, the essential underlying process of colonial domination continued - 'the conquerors are always inventing new' up-to-date methods of oppression' (Engels, 1971: 271). An example of the changing concrete forms of this process of colonialism is when Marx identified that 'the church (Anglian Church) was the only badge of conquest. The badge was removed, but the servitude remains' (Marx, 1971:154). Accordingly, it was not just the economy that was dominated as has been suggested by the more 'traditional' Marxist interpretations of colonialism. In this particular dialectical analysis of the Irish colonial situation, Marx proposed that it was the entire ensemble of social and material relationships within the Irish organic totality that were thwarted by the colonial process. These societal levels included the obvious ones of the political and the economic but it also involved the cultural, legal, social and crucially the ecological. All of these concrete entities (processes) and their normal complex relationships with each other were subverted by colonialism and to such an extent that the vast majority of the Irish people lived under 'abominable conditions' of existence' (Marx, 1853:61) as Marx suggests in the following:

'England has subverted the conditions of Irish society. At first it confiscated the land then it suppressed the industry by 'Parliamentary enactments', and lastly, it broke the active energy by armed force. And thus England created those abominable 'conditions of society' which enable a small caste of rapacious lordlings to dictate to the Irish people the terms on which they shall be allowed to hold the land and live upon it' (Marx, 1971: 61).

Accordingly, Marx was able to propose that not only were the people of Ireland colonised but also its soil. In this specific ecological aspect of colonization, Marx asserted that not only were the constituents of the soil appropriated by colonizers in the material form of agricultural commodities, but the actual production process of those commodities were also impeded by colonialism. Therefore, Foster's contention that the metabolic rift was the essential cause of soil exhaustion as determined exclusively by commodity production and especially by the capitalistic form of commodity production (Foster, 1999) is expanded upon here by Marx himself. Marx in his analysis of nineteenth century Ireland emphasizes how the abstract form of the commodity was itself embedded in the social form of the colonial rackrenting system². Accordingly, the conceptual emphasis moves away from the mere physical transportation of nutrients from the rural soils to urban centres of consumption towards the more abstract social relations of production between classes involved in agricultural cultivation. Thus class struggle became embroiled in the struggle for soil sustainability and the necessary attempt to overcome the metabolic rift involved in the particular Irish social form of commodity production.

² The Rackrenting system was a super exploitative rent relationship which was essentially a feudal form of exploitation but manifested itself in monetary forms. The colonial power of the landlords allowed it to emerge in the Irish social formation.

Within these social relations of agricultural production, Marx highlights how the direct ‘tillers of the soil’ were prevented from replacing those lost nutrients of the metabolic rift process by an exploitative class relationship. And in this particular class structure the dominant and exploiting class was a ‘small class of land monopolists’ (Marx, 1971:59/60). This ‘rapacious caste’ of landlords owed their privileged existence to the colonial plantations of the sixteenth and seventeenth centuries. The exploitation of these cultivators involved a complex matrix of enfolding social processes with material and organic processes which were metabolizing with each other within the labour process of agricultural cultivation. The ‘abominable conditions’ of existence for the ‘tillers of the soil’ was a consequence of a ferocious and on-going class struggle between the landlord class and their tenants including cottier-labourers. This ‘war’ was fought simultaneously on three fronts – as a colonial struggle between a colonising regime and a colonised civil society, as an economic struggle between landlords and their ‘rackrented’ tenantry and finally an ecological struggle between the soil cultivators and the owners of that soil and its sustainability. Consequently, not only were the Irish direct producers involved in an economic class struggle in the classic Marxist understanding of it but also, they and the soil they cultivated were enmeshed in an ecological form of exploitation where the soil tillers were being prevented from ‘improving’ the soil by their social relations to the rentier classes. And crucially both of these two social forms of conflict were themselves engulfed in a ‘life and death’ struggle with the British colonial regime. It is within this crushing cauldron of relentless oppression that the material conditions were laid down for the emergence of the Irish Famine, ‘which consigned to the grave a million Irishmen...and forced the emigration overseas two million more’ (Engels, 1986:181).

Marx’s analysis of the Irish ‘metabolic rift’ is most extensively done in the speech that Marx gave on 16th December 1867 to the Communist Educational Association of German Workers in London. Prior to this December talk Marx had intended to give another speech on the Irish Question to the First International in November of the same year but pulled out at the last minute. As a result, we now have copies of his undelivered speech notes for the 26th November meeting and his delivered speech of the 16th December. These two pieces were published as *Notes on an undelivered speech* (26th November 1867) (6 printed pages) and as an *Outline of the delivered speech* (16th December 1867) (14 printed pages) in *Ireland and the Irish Question* (1971). In addition, we have a copy of a report of Marx’s December speech written by Eccarius, a council member of the International, who took notes in order to prepare them for publication, but they were never published (Marx and Engels, 1971:140-142). Although, these works are short and much of the assertions are in note form especially in the *Notes* speech document, it should be stressed that these conceptualizations were not just intended for self-clarification but were composed to be presented to an audience³⁴. In this context, Marx must be seen to be attempting to give a consistent and

³ The major technical problem with Marx’s method of presentation in these ‘speech’ pieces is that many of the conceptual formulations are written in note form, - condensed and compressed as is the norm with speech note constructions. In dealing with the note form difficulty, I propose that we can incorporate more developed conceptualizations from other published sources, which are dealing with the same subject matter but in a more extended format. Since both texts come from the pen of Marx, I attempt to bring in to our exposition here, Marx’s own formulations from these other sources, - newspaper articles, sections from *Capital*, of

coherent account of this particular subject matter. Therefore, they each possess a logical framework which structures the order of presentation. In this article I will be concentrating on the *Outline of the delivered speech* of December 16th 1867 and attempting to follow its particular logical structure. And to maximise the significance of these speech assertions with regard to Marx's understanding of the how the soil was colonised I will expand upon his conceptualizations by adding in more conceptual and empirical detail, either from Marx himself or as much as possible from the same sources that Marx used, in order to provide a better format for the contemporary reader to understand these crucial insights of Marx. I also expand on Marx's speech framework by adding in more sections dealing with cottierism and spade cultivation and later on with sections dealing with soil exhaustion and the permanent pasture agroecosystem. I hope to develop and expand upon Marx's analysis without undermining the crucial dialectical mode of presentation of the speech.

Consequently, the unfolding narrative of this piece is attempting to follow the logic of Marx's argument as presented in his speech document of December 1867 and in particular where he is dealing with the colonial phases of the nineteenth century and how they impacted on the development of Irish soil⁵.

In the later end of his speech Marx concentrates on two phases of colonization in the nineteenth century - the 'Rackrenting' phase which was pre-Famine and ran from 1801 till the eve of the Famine – 1846 - while the post-Famine phase of 'estate clearances' began in 1846 and continued to exist right up to Marx's writing of the speech itself in 1867. And in locating the metabolic rift within these two historical phases of colonialism, Marx emphasised how differing social forms embrace the organic processes of Nature, and specifically in this case of Ireland – the soil. Thus Marx is providing us with a concrete and historical example of the essential relationship between organic nature and its social forms of existence:

No natural laws can be done away with. What can change, in historical circumstances, is the form in which these laws operate (Marx to Kugelman, 1988, 1867, CW, 43: 68).

particular importance is 'Section 5 (f) Ireland from chapter 25 of vol. 1 (17 pages) and finally Marx's letter correspondence to various people but especially with Engels (and in certain cases Engels' own formulations). I also attempt to use those formulations which are closest to the particular timeframe of original texts, - November and December of 1867.

⁴ Marx stated the following to Engels in a letter:

'Yesterday I gave one and a half hour lecture Ireland at our German workers' society (though a further 3 German workers' societies were represented, about 100 people in all)'Marx and Engels, 1867 CW, 42, 1987:504.

⁵ And although the abstract conceptual framework is dialectical the presentation here I am just following the logic of exposition as presented by Marx without explicating the underlying dialectical logic that 'structured' that speech presentation (Slater, 2013).

It is in the historical circumstances of colonized Ireland, that the organic laws of Nature become thwarted, as the following analysis reveals.

The Colonizing Regimes as emerging moments in the social process of colonialism

Following a brief discussion on how Fenianism originated from the activities of Irish Americans and subsequently as a political movement it took root among the lower orders of the Irish people Marx states:

‘Here what baffles the English: they find the present *regime* mild compared with England’s former oppression of Ireland? So why this most determined and irreconcilable form of opposition now? What I want to show [...] is that the *regime* since 1846, though less barbarian in form, is in effect [as] destructive, leaving no alternative but Ireland’s voluntary emancipation by England or life-and death struggle’. (my emphasis) (Marx, 1971, *Outline*: 126).

From this quotation we can see that Marx uses this concept of regime as the initial theoretical category to begin to examine not only the contemporary colonial relationship between Britain and Ireland but crucially how that relationship changed over time as it passed through various historical watersheds, i.e. types of regimes. He then begins to analyze these colonial phases, which I have summarize in the following list:

- a) **The English in Ireland before the Protestant Reformation.**
- b) **Protestant Epoch. Elizabeth. James 1. Charles 1. Cromwell. Colonization Plan (16th and 17th centuries).**
- c) **Restoration of the Stuarts. William 111. Second Irish Revolt, and the Capitulation on Terms.**
- d) **Ireland Defrauded and Humbled to the Dust. 1692- July 4, 1776.**
- e) **1776-1801. Time of Transition.**
- f) **1801-1846.**
- g) **The Period of the last 20 years (from 1846). Clearing the Estate of Ireland.**

Within each of these identified phases/stages of evolution of the colonialism⁶, the regime assumed a particular form determined by the strategies adopted and how they succeeded or

⁶ A reviewer of Marx’s methodology which Marx approves of stated the following with regard to the dialectical concept of phases of evolution:

Of greater importance to him is the law of variation, of their development, i.e. of their transition from one form into another, from one series of connections into a different one. [...] But most important of all is the precise analysis of the series of successions, of the sequences and links within which the different stages of development present themselves. [...] As soon as life has passed through a given period of development, and is passing over from one given stage to another, it begins to be subject also to other laws. ((Marx, 1976, Postface to the Second Edition of Capital, 24 January 1873:102).

not. And these specific historical forms were apparently continually evolving over time. Marx gives in note form the main characteristics of the colonizing regime within each phase/stage of its development and any changes that may occur within each phase. What is important to highlight is that within each phase there were always a number of differing strategies of oppression in operation but only one was dominant which gave the specific historical identity to that period⁷. For example, in the early part of the eighteenth century when State institutionalized a form of religious apartheid, the super-exploitative rental system of rackrenting simultaneously existed within this phase but it was not the dominant process and did not until the beginning of the nineteenth century. Marx outlined in a strict historical sequence, these phases of colonial evolution in the following way.

In phase *a) The English in Ireland*, ‘the war of conquest was conducted (originally) as against the Red Indians’ (Eccarius, 1971:140). The colonizing strategy was one of ethnic ‘cleansing’ but it failed as there was ‘mixing of the English common colonists with Irish, and of Anglo-Norman nobles with Irish chiefs’ (Marx, 1971, *Outline*:127). Eccarius reports Marx as stating that ‘the English, including the aristocrats, who immigrated before the Reformation were transformed into Irishmen by their Irish wives and their descendants fought against England’ (Eccarius, 1971:140).

The next phase *b) Protestant Epoch*, began with Elizabeth 1’s plan ‘to exterminate the Irish at least up to the river Shannon, to take their land and settle English colonists in their place, etc.’ This attempted strategy of displacement of the native population, Marx identified as:

‘*Clearing the island of the natives, and stocking it with loyal Englishmen*’ (Marx, 1971, *Outline*: 127).

But this particular colonial strategy failed as ‘they succeeded only to plant a landowning-aristocracy’ (Marx, 1971, *Outline*: 127). More conquests and ceding of land from the native Irish aristocracy under James 1 and later on Cromwell but the re-‘stocking with loyal Englishmen’ in general did not occur. However, what did happen was the introduction of religious apartheid, based on the state only recognizing the Anglican religion and the subsequent ‘persecution of Catholics’.

In the following phase *c) Restoration*, the stringent conditions of religious apartheid of the previous phase were lessened but the confiscated land was not given back to the native Irish. Finally, the religious apartheid reaches its zenith in the next phase of colonization.

d) Ireland Defrauded, 1692-1776: Eccarius summarized Marx’s points on this period of colonial repression in the following way:

‘With the help of the Protestant Penal Laws, the new aristocrats received freedom of action under Queen Anne. The Irish Parliament was a means of oppression. Those who were Catholics were not allowed to hold an official post, could not be

⁷ In Hegelian terminology this type of dominance was expressed as the concrete universal, which Marx inverted and applied to real concrete world.

landowners, were not allowed to make wills, could not claim inheritance; to be a Catholic bishop was high treason. All these were means for robbing the Irish of their lands;..' (Eccarius, 1971:140).

In essence, according to Marx the Penal Code was 'a code for the transfer of 'property' from Catholics to Protestants, or to make 'Anglicanism' a proprietary title' (Marx, 1971 *Outline*: 129).

e) *Time of Transition 1776-1801*: Marx begins:

'Before dealing with this transition period, what was the result of English terrorism:

English incomers absorbed into the Irish people and Catholicised. The towns founded by the English Irish. No English colony (except Ulster Scotch). The North American Revolution forms the first turning-point in Irish history (Marx, 1971, *Outline*:130).

And Eccarius recounts what Marx went on to comment upon:

'During the American War of Independence the reins were loosened a little. Further concessions had to be granted during the French revolution. Ireland rose so quickly that her people threatened to outstrip the English. The English government drove them to rebellion and achieved the Union by bribery' (Eccarius, 1971:141).

The Act of the Union of 1801 signaled the beginning of next phase of colonization, which Marx explored its determinants in much more detail than the previous ones. It is within these phases of colonization of the nineteenth century that Marx investigated how the soil of Ireland was colonized.

However it should be pointed out that Marx and Engels were aware that a number of these colonizing strategies that were applied to the Irish social formation were adopted elsewhere within the Empire by the British. Not only did Engels assert that Ireland was the first colony (Engels, 1971:83), but also there is a considerable amount of evidence throughout their writings to suggest that Ireland was the most characteristic and best developed case of a colonized society. For example, in Marx's discussion of India in 1853, he stated that as part of the 'Europeanisation of that society, the English ...Irelandised the country' (Marx, 1853, CW.33, P.347). In the same year and writing about British rule in India, Marx referred to India as the 'Ireland of the East' (Marx, 1976, On Colonialism: 35)⁸. But Marx was also aware that the British attempted to adopt 'Irish' colonial strategies not only to the East but also to the West and with tragic consequences, but this time for the colonizing:

⁸ When Marx was discussing distress it was not unusual for him to compare those conditions with Ireland:

Incidentally, you would scarcely conceive the burden that the last war and taxation have imposed upon the rural populace in Prussian Westphalia, e.g., truly Irish conditions prevail' (Marx to Engels, 7th May 1867 CW, 42, 1987:373).

‘It was the success of the vicious precedent (Poyning’s Law⁹) which had encouraged George III and his British Parliament to attempt to legislate for America. This cost them the North-American colonies’ (Marx, 1978: 170).

Before we attempt to uncover how the social process of colonization metabolized with the organic process of the Irish soil, it is necessary firstly to gain some insight into Marx’s understanding of how the organic soil is impacted upon by the agricultural process of cultivation. This layer of Marx’s work has been recently unearthed through the concept of the metabolic rift and the efforts of John Bellamy Foster.

Marx on the Irish ‘metabolic rift’

Marx’s most explicit statement on Irish soil and its relationship to colonialism is the following from a footnote in Capital:

‘[I]t must not be forgotten that for a century and a half, England has indirectly exported the soil of Ireland, without even allowing its cultivators the means for replacing the constituents of the exhausted soil’ (Marx, 1976: 860).

In the first part of this quotation Marx locates the presence of what has become identified as the metabolic rift in the Irish context of the nineteenth century (Foster, 1999). According to Foster’s initial understanding of Marx is how the metabolic rift emerged in large-scale capitalist agriculture. This rift causes a decline in the natural fertility of the soil by disrupting the natural soil nutrient cycle. As crops and animal products were being produced in agricultural fields, nutrients such as nitrogen, phosphorous and potassium were being integrated into those produced products and subsequently removed from these fields and shipped to locations far removed from their points of origin, especially to urban centres. As a consequence, the constituent elements of the soil that made up the products/commodities were not only removed but they were also not replaced naturally in the soil. The transportation of these nutrients in the form of agricultural commodities had two important consequences. Firstly, they created a rift in the natural soil cycle, and if this state of depletion continues soil exhaustion will by necessity emerge. Secondly, the human excretion of these nutrients in the urban environment tended to cause pollution in the local waterways, e.g. the river Thames in London in the nineteenth century. This particular understanding of the metabolic rift as highlighted by Foster was in the context of capitalist conditions and within a particular country and in spatial terms it was concerned with the movements of nutrients between the rural countryside and a metropolitan city. However, in the context of Ireland, this metabolic rift has been extended not only spatially beyond nation state boundaries but

⁹ With regard to Ireland Marx stated the following:

Poyning’s Law reduced The Irish House of Commons to a *mere instrument of the Privy Council of both Nations*, and consequently, of the *British Cabinet* (Marx, 1978:170).

significantly also structurally to include a political/economic relationship between the colonising core and a dependant periphery¹⁰.

In the above quotation the conceptualisation of the metabolic rift as being solely determined by the trade in agricultural goods to urban centres was itself superseded by the second assertion of the quotation, where Marx suggested that the Irish cultivators were not allowed ‘the means for replacing the constituents of the exhausted soil’ (Marx, 1976: 860). This is a fundamental development of the metabolic rift framework as it implies a number of conceptual and empirical consequences for the soil exhaustion debate. Firstly, Marx is proposing that cultivators have the potential to ‘mend’ the metabolic rift under appropriate social conditions or at least attempt to do so. Secondly, the determination of this particular form of the metabolic rift is not just determined by the movement of nutrients from the rural fields to urban centres but also by determinants that are to be found within the actual social relations of production, where the cultivators as a class of agricultural producers were prevented from replacing the lost ‘rift’ nutrients by as yet unspecified dominant class.

In his 1867 Irish speech document Marx expands upon these Capital assertions by identifying not just the historical period in which the metabolic rift in the Irish soil appears but also provides the precise identity of these thwarted restorers of nutrients to that depleted soil:

‘Since the exodus (Famine emigration), the land has been underfed and overworked, partly by the injudicious consolidation of farms, and partly because under corn-acre the farmer in a great measure trusted to his labourers to manure the land for them’ (Marx, 1971, *Outline*: 136) (in brackets by the author).

These assertions here by Marx identify not only the class relationships involved in the particular Irish manifestation of the metabolic rift but also the historical period in which it was located before and after the Great Famine of the 1840s. The exhaustion of the soil in this conceptualization appears to be a consequence of a number of related processes within agricultural production. ‘Overworking’ has to do with an extreme form of extraction of nutrients from the soil as expressed in the Foster’s version of the metabolic rift, but ‘underfeeding’ of the soil is indicative of inadequate replacement of the soil’s constitutions, which involved the labour of the farmer’s labourer – the cottier. This manuring was done by

¹⁰ To be fair on Foster he did identify the possibility that the soils’ metabolic rift can occur in the colonial context of Ireland:

‘For Marx, the metabolic rift associated at the social level with the antagonistic division between town and country was also evident on a more global level: whole colonies saw their land, resources *and soil* robbed to support the industrialization of the colonizing countries. Following Liebig, who contended that ‘Great Britain robs all countries of the condition of their fertility’ and had pointed to Ireland as an extreme example, Marx wrote ‘England has indirectly exported the soil of Ireland...’ (Foster, 2000: 164).

the cottier class in the pre-Famine period. But during the Famine and afterwards they were forced to migrate from the land. And in their exodus, soil exhaustion reappeared:

‘So result: gradual expulsion of the natives, gradual deterioration and exhaustion of the source of national life, the soil’ (Marx, 1971, *Notes*: 123).

Thus the soil of Ireland takes on not only a social form as it is embedded in the specific social relations of the pre and post Famine periods but these inter class relationships were involved in a necessary struggle. This class mediated relationship to the soil manifested itself in the process of soil resuscitation which was physically done by the cottier-labourer class for the tenant farming class through the conacre rent relationship. And that class relationship was fundamentally terminated by the Famine and in its wake soil exhausted appeared.

From the earlier version of the speech document (*Notes November 1867*) Marx statistically demonstrated the appearance of soil exhaustion in Irish agriculture in the Post-famine period. Between 1861 and 1866, there was a dramatic decrease in cultivated land, - cereal crops declined by 470,917 acres, green crops by 128,061 acres. However, even more interestingly with regard to how these agricultural statistics indicate the occurrence of the soil exhaustion was a decrease of yield per acre of every crop between 1847 and 1865. Oats decreased by 16.8%, flax by 47.9%, turnips by 36.1% and incredibly the potato crop by 50 %. In 1851, the estimated average potato yield per statute acre was 5.1 tons, which dropped to 2.9 tons in 1866 (Marx, 1971, *Notes*: 122). However, although these figures indicate that agricultural produce was diminishing due to the continuing presence of soil exhaustion, the financial returns from this productive activity was actually increasing¹¹. Marx stated this paradox in the following way:

‘The depopulation of Ireland has thrown much of the land out of cultivation, greatly diminished the produce of the soil, and in spite of the greater area devoted to cattle breeding, brought about decline in some of its branches, and in others an advance scarcely worth mentioning, and constantly interrupted by retrogressions. Nevertheless, the rents of the land and the profits of the farmers increased along with the fall in population, though not so steadily as the latter’ (Marx, *Capital*, vol.1:860).

And why this has occurred:

‘The reason for this will easily be understood. On the one hand, with the throwing together of the smallholdings, and the change from arable to pasture, a part of the total

¹¹ Marx prepared the following footnote for *Capital* but did not use it:

‘...the same gentlemen, had made the prophecy that the FAMINE which swept away one million people, and the subsequent exodus, would have the same effect in Ireland as the BLACK DEATH had in England in the mid-14th century. Precisely the opposite has occurred. Production has fallen more quickly than the population and the decline in the means of employing the agricultural workers has been quicker too, although the wages are no longer higher today, taking into account the changes in the price of subsistence than in 1847. The population has fallen in 15 years from 8 million to approximately 4 1/2 million. This does not prevent individual persons from enriching themselves during the rapid ruin of the country as a whole.’ (Marx, 1989, CW, 34, 1861-1864, unplaced footnotes: 468/9).

product was transformed into a surplus product. The surplus product increased although there was a decrease in the total product of which the surplus product formed only a fraction. On the other hand, the monetary value of this surplus product increased still more rapidly than its actual quantity, owing to the rise in the price of meat, wool, etc., on the English market (Marx, 1976: 860).

The financial returns on this type of agricultural production ‘falls’ to the landlords and ‘greater farmers’ because a large proportion of the direct producers were expelled from the immediate production process through land clearances¹². Clearing the estates of people freed up the fields of production on which the native population physically subsisted upon so that these old tillage plots were turned over to surplus commodity production – livestock pasture. And those that remained were more intensively expropriated of their surplus labour through increases in rent returns and profit taking. Therefore, the apparent contradictory relationship between the increasing financial returns from production and the loss of soil fertility locates the importance of the rental relationship in the context of Ireland. Therefore with regard to the two phases of colonialism which were separated by the Famine, the most dominant economic form that ‘metabolised’ with the Irish soil was the rental process, but as we are about to discover this rental process was in turn determined by the overall dominating process of colonialism.

The following analysis is essentially concerned with unfolding the determinants of soil exhaustion as caused by a particular form of the metabolic rift - a colonial form - as outlined by Marx in his *Outline* speech of December 1867. To do this I attempt to follow the conceptual path taken by Marx in his unfolding of the colonial dialectic in the pre and post Famine periods.

Marx on the Colonial phase of ‘1801-1846’ (Rackrenting and Middlemen)

Marx did not give a title to this section of the speech document, just the time period, but in a letter to Engels he gave a hint of what he might entitle it – ‘The system of 1801-1846, with its rack-rents and middlemen collapsed in 1846’ (Marx, 1971:147).

However, he quickly moves into a detailed analysis of Irish manufacturing industry, by contrasting its fortunes before and after the Act of Union of 1801:

‘From 1782 legislative independence of Ireland, shortly after which duties were imposed on *various articles of foreign* manufacture, avowedly with the intention of enabling some of her people to employ some of their surplus labour, etc. The natural consequence was that Irish manufactures gradually disappeared as the Act of Union came into effect’ (Marx, 1971, *Outline*:131).

¹² Marx explains this apparent contradiction in the following:

‘The total produce may diminish, but part of it, which is converted into surplus produce, falling to landlord, and greater farmers, instead of the labourer. And the price of the surplus produce has risen’ (Marx, 1971, *Notes*: 122/3).

The one branch which survived was linen in the northern parts of the country but it did not compensate for the loss of employment in the other industries. Then Marx exclaims the following:

‘Every time Ireland was about to develop industrially, she was crushed and reconverted into a purely agricultural land’ (Marx, 1971, *Outline*:132).

The consequence of deindustrialization was that Ireland became ‘purely (an) agricultural land’. In looking at the Census returns for 1861, he demonstrates that the population of Ireland for that year was 5,798,967 of which 6/7 were agricultural (Marx, 1971, *Outline*: 132). The implication of this demographic concentration of Irish people within the rural countryside, according to Marx created a dilemma for them:

‘Ireland is therefore purely agricultural: ‘Land is Life’ (*Justice Blackburne*). Land became the great object of pursuit. The people had now before them the choice between the occupation of land, *at any rent*, or *starvation*. System of *rack-renting*’ (Marx, 1971, *Outline*: 132).

The collapse of rural industries and the subsequent lack of ‘off-farm’ employment meant that the landlords of Ireland were further empowered to ‘dictate their own terms’ (Marx, *Outline*: 132) and extract enormous rents from their tenantry. This occurred to such an extent that a new word was ‘coined’ to express such a repressive rent regime, - ‘*rack-renting*’. Because of deindustrialization, there is no means of gainful employment for the majority of the population, except the occupation of land, but ‘at any rent’. Therefore, it is the rent relationship, which became the ‘motor’ of accumulation in this historical phase of colonialism in Ireland.

The rackrenting system, including the middlemen system (middle landlords who tended to sublet the land holdings often ‘for five times their value’, to the actual sitting tenants - Marx, 1971, *Outline*: 132), these tenants who were directly producing the commodities to pay exorbitant rents to these various middlemen, and as a consequence they were according to Marx reduced to a ‘state of popular starvation’ (Marx, 1971, *Outline* :131). The rackrenting system coupled with the Corn Laws tended to encourage the peasant agriculturalists to engage in tillage production (grain) as a way of producing commodities in order to pay the rent and the need for these direct producers of that grain to feed themselves from subsistent crops. The commodity production of tillage crops was boosted by the Corn Laws in England. Marx’s clearest statement on the effect of the Corn Laws comes from Capital:

‘The English Corn Laws of 1815 secured Ireland the monopoly of the free importation of corn into Great Britain. They favoured artificially, therefore, the cultivation of corn’ (Marx, 1976, footnote: 870).

Therefore, as a means of securing its food supply during its war with France, the Corn laws were passed by the British government and thus making Ireland a ‘dependant’ granary of Britain. Consequently the export of grain from Ireland to Britain grew enormously in the Pre-famine period as Marx indicated in the following statistics:

‘The average export of grain in the first 3 years following the passage of the Act of Union about 300,000 qrs, 1820 over 1 million qrs, 1834 yearly average 2,1/2 million qrs.’ (Marx, 1971, *Outline*:133).

But grain was not the only export to Britain, seven million pounds sterling was also sent over to the UK. This fortune was made up of rent returns to absentee landlords, interest on mortgages and investment funds. Marx suggests that:

‘[...] thus Ireland was forced to contribute cheap labour (through emigration) and cheap capital to building up ‘the great works of Britain’ (Marx, 1971, *Outline*: 131).

The passing of the Act of Union, although enacted for political purposes¹³, had a detrimental impact on Irish manufacturing industries by destroying those industries through free trade. As a consequence the process of ‘rackrenting’ became even more dominant within the Irish economy as the power of the landlord class grew because they now possessed the only means of survival for the majority of the population – the land. But crucially the enactment of the Corn Laws stimulated grain production and the financial rewards associated with such expansion. This financial windfall fell into the laps of the landlord class as they ‘dictated’ more repressive terms to their tenantry through increasing their legal domination over tenant landlord agreements. The rental form was the main weapon used by the landlords in their assault on the economic conditions of the Irish peasantry.

Marx on the ‘Rackrenting’ system

Marx’s earliest reference to the rent relationship in Ireland comes from his Poverty of Philosophy (1848) and it appears initially contradictory:

‘It may happen, as in Ireland that rent does not yet exist, although the letting of land has reached an extreme development there. Rent being the excess not only over wages, but also over industrial profit, it cannot exist where the landowner’ income is nothing but a deduction from wages’ (1848 edition The Poverty of Philosophy CW, 1977, vol.6: Marx and Engels: 1845-48:200/1)

Putting Marx’s remarks here into context he is actually referring to the non-existence of capitalist ground-rent within the Irish social formation. In its capitalist form, the rent has to be a payment over and above the cost of wages and the average rate of industrial profit. In short, it has to be an excess over the normal capitalist costs and returns from production. However, in the case of Ireland these necessary capitalistic conditions are not met with although a rent relationship does exist and apparently has ‘reached (a level) of extreme development there’. But crucially, the Irish relationship as conceptualised by Marx is an extreme of form of rental extraction which is a deduction from the level of real wages that a

¹³ As Marx stated :

‘Anglo-Irish House of Commons voted for the Act of Union in 1800. By the Legislature and Customs of Britain and Ireland closed the struggle between the Anglo-Irish and the English. The colony itself protested against the illegal Act of Union.’ (Marx,1971: 131)

peasant would earn as a wage labourer in a capitalist enterprise¹⁴. Marx throughout his entire body of work consistently stated that the specific conditions of existence of ground-rent in Ireland determined that the peasant was non-capitalistic:

‘We are not referring here to the conditions in which groundrent, the mode of landed property corresponding to the capitalist mode of production, has a formal existence even though the capitalist mode of production itself does not exist, the tenant himself is not an industrial capitalist, and his manner of farming is not a capitalist one. This is how it is in Ireland, for example’ (Marx, 1981: 763/4).

Unlike these Irish peasants, capitalist farmers have an economic ‘freedom’ to avoid the potential monopolistic demands from a landlord class, according to Marx:

‘Where the landlords have to deal with a class of large capitalists who may, as they please, invest their stock in commerce, in manufactures or in farming, there can be no doubt that the capitalist farmers, whether they take long leases or no time leases at all, know how to secure the ‘proper’ return of their outlays’(Marx, 1971:60).

But because the Irish peasants lacked this freedom to invest capitalistically beyond the sphere of agriculture, they suffered dire consequences:

‘Land became the great object of pursuit. The people had now before them the choice between the occupation of land, *at any rent*, or *starvation*. System of *rack-renting*’ (Marx, 1971, *Outline*: 132).

Accordingly the land of Ireland was not just a monopoly of ownership by the landlord class, but they also possessed a monopoly of access to a livelihood for the vast majority of the colonised. Marx in naming this Irish rental form as ‘rackrenting’ in the context of pre-Famine Ireland, emphasises the extreme extractive nature of this particular rental regime. And in the following he outlines the reasons why capital was not invested in agricultural improvements under this ‘rackrenting’ system:

‘On the one side you have a small class of land monopolists, on the other, a very large class of tenants with very petty fortunes, which they have no chance to invest in different ways, no other field of production opening to them, except the soil. They are, therefore, forced to become tenants-at-will. Being once tenants-at-will, they naturally run the risk of losing their revenue, provided they do not invest their small capital. Investing it, in order to secure their revenue, they run the risk of losing their capital, also’ (Marx, 1971:59/60).

Even in the post-Famine period, the majority of the Irish peasantry were tenants-at-will and being tenants at will – at the will of the landlord – there was no stated termination date to this

¹⁴ ‘..., not to speak of the cases (Ireland) where, despite his LITTLE STOCK, which is NO CAPITAL, he decides to CULTIVATE for the (physical) minimum, which stands below the AVERAGE WAGE.’ (Marx, 1861:153/4)

type of tenurial agreement so that the tenant could not wilfully ‘run out’ the fertility of the soil because he expected to hold onto the land¹⁵. But this perpetual rolling over of this agreement was extremely advantageous to the landlords because it allowed them the legal right to intervene in this unwritten tenurial relationship whenever they chose to do so. At the same time it did not protect the tenant from rent increases or even eviction. The consequence of this form of tenure was to create an inherent insecurity of landholding which had the propensity to rob tenants of their investments in their respective holdings:

‘... most of whom hold a temporary lease concluded for one year – have merely enabled the landowner to demand a higher rent on the expiration of the existing lease. Thus the tenant either loses the farm, if he does not wish to renew the lease under less favourable conditions, and with the farm he loses the capital he has invested in the improvements, or he is compelled to pay the landlord, in addition to the original rent, interest on the improvements made by his (tenant’s) capital’ (Marx, 1971:77).

This tenurial insecurity was the pivotal moment in the rackrenting process in that by shortening the lease or eliminating it altogether it made the tenants into – ‘tenants at will’. And thus it provided the landlord with the potential opportunity to intervene at his own personal discretion into this tenurial relationship to either demand an increased rent or evict the tenant. This insecurity manifested itself also in a financial form. Those that were able to accumulate money, as if accumulated behind the back of the rent relationship, invested it not only outside of agriculture but also outside of the country, in the metropolitan core. In the pre-Famine period when ‘rackrenting’ dominated the economy, intermediary landlords known as middlemen engaged in such colonial ‘induced’ investments:

‘Amount to pay *rent to absentees*, and interest to mortgagees (1834), over 30 million dollars (*or 7 million pounds sterling*). Middlemen accumulated fortunes that they *would* not invest in the improvement of the land, and they *could* not, under the system which prostrated manufactures, invest in machinery, etc. All their accumulations were sent therefore to England for investment’ (Marx, 1971, *Outline*: 131).

Without the ability to invest financially in the improvements of the land, the only means by which the land could retain any form of sustainability was by the use of direct labour digging in manure and thereby ‘working up’ the soil condition. According to Marx, what improvements were made to the soil were of a temporary nature and these were carried out by the cottier class under the direction of the tenantry. In essence, therefore rackrenting as a rental process did not just impact on the peasant direct producers but also on their essential condition of production – the soil – the soil system.

¹⁵ As Richey stated:

‘The wilful running out of the land so injurious to the owner frequently occurred in the case of tenants for fixed terms, but did not so often arise in the case of yearly tenants who expected to hold on to their farms’ (Richey, 1880: 45).

Marx on the ‘Pauperised’ Peasant on his ‘Rackrented’ Soil¹⁶

This crippling rental form, in deducting a monetary payment ‘from his necessary wage’, left the small tenantry and the cottiers - the lowest ranks of the peasant class – with an appalling dilemma:

‘As an Irish peasant, for example, he can only choose to eat potatoes or starve, and he is not always free to make even this choice.’ (Marx, German Ideology: 312)

But not only were the Irish peasantry reduced to subsisting on this doomed plant but also their physical means of producing this subsistence – the soil system was similarly reduced to the minimal level of sustainability by this super exploitative rental regime. The sustainability of the soil system was essentially concerned with soil improvements or more precisely the lack of them. Marx teases out the contradictions between attempts at soil improvement and the rackrent in the following:

‘A tenant having incorporated his capital, in one form or another, in the land, and having thus effected an improvement of the soil, either directly by irrigation, drainage, manure or indirectly by construction of buildings for agricultural purposes, in steps the landlord with a demand for increased rent’(Marx, 1971:59).

Thus any obvious effort on the part of the tenant to attempt to increase the productivity of the soil by engaging in the aforementioned improvements tended to have an immediate response from the landlord to increase the rent. The consequence for this potential rent increase is that the tenant is either going to lose the value of his improvements or the actual tenancy of the land itself:

‘If the tenant concedes (to pay the rent increase), he has to pay the interest for his own money to the landlord. If he resist, he will be very unceremoniously ejected; and supplanted by a new tenant, the latter being enabled to pay a higher rent by the very expenses incurred by his predecessors, until he has also, in his turn, has become an improver of the land and is replaced in the same way, or put on worst terms’ (Marx, 1971:59/60 my brackets).

In either increasing the rent or evicting the improving tenant, the landlord class has appropriated not only the capital value of these improvements but also extracted the value of the improving tenant’s labour. The landlord’s rental intervention was not a one off event but actually became a systematic process which constantly lowered the standard of living of the peasantry over the generations:

¹⁶ Marx’s most extended analysis of the Rackrenting system and its impact on the tillers of the Irish soil comes from an 1853 article which he wrote for the New York Tribune and the following section is generally based upon.

‘In this easy way a class of absentee landlords has been enabled to pocket, not merely the labour, but also the capital, of whole generations, each generation of Irish peasants sinking a grade lower in the social scale, exactly in proportion to the exertions and sacrifices made for raising of their conditions and that of their families’ (Marx, 1971: 60).

Consequently, the never-ending grinding extraction of the rental over the generations leaves no alternative for the Irish peasant but to ‘pauperise’ himself:

‘If the tenant was industrious and enterprising, he became taxed in consequence of his very industry and enterprise. If, on the contrary, he grew inert and negligent, he was reproached with the ‘aboriginal faults of the Celtic race’. He had, accordingly, no other alternative left but to become a pauper – to pauperise himself by industry, or pauperise by negligence’ (Marx, 1971:60).

In fact the vast majority of the Irish peasantry took the latter route to pauperism as they were less likely to be evicted and in doing so they merely preserved the soil’s condition rather than attempt to improve its productiveness by engaging in extensive improvements such as ‘irrigation, drainage, or indirectly by construction of buildings for agricultural purposes’ (Marx,1971:59/60). In merely maintaining the productive condition of the soil, rather than enhancing it, the peasant tended only to manure the land. Therefore, Marx is right in that the only physical improvement in the soil was provided by the tenant’s own labour or his contracted cottier and of course the landlord did not engage in any form of improvements:

‘The landowner, moreover, who does nothing at all here to improve the soil, expropriates from him the small capital, which he incorporates into the soil for the most part by his own labour, It is this continuing robbery that forms the object of dispute over the Irish land legislation; what is demanded in this case is essentially that the landowner who gives a farmer notice to quit should be forced to compensate the tenant for the improvements he has made to the land or the capital he has incorporated into it (Marx, 1981:763/4).

Therefore, unable to engage in permanent improvements for the fear that they would increase the setting value of their own tenancy, the only realistic strategy left for the tenantry was to maintain the minimum level of soil productiveness so that this will allow them to produce commodity crop(s) to pay the rent and a subsistence crop (potato) to feed themselves. These commodity crops tended not to be fertilized as the potato crop was, but they were part of the crop rotation that followed on from the potato crop. And because the labour content was enormous in the production of the potato crop, the tenant aspired to ‘sublet’ this exhausted plot out to a cottier¹⁷ for him and his family to attempt to restore the soil fertility. And that was in general achieved by digging in manure and planting a potato crop. Thus for the cottiers, this physical return on their productive efforts – their yearly food supply – was their necessary and minimum labour ‘wage’ under this specific rental form of conacre.

¹⁷ According to Clark about 16 to 20 men could plant an acre of potatoes in a day with a spade and about twice that number was required to dig out the crop (Clark, 1979: 216).

In a real crushing way, the necessary wage of the cottier realised itself beyond the monetarised rental form in the potato crop – the cottier’s main if not exclusive means of food supply. Access to this ‘necessary wage’ plot was through the tenurial contract of conacre between the peasant farmer and his cottier labourers.

Conacre and cottierism

As already highlighted Marx explicitly makes reference to the role that the cottiers played in manuring the land:

‘...under corn-acre the farmer in great measure trusted to his labourers to manure the land for them’ (Marx, 1971, *Notes*: 122).

‘Cornacre’ or conacre was the specific form of tenurial contract between the tenant farmers and his cottier labourers. Although, they were labourers, they were not wage-labourers as in the capitalist mode of production, which Marx indicates in the following:

‘Before the Famine, the great mass of agricultural wages were paid in kind, only the smallest part in money;’ (Marx, 1971:109)

The cottier’s specific conditions of existence was determined by this rental form of conacre. The Poor Law Inquiry outlines the contractual conditions of this rental form:

‘The most prevalent meaning of the term ‘cottier’ is that of a labourer holding a cabin, either with or without land, as it may happen (but commonly from a quarter to three acres are attached), from a farmer or other occupier, for whom he is bound to work, either constantly at a certain fixed price (usually a very low one), or whenever called upon, or so many days in the week at certain busy seasons, according to the custom of the neighbourhood’ (Poor Law Inquiry, 1836: 660).

The tenant farmer charges the cottier a rent for his conacre plot on which he grows potatoes. Against this rent, the tenant farmer credits the cottier’s work keeping account of the days and half-days worked. In this situation the cottier was a ‘bound’ worker for the year and as a consequence the tenant farmer was guaranteed not only a supply of labour (including the cottier’s family), but also the tenant farmer could demand from the cottier the difference between the value of labour obtained and the price of the rent agreed. Therefore when crop yields contracted or failed and the labour of the cottier was not required, the tenant farmer could still get his conacre rent in its moneyed form. In this way, the tenant farmer expropriates the cottier’s wage as a form of surplus labour and simultaneously forced the cottier to engage in the necessary labour of potato production. Marx continually reiterated this relationship in the following way:

‘If a COTTIER pays a rent then this is purely a deduction from his *necessary wage* ...’ (1861-63 Theories of Surplus Value: *Collected Works*, vol.3:272).

The essential difference between wage labour under capitalism and cottier wage labour is that the cottier accumulates money in the market place by selling his labour power not to survive

directly on that money as a means of subsistence but to use his and his family's accumulated earnings to pay for access to the conacre plot. In this situation the conacre rental form has come to mediate the relationship between waged labour and the physical means of subsistence – the potato crop¹⁸. Accordingly the cottier must earn money to pay this rent so that he can subsist on the potato. There were a number of activities that the cottier and his family could engage in to earn this necessary moneyed 'rent'. Firstly, he could 'contract' to work out a part, or the whole of his agreed conacre rent for the tenant supplying the conacre plot. However, as a necessary security of maintaining access to his potato plot, he would still need to earn money in order to make up the potential shortfall between the hours worked and the agreed rent. Secondly, the cottier family could rear a pig on surplus potatoes and the sale of the pig constituted a useful cash income. This type of pig production became synonymous with the cottier class in the pre-Famine period (Donnelly, 1975:40). Thirdly, in the northern counties he could engage himself and his family in the spinning and weaving of linen. And finally, the cottier's major source of income was from temporary farm employment he found with other tillage farmers. This type of work could be obtained either locally or in other counties and even abroad when these cottiers became seasonal migrants – temporary emigrants in Britain. But because of the seasonality of this type of agricultural work and the poor daily rates of pay, the amount of money earned was not sufficient to allow this particular class of labourers and their families to survive on a yearlong basis outside the conacre relationship¹⁹.

In the pre-Famine period, the high prices for corn products on the British market were artificially stimulated by the passing of the Corn Laws (1815), and subsequently turned a vast amount of Irish agricultural land into tillage land, where white crop rotation dominated the agroecosystem (the combination of the social forms of agricultural products with the natural contents of the local ecosystems) of the peasantry. White crop rotation involved taking two or more crops such as oats or wheat in succession followed by a potato crop. This rotation did not include the growing of grass or clover so that the land was never rested from tillage production unless it became exhausted. In order to combat this tendency towards soil exhaustion the tenant farmer introduced a highly manured crop of potatoes as an alternative to grass or fallowing. It was the cottier-labourers that dug the manure into the potato plot and planted the potato seed. The cultivation of the tillage plot was carried out through a ridge system and the ridge making was done by the spade. In this type of spade husbandry, the cottier-labourer laid the manure directly on the surface of the sod. The seed potato was then placed upon the surface and covered with an inverted sod dug with the spade from the trench paralleling the seed row. This was repeated across the width of the field to create a series of

¹⁸ This aspect of the cottier's relationship with his conacre plot became known as the 'potato truck system' (Rogers 1847).

¹⁹ As the Poor Law Inquiry stated:

The reasons why the labourers have this preference (for conacre) are, then when sick or old, some of their family could work for them, that they were also more independent, could keep pigs, poultry, etc.; and perhaps carry on some little trade, as well as employ their own otherwise idle time, and that of their family (Poor Law Inquiry appendix f: 95 quoted by Dunne *Cultures of Resistance in pre-Famine Ireland*, 2014:82)

troughs and ridges which provided for drainage of the field and kept the oats and potatoes high and dry (O'Neill, 1984:87).



Therefore, this method of the ridge making, known as ‘lazy beds’ was essentially a form of deep cultivation which was a mode of pulverising the soil and in most cases mixing the top soil with the subsoil (Bell and Watson, 1986:57/8).

The ridge system of cultivation

Therefore, as money capital could not be invested in the production process as it was continually appropriated by increasing rent demands productive capital in the form of permanent improvements rarely occurred. And as a consequence, the obvious fixed forms of improvements such as ‘drainage ditches, the provision of irrigation, levelling of land, farm buildings’ (Marx, 1981:756) which were being adopted by the capitalist mode of production in British agriculture at the time were totally excluded from the particular Irish sphere of agricultural production. The only potential viable strategy left for this rackrented peasantry to engage in was one of providing more of the ‘non-fixed’ (fluid) forms of improvements

(manure etc.,) in order to attempt to repair soil depletion and exhaustion.



It was the ridge system of cultivation which was the main ‘weapon’ used by the peasantry to combat the constant threat that the soil system was ‘squandering its vitality’ under such a repressive form of nutrient extraction. The ridge system was a form raised beds agriculture which was carried out by spade husbandry. The spade in the pre-Famine period which was the only agricultural implement available to the peasantry outside of the capitalist mode of production that was capable of engaging in deep cultivation. Deep cultivation in Marx’s soil framework appears to occur when the subsoil with its encased nutrients is accessed and mixed with the top soil.²⁰

In the case of the Irish ridge system of cultivation not only was the subsoil sourced for its nutrients but also by deepening the furrow beside the raised bed the peasantry often reached and broke the ‘iron pan’ beneath the subsoil layer. But this mining of the nutrients beyond the top soil was complimented by a form of superficial cultivation which harvested nutrients that were either embedded just below the surface or even on the surface itself. Marx refers to superficial cultivation where nutrients are sourced from ‘the upper layers of the soil’ as if by ‘skim(ing) the first cream off the country’ (Marx, 1981:672). The most explicit example of this was type of superficial cultivation in the Irish ridge system was the paring and burning process prior to the construction of the beds and secondly when the beds were

²⁰ As Marx stated:

‘Finally the same result may be brought about by a change in the succession of the predominant kinds of soil, owing to different conditions of the subsoil, as soon as it is likewise taken into cultivation and turned over into top layers. This is caused either by the employment of new methods of agriculture (such as planting of stock feed), or any mechanical appliances, which either turn the subsoil into the top layers, or mix it with the top soil, or cultivate the subsoil without throwing it up’ (Marx, 1981: 790).

being dug the top sod was turned over on itself trapping these surface plant (grass and weeds) nutrients under the surface of the turned sod. But these techniques of accessing nutrients within the soil structure and on it which were in general only temporary incorporated into the soil. What was constant was the 'extra-economic' work required in gathering nutrients to replenish the lost traded nutrients of the soil. The collecting of these nutrients took on various concrete forms - manure, seaweed, sand, seashells, muck and soot etc, - and from diverse spatial locations.

It was the combination of these opposing forms of cultivation within the ridge system which was crucial in counteracting the 'squandering of the vitality of the soil' (Marx, 1981: 812).

The cottier's struggle was not just with the peasant/tenant class but also with Nature

But more crucially that the mere application of 'new' nutrients to the soil through manuring was the process of application itself in which the potato crop was cultivated through spade husbandry. The particular ridges for growing the potato were much narrower than the other white crop ridges such as those for wheat and oats (Bell, 1984:80). And as a consequence more of the ground was 'furrowed' under potato cultivation as the spade penetrated more of the surface area. But even more importantly was the depth reached in the 'furrowed' trenches. Because the potato plant needed to be 'earthed' – throwing extra soil up the growing plant's stem so as to encourage extra tuber growth, the furrow or trench was dug for a second time and therefore much deeper. And in certain areas this digging was deep enough to break the iron pan as Evans suggests:

'...when the trenches are dug a second time for earthing the potatoes, they often go deep enough to penetrate the hard layer of iron pan which tends to form under heavily leached soils by the washing down of iron salts. [...]Breaking the impermeable pan not only improves the drainage but provides minerals which are returned to the topsoil when the potatoes are earthed' (Evans, 1967:143).

In pulverising the soil, the buried nutrients of the subsoil and the iron pan were released and also the soil pores were reopened to allow air, water and nutrients to move along them. Thus in adding new nutrients (contents) and pulverising the soil (changing the form), the cottiers were creating ideal conditions for the growth of a crop of potatoes but also these ideally constructed conditions of spade cultivation also unfortunately intensified the ability of a disease, such as blight to spread throughout the entire agroecosystem. The blight was oftentimes a natural moment of a potato plant ecosystem, but when that ecosystem became an agroecosystem the blight impact was intensified to become for its duration the determining aspect of that process and its subsequent demise of this particular 'natural' crop monoculture. It is at this point that the social form of potato cultivation in which it was the dominant means of revitalising the exhausted soil metabolised with the naturally occurring blight disease of the potato plant ecosystem 'to become the general famine of 1846' (Eccarius, 1971:141).

So Marx was right, the cottiers were the main purveyors of manure to the Irish soil system and thereby ‘by the dint of chemical application’ of manure they were attempting to replenish the ‘lost’ nutrients of the metabolic rift. But, probably more significant than applying the manure to the soil was their method of pulverising the natural strata of the soil structure in ridge digging. This had two crucial consequences for reviving the condition of the soil. Firstly, nutrients that were ‘locked’ in the subsoil or were beneath the iron pan were thereby transformed into a material form which was more ‘easily assimilated and immediately utilised [by] the nourishing plants’ (Marx,1981:651), thus transforming the soil’s content and structure from ‘earth material to earth capital’ (Marx,1981:756). Secondly, the permeable conduits were improved by removing structural obstacles which restricted the flow of air, nutrients and water into the crop plants. The ridge digging and manuring of the potato crop by the cottiers and the small peasantry determined that the potato crop was the necessary restorative mechanism for the overall reproduction of the white crop rotation process. And because the potato crop was mediated by the conacre tenural form its supply to the cottier population was controlled by the tenant farmer class. In this scenario the essential determination of the potato crop was its restorative function. In the white crop rotation generally two grain crops were followed by the potato. O’Neill discovered in his study of pre-Famine Co. Cavan, that the ratio of planting between the grain crops and the potato was 2:1 which supports the idea that the potato was planted more for its restorative function rather than just a food supply (O’Neill, 1984: 87). The potato crop from the perspective of the tenant-farmer functioned to resuscitate the exhausted soil and from the cottier’s perspective it provided a necessary food supply. But it should be pointed out that these two differing functions of the potato crop within the ridge system of cultivation synthesised together to the advantage of both, although the tenant’s requirement to attempt restore fertility was the dominant form²¹. This was so because increasing fertility on an exhausted plot was a necessary prerequisite for planting any crop but especially the potato as it extracted more nutrients from the soil than any other crop²². In this context, both the tenant-farmer and the cottier-labourer needed to recuperate as much of the soil’s fertility as possible. The best way to achieve this aim was to mend the metabolic rift by digging deep and applying as much fertilizer as possible from whatever source.

²¹ ‘The farmers are very anxious to get any rent for this exhausted soil; it produces nothing for themselves, and they are anxious to have it taken from them, and particularly those who will give one crop; they have it in prime order for the corn crop, and have the benefit of the poor man’s manure, and the high rent besides’ (Devon Commission, 1847: 532).

²² Lyon Playfair stated this in the following way ‘An average crop of potatoes robs the soil of the seed constituents of between three and four average crops of wheat’ (Playfair, 1870:250).



The sourcing of nutrients was not just a one off collection from livestock excretions but a constant pursuit from a diverse range of natural materials and from various locations. According to the Devon Commission (1847), the cottiers ‘gather all sorts of vegetable matter from the ditches, scrapings of the road and the litter of their pigs’ (Devon Commission, 1847:535). Other gatherings were sea sand, shells and seaweed along coastal districts and gravels, marl and clays were dug up from pits (Collins, 2008: xv). Where there was bog, turf-mould was collected and added to the cottier’s dunghill. But the most controversial method of sourcing nutrients was paring and burning which consisted of:

‘...removing the surface sod to a depth of from two to five inches, drying it, and subsequently burning it into heaps, the ashes being eventually spread over the land as manure and ploughed or dug in’ (Hooper, 1922:216).

However, ‘paring and burning’ was only one method of ‘manuring’ the soil, the most utilised form of manure was that which was gathered from livestock. Dutton describes the extraordinary ends that the cottier class went to, to acquire sufficient animal manure for their potato plot:

‘Every cottier is perfectly sensible of the great value of manure, and the great exertions are everywhere made to collect it, insomuch that the roads are frequently injured to a great extent: turf – mould spread about their doors, and every hole filled with it during winter, forms a very large share of their manure for potatoes...to accomplish this *sine qua non* of agriculture, cows and other beasts are generally kept in the house in winter and fed with potatoes, usually boiled and mixed with bran, if the price is reasonable (Hely Dutton, 1808: 35,52 &53).

What Dutton is describing here with regard to the spreading of turf mould is that of placing it in locations where animals congregate so as to soak their waste up as manure. And in housing

the animals at one end of their cabin during wintertime, the cottiers and the smallest of the peasant farmers could hope to clear out of their abodes as much as 10-15 tons of manure each spring time (Hill, 1971). With all of this ingenuity and year-long effort in ‘harvesting’ nutrients for the potato crop, the logic of locating the cottiers’ cabin (temporary) on ‘the field of labour’ (Marx, 1971:110) is revealed.

The cottier’s struggle was not just with nature as they gathered the nutrients from diverse locations and dug them in through the ridge system of cultivation but it was also a class struggle between the tenant farmers and themselves mediated through the conacre rental relationship. This rental form was an extra-economic form of coercion which was used to extract surplus labour out of the cottier and his family by ‘constraining’ the cottier class to access their food supply from the conacre plot and thus forcing them to manure the plot, in order to secure an adequate food supply. The location of the plot was chosen by the tenant farmers and their respective need to restore the fertility of that piece of land. And in choosing the spatial enclave to be planted, the tenant farmer (logically from his perspective) chose the most exhausted one but in doing so he appropriated more surplus labour out of the cottiers as they had to replenish the soil with new nutrients to a level of fertility that allowed cultivation to begin again. In short, the more exhausted the plot the more nutrients were needed to be replaced. Secondly, the collective labour of the cottier family produced more nutrient replacement that was necessary for the potato crop alone. This surplus of nutrients which was accordingly indicative of surplus labour beyond what was necessary for the potato crop became incorporated into the ‘natural’ fertility of the soil and ‘no longer to be distinguished from the original fertility’ (Marx 1968:149). This form of labour was physically done on the backs of the cottier family and thus was appropriated by the tenant farmer class through the manuring process. The class aspect of this process of attempting to mend and reverse the soil’s depletion became manifest when the cottiers were ‘exterminated’ to use Engel’s terminology in the post-Famine period, the soil system even under a less demanding nutrient extraction regime as in the livestock agroecosystem, began to show signs of at least soil

depletion if not soil exhaustion.



Therefore, the cottiers and their diverse strategies for soil recovery was a vital subordinate process within the overall reproduction process of the white crop agroecosystem. It was specific to the particular colonial period of pre-Famine Ireland and thus it was in the end determined by this colonial process. The peasantry's (tenant farmers and cottiers) diverse manuring techniques must be seen as a direct response of the tenant farmers' inability to engage in permanent improvements on their holdings, which were eliminated by the colonial rackrenting system. This colonial phase ended with the Famine and then began a new phase of colonial domination by Britain of Ireland. And in the Famine's catastrophic wake, all things changed including the cottiers. Marx highlights this transformation of the cottier class:

'Previous to the Famine, the labourer enjoyed his cabin....with a rood, or half-acre or acre of land, and facilities for...a crop of potatoes. He was able to rear his pig and keep fowl...' (Marx, 1971:109)

And then:

'In fact, formerly, the agricultural labourers were but the smallest of the small farmers, and formed for the most part the rearguard of the medium and large farms on which they found employment. Only since the catastrophe of 1846 have they begun to form a fraction of the class of purely wage-labourers, a special class, connected with its wage-masters only by monetary relations' (Marx, 1971:109).

In transforming the cottiers into ‘pure’ wage-labourers, they were also to lose their role of restorers of soil fertility.

Marx on the Famine

Marx begins this section of his speech by mentioning that famine conditions were prevalent throughout the early decades of the nineteenth century. Prior to 1846/7, these famine conditions were only partial (temporary and spatial restricted) but in 1846 they became general over all Ireland, indicating a structural propensity to have famine conditions. The Great Famine was thus an intensification and expansion of a pre-existing trend within the rackrenting system that constantly reduced the physical subsistence of the majority of the peasantry to near starvation levels. But the severity of its occurrence determined that it became the defining moment that located the watershed between the early period of colonialization (1801-1846) and its’ subsequent following stage as identified by Marx:

‘This new period was ushered in by the potato blight (1846-47), starvation and the consequent exodus’ (Marx, 1971, *Outline*: 133).

It is interesting to note that Marx conceptualizes the pivotal turning point in the emergence of this particular phase of colonialism as the actual Famine itself and not what we would have come to expect from the previous identified colonial phases by Marx, such as changes in strategies adopted or even a change in the composition of the power structures within the regime itself. What Marx highlights here is not just in a change of circumstances, which was triggered by ‘potato blight’²³, - ‘...when the potato blight of 1845 and 1846 struck the Irish root of life with rot’ (Marx, 1861:95) but also how that plant disease became the dominant process that determined the overall structure of the Irish organic totality. Consequently, the logic of Marx’s exposition here begins with this dominant natural form of the potato blight, leading onto more social forms of starvation, disease (both mediated by natural and social forms), flight, and exodus (both exclusive social forms of determination).

²³ The logic of Marx’s exposition here is worth bringing attention to, with respect to gaining an insight into the metabolic relationship between society and nature. The crucial point of Marx’s conceptualization of the determination of events is that the Famine is perceived to be determined by a natural cause, -the potato blight and this then, sets in motion a chain of reactions, which increasingly incorporates concrete societal forms. Normally, in Marx’s analysis of the socio-ecological metabolism, it is the social form, which is generally the dominant form, while the natural merely tends to form the contents within a particular social form. However, here the potato blight (the usual material contents) seems to have ‘ruptured’ this metabolic relationship with society.



Marx explicates how this empirical process unfolded:

‘Over one million die, partly from hunger, partly from diseases, etc. (caused by hunger). In nine years, 1847-55, 1,656,044 left the country’ (Marx, 1971, *Outline*: 134).

The end point of this concrete ‘chain’ of events (empirical process) was a ‘revolution of the old agricultural system’ which ‘was a natural result of barren fields’ (Marx, 1971, *Outline*: 134). This ‘revolution’ involves the consolidation of farms and the emergence of livestock production and the decline of tillage. The initial ‘natural’ reaction of the masses to these famine conditions (flight and exodus) created the conditions for the emergence of a new agroecosystem (pasturage). It was they – the famine victims who either fled themselves or ‘clubbed together to send away the youngest and most enterprising’ (Marx, 1971, *Outline*, :134) that brought this agricultural revolution into existence by ‘pooling of small leaseholds and by the substitution of pasturage for crop farming’ (Marx, *Outline*, 1971:134). However, this newly unfolded concrete process was soon overtaken by a new form of determination, in which ‘a new social soul has popped into its body (Marx, 1976:909):

‘However, soon circumstances arose whereby this became a conscious and deliberate system’ (Marx, 1971, *Outline*: 134).

In a footnote to the ‘Irish’ section in *Capital*, Marx identified the instigators of this ‘conscious and deliberate system’:

‘The Famine and its consequences have been deliberately made the most of, both by individual landlords and by the English legislature, to forcibly carry out the agricultural revolution and to thin down the population of Ireland to the proportion satisfactory to the landlords’ (Marx, 1976: 869 -footnote).

But these political and social acts were initiated by the occurrence of a natural disease upon the potato plant. This ‘blight’ ruptured the natural contents of this organic totality and thereby impacted back on the specific social forms which normally dominate such contents. Marx has explicitly stated that these natural contents are usually embedded in specific social forms: (Marx, 1868 CW, 42, 1987:504). Change when it occurs is usually determined by the internal developments within the social processes of society (including the economy). But in the case of the catastrophe of the Irish Famine, the destruction of the natural contents of the rackrenting system burst its specific social forms apart and shook the very foundations of this entire society. In doing so the Famine undermined the dominance of the rental process within the Irish organic totality as manifested in rent arrears, bankrupt landlords and starving peasantry.

But the determinants that made the lower classes - the small peasantry and cottiers - physically dependent on the potato were laid down by that particular rental system in the colonial phase leading up to the Famine. This phase (1801-1846), which Marx identified as being dominated by the ‘rackrenting and middleman system’ (Marx, 1971, *Notes*: 123) had dire consequences for the majority of the actual toilers of the land – ‘...left the Irish, however ground to the dust, the holder of their native soil’ (Marx, 1971, *Notes*: 124). Marx uses a long quotation from an anonymous author in outlining the essential conditions of the ‘system of rack-renting and the middleman system’:

‘The lord of the land was thus enabled to dictate his own terms, and therefore it has been that we have heard of the payment of £5, 6, 8, and even as much as £10 per acre. Enormous rents, low wages, farms of an enormous extent, let by rapacious and indolent proprietors to *monopolising landjobbers*, to be relet by intermediate oppressors, for five times their value, among the starvers on potatoes and water’ (quoted by Marx, 1971, *Outline*:132).

Therefore the rack-renting system reduced the physical subsistence of the peasantry to such a meagre level that they became ‘the starvers on potatoes and water’. The cruel contradiction between necessary labour and surplus labour becomes apparent in what the peasantry lived on and what they sold to pay the rent; ‘lived on potatoes and water;’ while ‘wheat and meat were sent to England;..’ (Eccarius, 1971: 141).

But certain colonial aspects came into play with regard to the Famine in how a particular faction of the colonising regime in Westminster, used this ‘God sent’ opportunity to repeal the Corn Laws:

‘*Potatoes* as is known were almost the only food of the Irish and of a considerable part of the English working population when the blight of 1845 and 1846 struck the Irish root of life with rot. The results of that big catastrophe are well known. The Irish population decreased by two millions, some of whom starved, while others fled across the Atlantic. At the same time, this enormous calamity promoted the victory of the English Free-Trade Party; the English landed aristocracy was compelled to sacrifice one of its most profitable monopolies, and the Repeal of the Corn Laws ensured a wider and sounder basis for the reproduction and maintenance of the working millions’ (Marx, 1971:95).

As we are going to discover the Repeal of the Corn Laws was the initial and ‘chief factor’ in the emergence of a new phase in the colonial process. But here Marx indicates that the main reason for its enactment was to guarantee a cheap food supply to the British working class. And therefore, the economic foundations of Irish agriculture and the livelihood of its direct producers were sacrificed for ‘the reproduction and maintenance of the working millions’ in Britain. But this Act of the British Parliament is only one moment, although crucial, in the post-Famine phase of the colonial process.

Marx devotes the following page of the *Outline* to explicating the determinants of this ‘systematic’ process of land clearance, which he has earlier entitled ‘Clearing the estate of Ireland’. Marx goes on to highlight four concrete events which although they appear as apparently discrete and unconnected at the surface level of society they actually combine to make up the essential structure (and thereby become determining moments of the process) of this ‘conscious and deliberate system’ of land clearance.

Marx on the systematic process of ‘Clearing the estate of Ireland’²⁴

Marx begins by suggesting that the Repeal of the Corn Laws was the dominant ‘moment’ in this process of land clearance and he continues to unfold the subsequent sequence of events that followed its parliamentary enactment:

‘Firstly, the chief factor: Repeal of the Corn Laws was one of the direct consequences of the Irish disaster. As a result, Irish corn lost its monopoly on the English market in the ordinary years. Corn prices dropped. Rents could no longer be paid’ (Marx, 1971, *Outline*: 134).

But these declining trends in the price of corn and rental returns were contrasted with a rise in the price of livestock and livestock products:

‘In the meanwhile, the price of meat, wool and other animal products increased steadily in the proceeding 20 years’ (Marx, 1971, *Outline*: 134).

This latter trend of price increases was unable to counter the detrimental effects of the price decrease for corn commodities on the cottiers and small tenants because the ‘economies of scale’ associated with pasturage production demanded larger land-holdings than those

²⁴ Marx in *Theories of Surplus Value* defined this process:

‘But what is the meaning of this ‘clearing of estates’. It means that without any consideration for the local inhabitants, who are driven away, for existing village communities, which are obliterated, for agricultural buildings, which are torn down, for the type of agriculture, which is transformed in one fell swoop, for instance arable land converted into grazing pasture – [in short] none of the conditions of production are accepted as they have traditionally existed but are historically transformed in such a way that under the circumstances, they will provide the most profitable investment for capital’ (Marx, CW, 1989, *Theories of Surplus Value*, Part 2 :237/8)

prevalent among these small ‘tillers of the soil’²⁵. But, crucially the loss of the British market for grain because of the Parliamentary Act of Repeal of the Corn Laws further compounded the damage done to the Irish economy by the earlier passing of the Act of Union, which as a consequence of free trade flooded the Irish domestic market with cheap British commodities. Marx highlighted this double loss with a succinct comment:

‘Deprived of the English market now, as by the Act of the Union of her own’ (Marx, 1971, *Outline*: 134).

But the Repeal of the Corn Laws was not sufficient in itself to make it a systematic process as Marx continues to outline the ‘contributing circumstances that made this (process of land clearances) systematic’ (Marx, 1971, *Outline*:134): Marx declares that the second factor in this colonial process of land clearances was an agricultural revolution which essentially involved a change from grain production to livestock.

I want to leave this discussion of Marx out at the moment as I will go into more detail in the next section of this article.

Marx continues to point out that the ‘despairing flight’ of the Irish was not just determined by the diverse forces associated with agricultural product transformation but it also got a political catalyst with the passing of the Irish Poor Law Extension Act in 1847 in the Westminster Parliament. Marx outlines the concrete consequences of this parliamentary act on emigration and its new form of manifestation - forcible emigration:

‘Act of Parliament passed (1847-48) that the Irish landlords had to support their own paupers. (The English Pauper Law is extended to Ireland). Hence, the Irish (especially English) landlords, mostly in debt, try to get rid of the people and clear their estates’²⁶ (Marx, 1971, *Outline*: 134).

A large number of Irish landlords now took advantage of the Act to clear their estates, pleading like Lord Sligo, the necessity to eject ‘or being ejected’²⁷ themselves.

²⁵ Marx in Capital vol.1 had this to say about this process of consolidation:

‘Centralisation has from 1851 to 1861 destroyed principally farms of the first three categories, under 1 and not over 15 acres. These above all must disappear. [...] Categories 4,5,6 of over 15 and not over 100 acres, are, as was known long since in England, too small for capitalistic cultivation of corn, and for sheep-breeding are almost vanishing quantities’ (Marx, 1976:869).

²⁶ Engels teased out the implications of this Act for the immediate ‘tillers of the soil’ ... ‘the land must be tilled by workers who live in *other Poor Law Unions*, so that the landlord and his tenant can remain exempted from the poor tax...The great instrument which is clearing Ireland is the Poor Law’ (Engels, 1971: 297).

²⁷ According to Kinealy:

‘The incentive to evict was a further by-product of the transfer to Poor Law relief. In 1847, evictions rose sharply and kept rising until they peaked in 1850, reaching 100,000 persons. Many more were illegally evicted or voluntarily surrendered their holdings in an effort to become eligible for relief, forced to do so by the harsh regulations of the new Quarter Acre Clause, which deemed that anybody occupying more than this acreage of land was not eligible to receive relief’ (Kinealy, 2005:57)

The fourth moment of this ‘systematic and deliberate’ process of clearances as Marx indicated was another parliamentary act, - the Encumbered Estates Act (1853). Because of the Famine and the failure of the tenantry to pay their rents, landlords fell into debt and since their estates were encumbered with mortgages and settlement agreements they were failing to service their mounting debts. This Act created a clean title to the land, which allowed it to be sold and the proceeds divided up among those who had claims on it. In an earlier piece (1855) Marx dramatically revealed how this Act led to these ‘flotten’ landlords²⁸ to emigrate along with their own tenantry:

‘...the Act of Parliament which exposed the estates of the debt-ridden old Irish aristocrats to the hammer of the auctioneer or bailiff, thus driving them from the land just as starvation drove away their small tenants, subtenants and cottagers’ (Marx, 1971:76)

But, what ‘hastened the process’ (Marx, 1971:148) of land clearance was how the Encumbered Estates Act allowed not only English entrepreneurs and insurance societies but also a ‘mass of previously enriched middlemen’ to become landlords, ‘who wanted to run their farms on modern economic lines’ (Marx, 1971, *Outline*:135), and accordingly intensified the propensity to exploit their tenantry²⁹. This new breed of speculating landlords imposed not only a severe rental regime on their tenantry so as to get the best return on their estate investment, but they also were prone to evict any perceived ‘surplus’ tenants.

All of these political and legal enactments, - Repeal of the Corn Laws, the Poor Law Extension Act, and the Encumbered Estates Act, for their own diverse reasons of enactment had the same result for the Irish rural population, in that they intensified the propensity of the landlords to clear the peasantry off their land and thus they became moments in this colonial process of ‘Clearing the estate of Ireland’.

How these events and especially the Repeal of the Corn Laws are determinants of the colonial process is that they were ‘conscious and deliberate’ acts of decision making by Parliament, which was made to protect British interests as the ‘management of merely local concerns of Ireland, was altogether immaterial to Great Britain’ (Marx, 1978:177).

‘Reorganisation of agriculture in England. Caricature of same in Ireland’(Marx)

The second moment in this colonial process of land clearance was the:

²⁸ Marx later stated this in the following way: ‘...the Encumbered Estates proceedings have put a mass of small usurers in place of the turned out flotten landlords’ (Marx to Engels, 1971: 296)

²⁹ As the Roscommon Journal (1st July, 1854) stated: ‘In the revolution of property changes the new purchaser accelerates the departure of the aborigines of the country, by which he seems to imagine he has not only rid himself of their burden but enhanced the value of the property’ (Quoted from Lane, 1972: 50)

‘... Reorganisation of agriculture in England. Caricature of same in Ireland’ (Marx,1971 *Outline*:134).

In order to understand what Marx is getting at here we need to be able to distinguish between what he meant by the ‘reorganisation’ of English agriculture and how it contrasted by its Irish ‘caricature’. Marx’s discussion in Capital vol.1 on Ireland can throw some light on his conceptualization of this agricultural revolution, where he discusses how the potential impact of this process of transformation on both countries is essentially about ‘the change from arable to pasture land’ (Marx,1976:862). But the particular Irish variant of this transformation of tillage to cattle-rearing, which defines the caricature aspect, is one in which tillage is nearly completely eliminated from the crop rotation and the land is laid down in permanent grassland. While in Britain green crop production was integrated into the cattle-breeding sphere of production. This convertible husbandry relied on the alternate use of fodder crops and corn crops to obviate fallowing. And by under-sowing grass with the grain crops and thereby cutting out of the rotation system the bare fallow which was a necessary consequence of white crop rotation. But this attempt to integrate the grain with the fodder crops did not occur in Irish agriculture. It is this difference, which makes the Irish agricultural revolution a caricature of the British one. As Marx from Capital stated:

‘...the change of arable to pasture land must work more acutely in Ireland than in England. In England the cultivation of green crops increases with the breeding of cattle; in Ireland, it decreases. Whilst a large number of acres, that were formerly tilled, lie idle or are turned permanently into grass-land, a great part of the waste land and peat bogs that were unused formerly, become of service for the extension of cattle-breeding’ (Marx,1976:862)

And why Britain was able to fully revolutionize its agricultural production through the introduction of green crop rotation system was because its capitalist tenant farmers had the tenurial security to invest in permanent improvements while the Irish peasantry had not³⁰. Thus the Irish farmers switched into livestock production without the recuperative powers of the green crop system to replace the lost nutrients endemic in agricultural commodity production. The green crops could have restored some of the lost nutrients the rest might have been replaced by a cottier class as they had done under the white crop rotation system. Both of these moments did not happen. Therefore, the soil fertility revolution inherent in this transformation from tillage to cattle with green cop rotation system was not realised in the Irish situation and thus soil exhaustion re-emerged.

However, soil depletion was only one consequence of this stunted form of agricultural revolution, there was also a social revolution embedded in the transformation of tillage to

³⁰ Although the Repeal of the Corn Laws devastated Irish agriculture, it had the opposite effect on British agriculture:

The Repeal of the Corn Laws gave marvelous impulse to English agriculture. Drainage on the most extensive scale, new methods of stall-feeding and the artificial cultivation of green crops, the introduction of mechanical manuring apparatus, new treatment of clay soils, increased use of mineral manures, employment of steam-engine and all kinds of new machinery, more intensive cultivation in general, are all characteristic of this epoch’. (Marx, 1976: 831).

pasture which had potential disastrous consequences for Ireland as Engels suggests in the following:

‘And yet the social revolution inherent in this transformation from tillage to cattle-rearing would be far greater in Ireland than in England. In England, where large-scale agriculture prevails and where agricultural labourers have been replaced by machinery to a large extent, it would mean the transplantation of at most one million; in Ireland, where small and even cottage-farming prevails, it would mean the transportation of four million: the extermination of the Irish people’ (Engels,1971:190).

Marx on the clearing the cottiers and evicting the small peasantry from the landed estates of Ireland

Marx continues by outlining the precise mechanism by which the ‘clearing of estates’ was carried out:

‘*Eviction* of farmers partly by friendly agreement terminating tenure. But much more *eviction en masse* (forcibly by *crowbar* brigades, beginning with the destruction of roofs), forcible ejection. (Also used as political retribution). This has continued since 1847 to this day’ (Marx, 1971, *Outline*: 135)



And this type of en masse forcible ejection had no precedent in the European context as Marx stated in a letter to Engels:

‘Furthermore, the form of eviction. The Irish Viceroy, Lord Abicorn (Abercorn), ‘cleared’ his estate in the last few weeks by forcibly evicting thousands of people. Among them were prosperous tenants whose improvements and investments were thus confiscated! In no other European country did foreign rule adopt this form of

direct expropriation of the stock population. The Russians confiscate solely on political grounds; the Prussians in Western Prussia buy out' (Marx, 1971:143/4).

The colonial aspect of this 'deliberate and systematic' process of clearing the estate of Ireland comes to the fore in the above quotation as Marx proposed that the British 'foreign rule' allowed the Irish landlords not only to 'forcibly' evict their perceived 'surplus' tenantry but also to use the state as an instrument of 'direct expropriation of the stock population'. Marx quotes from a Galway newspaper to highlight the collusion between the state and the landlord's crowbar brigade in evicting the tenantry:

'Land agents direct the operation. The work is done by a large force of police and soldiery. Under the protection of the latter, the 'crowbar brigade' advances to the devoted township, takes possession of the houses...The sun that rose on a village sets on a desert, (*Galway Paper, 1852*)' (Marx, 1971, *Outline*:135).



Thus estate evictions and the subsequent forcible emigration are politicized in the actual institutional setting of the eviction process. This, therefore, is a concrete and everyday example of what Marx has already stated analytically in that the 'state is only the tool of the landlords' (Marx, *Notes*, 1971:123).

However, it needs to be pointed out that the colonial strategy of estate clearance was especially directed at the elimination of the cottier class:

'The landlords of Ireland are confederated for a fiendish war of extermination against the cott(i)ers; or as they call it, they combine for the economical experiment of clearing the land of useless mouths. The small native tenants are disposed of with no more ado than vermin is by the housemaid' (Marx, 1971: 90).

The apparent strategy was not just to prevent the renting out of conacre to the cottiers, which was less likely to happen any way under a livestock regime of production, but also to throw them out of their cabins and then demolish these 'hovels'. The consequence of this particular type of cottier clearance is that they were not only 'evicted' off their particular landed estate but they were also banished from the countryside. The only refuge left for those 'evicted' cottiers was either emigration or migration into the squalor living conditions of urban Ireland:

'The first act of the agricultural revolution was to sweep away the huts situated on the field of labour. This was done on the largest scale, and as if in obedience to a command from on high. Thus many labourers were compelled to seek shelter in villages and towns. There they were thrown like refuse into garrets, holes, cellars and corners, in the worst back slums' (Marx, 1971:110).

And this banishment of these newly created 'agricultural' labourers into the towns and villages of Ireland had a number of consequences:

'The men are now obliged to seek work by the day, and therefore under the most precarious form of wage. [...] The towns have had to receive from year to year what was deemed to be the surplus labour of the rural division' (Marx, 1971:110).

They became agricultural wage labourers forced to reside in urban Ireland, which was a direct consequence of the operation of the Poor Law in Ireland as Engels suggests:

'Essentially it comes to the same thing in England and in Ireland: the land must be tilled by workers who live in *other Poor Law Unions*, so that the landlord and his tenant can remain exempted from the poor tax. [...] The great instrument which is clearing Ireland is the *Poor Law* (Engels, 1971: 297).

But without industrialization in Ireland, a difference in the respective reserve armies appears:

'But the difference is that in England, an industrial country, the industrial reserve is recruited from the countryside, whereas in Ireland, an agricultural country, the agricultural reserve is recruited itself from the towns, the places of refuge of the agricultural labourers, who have been driven from the land . [...] '...those forced into the towns remaining agricultural labourers even while they exert a downward pressure on urban wages and are constantly sent back to the countryside in search of work' (Marx, 1976:866).

In becoming an agricultural reserve army, they were compelled to engage in extended daily trek from their urban residences to their fields of the labour. Marx quotes from the Poor Law Inspectors indicating the consequences of this now necessary journey to their work locations:

'they sometimes have long distances to go to and from work, often get wet, and suffer much hardship, not unfrequently ending in sickness, disease and want' (Poor Law Inspectors Reports 1870: 25).

But 'ill-health' did not just fall upon the 'tillers of the soil' but also on the soil they tilled!

The emergence of soil exhaustion as determined by the decline in the ecologically sustaining labour of the cottiers

The green crop innovation of the agricultural revolution that was occurring in Britain demanded not just a change in crop rotation but also a necessary large investment in various types of permanent improvements. Extensive and expensive drainage was required but this was not sufficient in itself. Along with field fences which could shelter livestock, probably the most important aspect of intensive cattle production was the provision of byres – housing that allow stall-feeding of livestock during the winter period. And as we have already uncovered the advantage of the ‘wintering’ of livestock indoors is that it especially facilitated the collection of farmyard manure. All of these diverse physical structures and varying material practices formed mediating moments in this particular type of agroecosystem. Any of these essential moments missing from this integrated system can thwart the overall effectiveness of the entire system. And with regard to Ireland, the particular manifestation of thwarting of this near ‘ideal’ self-sustaining agroecosystem was the general lack of green crops within the rotation system, as Pringle indicates:

‘It is an old saying that without green crops there can be no cattle and without cattle, no manure; and without manure, no corn. The whole rests on green, or root crops, and this foundation is wanting, generally speaking, in the routine of farm management in Ireland, whether on small or large occupations’ (Pringle, 1871:32).

As we discovered Marx was aware of this decline in green crops in Ireland in contrast to the increase in Britain. Within this green crop rotation system itself, the pivotal crop of the whole process was the turnip. However, according to Prof. Hodges in the agricultural returns of the late 1860’s, Ireland had only 23% of its green crops in turnips while Scotland had 72.6% (Cliffe Leslie, 1870: 105). And as a consequence, the production of livestock in the Irish context was based upon an exclusive grass crop, which was known as permanent pasture:

‘The grazing system, as pursued in Ireland with reference to the rearing of livestock, may be described as a system which is based altogether on unassisted nature. Art has nothing whatever to do with it, beyond saving a crop of hay on some piece of old pasture which has been specially reserved for ‘meadowing’. There are no houses on such farms for sheltering cattle during winter,.... Not a turnip is be seen’. (Pringle, 1871: 45).

Consequently this agroecosystem of permanent pasture ‘based....on unassisted nature’ had minimal human input and therefore was nearly totally dependent on the natural fertility of the soil. But as Engels’s survey of the natural conditions of Ireland has revealed there were differing soil types that had differing natural propensities to produce particular agricultural products (Engels, 1971:171-191). Livestock production was no exception to this tendency. With regard to this permanent pasture, Longfield drew a distinction between two types of soil, one being rich stiff clay, and improving every year with pasture, another and lighter soil, on the contrary, if kept in pasture, having a tendency to run into unprofitable moss (Longfield, 1870: 35). The greater part of the land under pasture in the mid-nineteenth

century was of the latter kind (Leslie, 1870:66). The sign of soil depletion or even exhaustion on permanent pasture lands was indicated not only by the invasion of moss-like vegetation but also in a declining stocking rate of that pasture³¹ as Pringle suggests:

‘Of late years much of the land laid down to grass has not only been sown out in an imperfect manner, both as regards the condition of the land and of the seeds used, but much of it is not suitable for permanent pasture as it is for rotation cropping. This last consideration has been much overlooked. People saw the better class of pastures, and they concluded that all descriptions of land would produce equally good grazing if sown out. Hence, it is frequently found that pastures do not keep the same number or class of stock that they maintained at first’ (Pringle, 1871:56).

What Pringle is raising here is something that Engels adhered to with regard to how Ireland had naturally endowed fertility enclaves that were organically suited to produce differing types of agricultural products under differing agroecosystem conditions. In the specific historical period of post-Famine Ireland, it was livestock which was the commodity form demanded by the colonial market system that pushed the adapted agroecosystems beyond their naturally endowed enclaves to those areas which were more suited to producing non-livestock commodities or a mixture of livestock and crops. Cairnes gives statistical evidence of the spatial expansionary tendency of this type of livestock production:

‘We are thus justified in stating broadly that in her transition from the agricultural regime of the past, at least 1,200,000 acres of the soil of Ireland have already passed from the condition of tillage to that of grass’ (Cairnes, 1865:1174).

And Leslie highlights how the tillage ‘regime of the past’ has contracted and how livestock has subsequently spilled out over onto land better suited for tillage production:

‘There are now, out of 20,319,924 acres only 5,458,945 under crops, or little more than a quarter of the island, though two thirds of its area are better adapted for root crops than for natural grass’ (Cliffe Leslie, 1870:106).

The natural unsuitability of these ‘tillage’ soils for permanent pasture and the lack of permanent improvements determined that these particular enclaves began to show signs of soil exhaustion either directly on the surface of these lands – moss, or a decline in product

³¹ ‘More is taken out of the ground than is put into it. Dairy farmers have complained to me that their land feeds less stock now than it did twenty years ago’ (Mahony, 1880: 22) and

‘There is a very large area of grassland in both counties (Cork and Kerry es) which is in a very impoverished condition. The land is grazed year after year. Young cattle are reared and dairy produce sold, but nothing is returned to the soil. It will not be long before the Irish farmer experiences what the Cheshire farmer has already experienced. That this system being continued it will end in the total exhaustion of the land and that before it can again be made remunerative a heavy outlay of capital will be required. It is only the high price of dairy produce which is now supporting these small farmers’ (On the present condition of agriculture in the counties of Cork and Kerry, February 1867 by W. R. Robertson in *Analecta Hibernica* no.40, 2007: 248).

output grazing on these lands³². But what is more significant than just the ending of rotation of pasture with tillage is the practice of pulverising the soil also ceased. However, the declining tillage area also appears to be on the move away from their old pre-Famine locations, where they occupied more of the low lying soils towards more mountainous and boggy regions where the soils are inherently less fertile. Cairnes has identified this trend:

‘The land now under crops in Ireland, though equal or greater in extent than the land under crops eighteen years ago, is not the same land. The richest portions of the old tillage have gone into pasture, while the land which supplies their place has just been reclaimed from the mountain and bog’ (Cairnes, 1865: 1175).

Consequently, both agroecosystems were deprived of essential moments in maintaining soil sustainability. The majority of the pasture lands needed to be rotated with tillage crops and were not³³. With regard to the tillage lands, they lacked the natural fertility of the low-lying soils. Therefore, both of these agroecosystems were deprived of essential but differing moments. However, the pasture lands required not just a tillage input to resuscitate the soil under permanent pasture but also there was a need to substitute plough husbandry for spade husbandry. The reason for this as we have already uncovered is that spade husbandry pulverised the soil much more effectively than plough husbandry as Hooper suggests:

‘There is good ground for believing that many tillage operations are performed less thoroughly by machine than hand. Ploughing is normally a less thorough operation than spade digging..... The high yields of the late forties and early fifties.....were obtained by agricultural methods which were overwhelmingly those associated with spade husbandry and “small cultivation” (Hooper, 1922: 223).

And by the elimination of these ‘spade tillers’ of the soil through the estate clearances in the Post-famine phase of colonialization, the soil began to display signs of being not pulverised - soil exhaustion:

‘The factor which in all probability contributed to most powerfully to the sudden decline in yields per acre of crops which took place after the middle of the last century, was the diminution in the supply of agricultural labour’ (Hooper, 1922:223).

But as we have already unfolded the reason for the lack of these agricultural labourers (the cottiers), who were the ‘natural’ restorers of the soil’s productive condition of the 1840s and 50s was because of the specific form of the post-Famine colonial strategy of clearing the estate of Ireland had already ‘cleanse’ them from the countryside. The consequence of this colonial moment is that these thwarted agroecosystems of Ireland lost the ability to feed its own population:

³² McDonald refers to moving livestock around Achill Island in Co. Mayo so as to avail of minerals such as cobalt and copper found in certain pastures but in short supply elsewhere on the island (McDonald, 1998: 87).

³³ Cliffe Leslie succinctly stated this dilemma as: ‘It does not rain bones and flesh even in Ireland’ (Cliffe Leslie, 1870:66).

‘...that in the eleven years (1857-1868) Ireland has lost the power of feeding more than 1,8000 of her population; while Scotland has gained the power of feeding 300,000 more people’ (Lyon Playfair, 1870:249).

And it had consequently to import food such as wheat which Marx statistically demonstrates the declining fortunes of Ireland as a food producer:

‘Though Ireland exported considerable quantities of wheat in the past, it is now said to be good only for cultivating oats (the yield of which per acre also continuously decreases). In fact: 1866 Ireland shipped out only 13,250 qrs of wheat against 48,589 qrs shipped in (that is almost fourfold)’ (Marx, 1971, *Outline*: 136).

Thus Ireland, reduced to being nearly an exclusive agricultural country, was unable to produce enough food to feed its own declining population. This ironic situation can only be explained by the differing and diverse impacts that colonialism had on the Irish soil.

Conclusion

Marx’s insights in this speech document challenges a number of the accepted views of his understanding of a society that is - marginal to Capitalist development (Anderson 2010). What is ground-breaking about Marx’s analysis of Ireland is not just how he investigated a non-capitalist social formation that was colonised but he did so dialectically. It is within this dialectical unfolding that Marx was able to identify how colonialism was able to impact on the ecological material base of this Irish social formation. However, it is not just about the physical extraction of nutrients from Irish soil and their transportation to the British urban centres of consumption as initially highlighted by Foster but crucially what is involved in the Irish form of the metabolic rift is the thwarting of the social relationships of Irish agricultural production by a complex matrix of colonising interactions. Tragically this colonial thwarting established ‘abominable conditions’ of existence for the majority of the ‘tillers of the soil’ that in the end led to the Famine and the inevitable death of over one million people.

In the opening quotation of this article Marx was reported to have asserted the near absurd connection between soil exhaustion, the Famine and British colonial domination of Ireland. This apparent unlikely connection between these concrete entities was similar to one raised elsewhere by Engels:

If we consider two extremely different things – e.g., a meteorite and a man – in separation, we get very little out of it, at most that heaviness and other general properties of bodies are common to both. But an infinite (unknown) series of natural objects and natural processes can be put between the two things, permitting us to complete the series from meteorite to man and to allocate to each its place in the inter-connection of nature and thus to *know* them.(Engels, 1986: 232/3)

Colonialism and the Irish soil are in a similar incongruous relationship with each other where their connection is not obviously apparent to empirical observation but by engaging in a dialectical mode of exposition we have been able to uncover a diverse range of mediating processes by explicating a precise series enfolding processes and their inter-connections.

In order to grasp the significance of Marx's conceptual endeavours on the Irish Question, I want to reiterate that we need to see him applying his dialectical methodology to this Irish problematic in such a way that he is able to account for not only how Nature interacts with society (and vice versa) but also how the actual determinants within Nature and society metabolize/fuse with each other to determine the structure of the entity under investigation. Significantly, Marx's conceptual work here is not an example of interdisciplinary approach which tends to be inherently descriptive in its style of exposition, and subsequently tends to produce simple phenomenal categories only appropriate to the surface level of concrete reality. But Marx's dialectical approach has a diametrically opposing conceptual trajectory to this form of descriptive empiricism. It is a logical unfolding of conceptualizations of internal metabolized determinants which are expressed in abstract concepts within a determinate analytical framework. Thus the concept of 'Rackrented soil' is not a mere descriptive category but it is in fact an analytic concept that attempts to grasp the specific form of how this rental form expropriated the organic 'sustainability' of the Irish soil. Therefore, the location of this concept of 'Rackrented soil' within the dialectical analysis of the Irish labour process of cultivation is only comprehensible in this context of unfolding concepts in a logical format that which reflects the concrete reality of colonised Ireland. It is in this precise dialectical method of presentation that Marx was able to explicate the diverse and complex mediating relationships between the political processes of the colonial regime and the organic processes of the Irish soil³⁴. He does this by systematically unfolding a whole series of mediating processes in a strict sequence, which is briefly summarized in the following:

Colonialism is essentially a social process, where all aspects of society and not just the economy are thwarted by colonial forms of intervention. Each of these phases of evolution had their own respective determinants, which challenges the traditional Marxist understanding of colonialism as an unchanging condition of economic dependency.



³⁴ Chris Arthur highlights this difficulty with regard to the concepts of value and capital within Marx's dialectical analysis of them:

'The upshot is that value cannot be defined in the simple sense of either substance pre-existing exchange or as a mere phenomenal relation, but only as a moment of a totalizing process of development of internally related forms of a complex whole.[...] whose internal moments...are nested within each other and enfold one another in an ever-moving mediatedness. [...] A methodological consequence of this is that the concept of capital ...requires not a definition ...but a dialectical exposition of its inner self-development' (Arthur, 1997:30).

The colonial process of deindustrialisation which was enacted in various historical phases determined that the majority of the population were wholly dependent on agriculture not only for their livelihood but also their food supply.



Because the market system was dominated by the British changing demands for food. The diverse colonial moments of this market regime, and when it becomes a systematic process of economic repression, was when the British State interfered in the market mechanism by various parliamentary acts for their own benefit, e.g. Act of Union (1801), Corn Laws (1815) and their Repeal (1846). This colonial thwarting of the trading relations between the two countries determined that Ireland became not only an agricultural region of Britain but a producer of agricultural products for the British market without the normal autonomy associated with market trading.



The subsequent 'ruralization' of Irish society created a monopoly situation where the landlords controlled access to the only sphere of productive activity – the land. This monopolistic position was established in the colonial conquests of the sixteenth and seventeenth centuries.



The colonial landowning caste through their domination of the political and legal systems, were able to pass acts that strengthened their rental relationship with their Irish tenantry so as to create 'abominable' legal conditions enabling them to rackrent the Irish peasantry. Thus rent rather than capital becomes the means of extracting surplus labour from the Irish direct producers.



The extra-economic coercion as compared to the capitalist mode of production which was manifested in the rackrenting system determined that there was no legal or economic security to invest capital in the agricultural production process, which had the consequence of hindering the emergence of the capitalist mode of production in Irish agriculture. Without capitalism, there were limited opportunities for development of the forces of production as was occurring in British agriculture.



As a consequence, the land becomes 'pauperised' without adequate capital investment in the soil. Normal extraction of nutrients in commodity production under these social

conditions became an extreme form of extraction, where the soil was ‘over-worked and under-fed’. In short, what emerges is an extended or more severe form of the metabolic rift than the one that occurs under capitalism.



In identifying the cottiers and small peasantry as the actual restorers of Irish soil fertility, Marx was able to bring in class and class struggle as a variable in the determination of the ecological base of society. In their conacre relationship with the peasant tenantry, the cottiers struggle to replace the lost nutrients to the soil was simultaneously a class struggle with the tenantry.



However, in order to maintain any form of soil fertility without capital investment in improvements, it was left to the cottier class to attempt to recoup some of the productive capacity of the soil by their labour in manuring. This vital mechanism in the reproduction of the white crop agroecosystem was achieved through the rental form of conacre.



Marx identified for the first time how a natural occurrence - the potato blight of the Famine – can cause a collapse of an entire social and economic system - Rackrenting which was physically subsisting on that ecological base.



With the removal of the cottiers and the small peasantry through the Post-famine strategy of ‘Clearing the Estate of Ireland’ determined that soil exhaustion emerged on certain soil types of Ireland.

Therefore, this process of colonization metabolized with the processes that made up the Irish organic totality to such an extent that it appears to penetrate all levels of Irish society and thereby subverted these conditions of existence and consequently made them ‘abominable’ (Marx, p.61). And in assessing the degree of subversion of the Irish conditions Marx compared those that existed in the metropolitan core – capitalistic Britain. This becomes particularly obvious when Marx was examining the economic structure of the Irish rental form. For example, when assessing the forms of rackrent or conacre Marx tended to compare them with the capitalist form and thereby identify not only the difference but also to highlight the ‘super’ exploitative nature of the Irish regime even beyond those experienced under capitalistic conditions, as the following indicates:

‘For the same worker, COTTAGER or SMALL TENANT, it is a SUFFICIENT INDUCEMENT TO CULTIVATE, if he receives wages, in a favourable case some SURPLUS over AVERAGE WAGES, i.e., if he is able to appropriate a part of his own SURPLUS LABOUR, not to speak of the cases (Ireland) where, despite his LITTLE STOCK, which is NO CAPITAL, he decides to CULTIVATE for the (physical) minimum,

which stands below the AVERAGE WAGE.’ (Marx, *1857-61 Relative Surplus Value. Addenda Collected Works*, vol. 28:153/4).

The difference between the Irish rental form and the capitalist form therefore makes explicit the ‘abominable’ conditions that the Irish cultivators were attempting to work under. This is a consequence of the particular colonial configuration of the Irish organic totality that made commodity production in Irish agriculture unable to become ‘completed’ in its capitalist form. Marx in his Preface to the German edition of *Capital* brilliantly captures this contradictory relationship between fully developed capitalist production and those ‘incompleted’ forms:

‘In all other spheres, we, like all the rest of Continental Western Europe, suffer not only from the development of capitalist production, but also from the incompleteness of that development. Alongside the modern evils, a whole series of inherited evils oppress us, arising from the passive survival of antiquated modes of production, with their inevitable train of social and political anachronisms. We suffer not only from the living but from the dead’. (Marx, 1867, Preface to the German edition).

Therefore, commodity producers ‘at the margins’ to paraphrase Anderson (2010), who produce under non-capitalist conditions of production suffer, from both ‘living’ competition from capitalist farmers and without (therefore dead) capitalist forces of production. The ‘incompleteness’ in the case of the Irish peasantry as we have discovered manifested itself in the rental form, which was a result of thwarting by the process of colonization. But the process of subverting the ‘normal’ conditions of production does not just relate to the social relations between the Irish landlords and their tenantry but also relates to the forces of production within Irish agriculture, especially the soil system.

The essential contradiction of this phase of the colonisation of Ireland Marx highlighted as the following:

Since the exodus, the land has been underfed and over-worked, partly from the injudicious consolidation of farms, and partly because, under the corn-acre system, the farmer in a great measure trusted to his labourers to manure the land for him. Rents and profits (where the farmer is no peasant farmer) may increase, although the produce of the soil decreases. The total produce may diminish, and still a greater part of it may be converted into surplus, falling to the landlord and (great) farmer. And the price of the surplus produce has risen.

Hence, sterilisation (gradual) of land, as in *Sicily by the ancient Romans* (Ditto in *Egypt*). Marx 1971, 136

This is a classic rendition of the dialectical methodology’s ability to grasp the dominant contradiction of this colonial phase, where the apparent divergent worlds of the market and the soil in empirical forms of analysis would not be perceived to be interconnected or interdependent. They would tend to observe no connection between these two obviously ‘detached and isolated’ entities. Accordingly, the gradual sterilisation of the Irish soil would be understood to be a technical problem within cultivation practices while the increasing market prices would be naively interpreted as a consequence of demand and supply. However, it is ‘the science of inter-connections’ (Engels, 1986: 62) – dialectics that is able to

see beyond the apparent discreteness of mundane reality and consequently it is able to establish those causal connections. Thus Marx has proved dialectically that:

‘The potato blight resulted from soil exhaustion it was a product of English rule’
(Eccarius, 1971:141).

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