# Marx on Primitive Communism: The Irish Rundale Agrarian Commune, its Internal Dynamics and the Metabolic Rift

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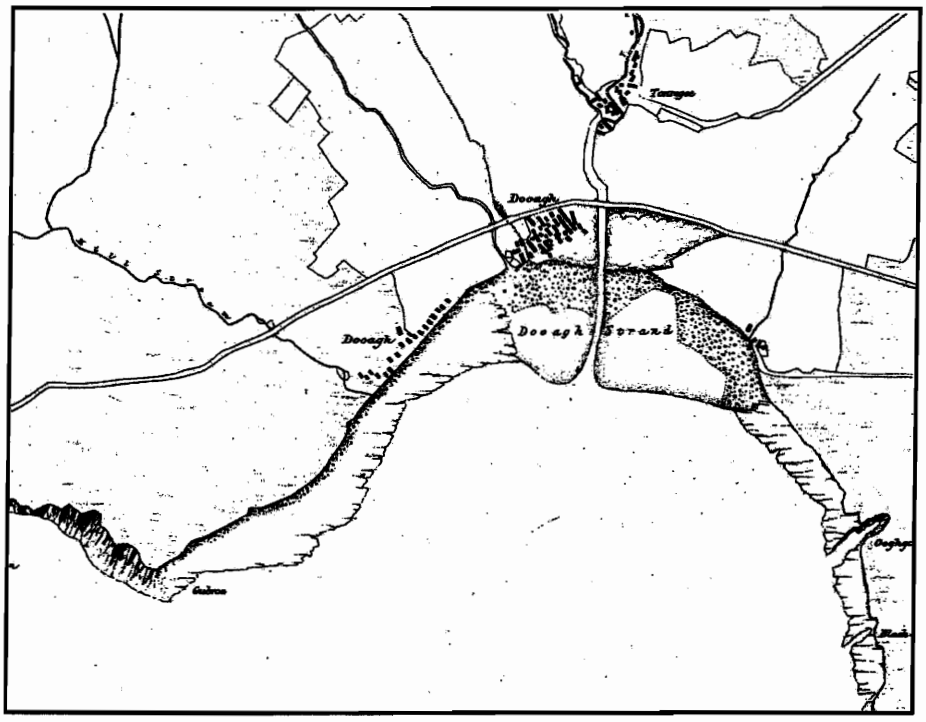
It is not a question here of definitions, which things must be made to fit. We are dealing here with definite functions, which must be expressed, in definite categories. Karl Marx *Capital*, vol. 2.

In the dialectical method of development the movement from the abstract to concrete is not a straight-line process. One returns to the concrete at expanded levels of the total curve, reconstructing the surface of society by 'stages', as a structure of several dimensions. And this implies, finally, that in Marx's *Capital* we shall find a continuous 'oscillation between essence and appearance'. Banaji 1979.

## 1. Introduction

In the following account we apply a Marxist 'mode of production' framework that attempts to create a better understanding of the complex relationships between society and nature. Most of the discussion of the dualism of nature/society has tended to replicate this divide as reflected in the intellectual division between the natural sciences and the social sciences. We hope to cross this analytic divide and provide an analysis that incorporates both natural and social variables.

Marx's work on ecology and 'mode of production' provides us with the theoretical framework for our examination into the essential structures of the Irish rundale agrarian commune. His analysis of modes of production includes not only social relations (people to people) but also relations of material appropriation (people to nature) and therefore allows us to combine the social forces of



*Map – Dooagh Village, Achill Island, Co. Mayo. Scale 1:10,560 (6 inch), Sheet 54, Surveyed 1838, Published 1839 'Glucksman Map Library', Trinity College Dublin*

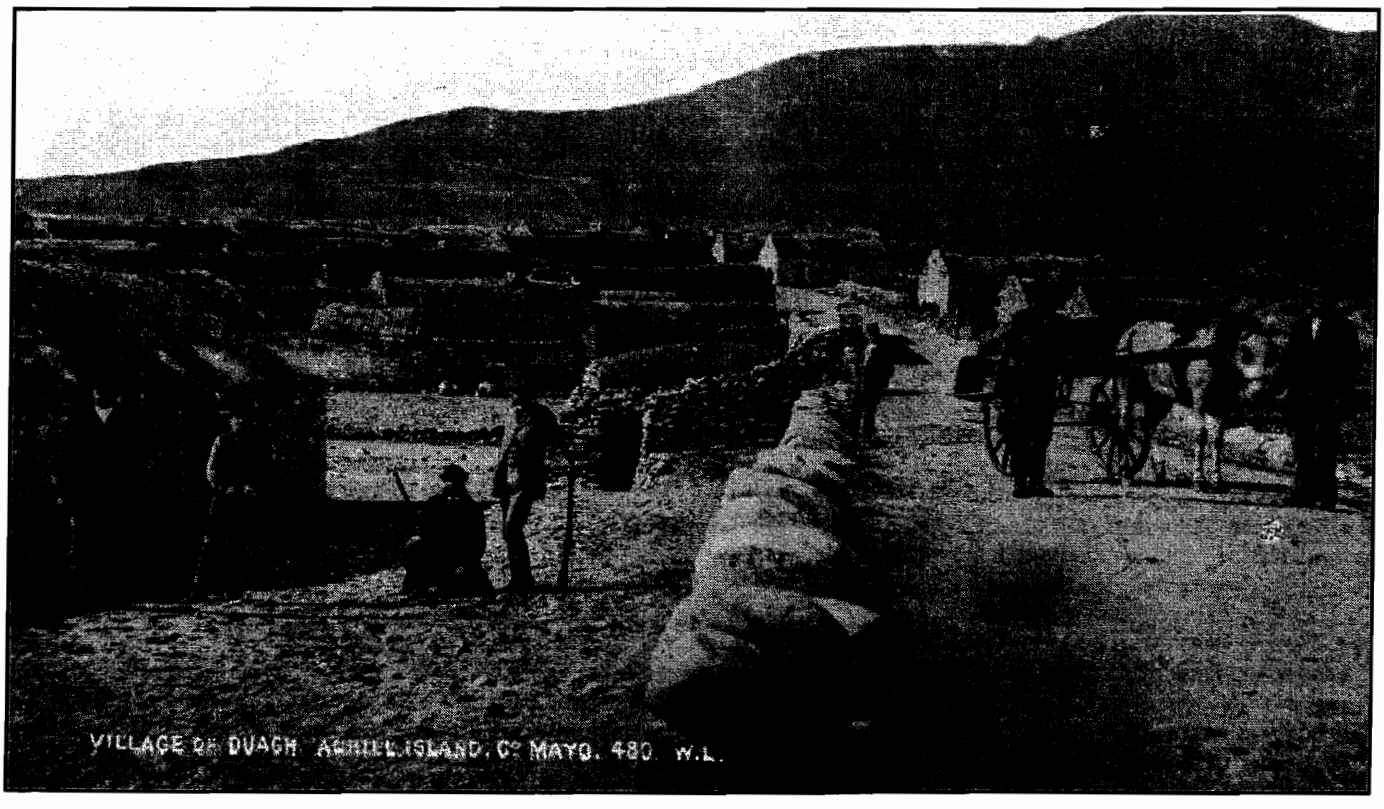
production with the natural forces of production. The latter relations are conceptualized by Marx as mediated through the process of metabolism, which refers to the material and social exchange between human beings and nature and vice-versa. However, what is crucial to Marx is how the natural process of metabolism is embedded in its social form – its particular mode of production. Marx suggested that this unity of the social and the natural was to be located within the labour process of the particular mode of production and he expressed this crucial idea in the concept of socio-ecological metabolism. Some modes of production such as capitalism create a rift in the process of metabolism. The metabolic rift is a disruption of the soil nutrient cycle as nutrients are removed from the soil when they pass into the crops and animals and are not returned. Declining soil fertility therefore becomes a social/economic problem for society.

Historically, the rundale system occupied a large spatial area in pre-Famine Ireland. For instance, Almquist suggests that 58% of all the land in Co. Mayo in 1845 was held in common by joint tenancies (Almquist 1977: 103). According to McCourt, the rundale system, as indicated by clachan settlements, was concentrated in a crescent that included the north, west, and south-west (McCourt 1971: 136). Freeman estimated that in 1845 on the eve of the Great Famine the rundale system occupied some 2,000,000 acres of land (Freeman 1965: 180).

In his introduction to *Marx's Ecology*, Foster (2002) stated that '... to be truly meaningful, the dialectical conception of a totality in the process of becoming ... had to be placed in a practical, materialist context' (Foster, 2002: 5). Contrary to this suggested approach, 'mainstream' sociological inquiry concerned with the analysis of human-natural relations has tended to proceed in the opposite direction, maintaining an analytical separation between the social, and the natural.[1] The effects of this separation have amounted to what Benton describes as an 'obstructive dualism', within which non-social entities remain beyond the remit of sociological inquiry (Benton, 1991: 7). Despite notable contributions from the aforementioned authors,[2] the state of research from within the social sciences has remained largely conceptual. Consequently, little attempt has been made to reconcile such restrictive dualisms within a particular case study. The case of the rundale agrarian commune, therefore, is presented in an attempt to resolve both deficiencies in our knowledge of the internal dynamics of the system itself within its broader context, and to overcome these separations through a mode of production analysis.

## 2. The Contrasting Conceptualizations of Academic Scholarship on the Rundale System: either Overculturalized or Overspatialized

To date, the most prolific debates on the rundale system have concerned theories of its origins, most often expressed as a conflict between, on the one hand, documentary and archaeological evidence and, on the other, supposedly epistemologically inferior ethnological work. The nature of this debate has hinged on the widely-contested notion of the antiquity of the rundale system, and its concomitant pattern of nucleated settlement. Institutional Irish scholarship on the rundale system and clachan finds its roots in the Queen's school of Historical Geography; most notably the contentions




*Village of Duagh (sic), Achill Island, Co. Mayo (circa 1880-1912) 'National Photographic Archive'*

raised by Estyn Evans's 1939 paper 'Some Survivals of the Irish Openfield System' and, years later, the work of Desmond McCourt. Evans's prominence is reflected in Whelan's description of his rejection many years later by historical geographers as 'discarding some of the most venerable concepts in Irish geography' (Whelan 1999: 187). Given the unfortunate scarcity of documentary sources detailing the rundale system in comprehensive detail, and the extent to which the work of the Queen's geographers[3] dominates our empirical knowledge, it is necessary to critically assess their work and the more recent revisiting of the rundale by their later geographer colleagues.

In a comment originally made in 1981, Evans stated that his 'particular brand of anthropogeography, which is that of H.J. Fleure and Carl O. Sauer, [was] currently out of fashion' (1992: 1). According to Graham, Evans's life work remained preoccupied, for the most part, with the intent to document the 'undocumented', his writings remaining rooted within a holistic regional framework and legitimating a distinctively Darwinian interpretation of 'regional particularities'.[4] McCarthy notes that, methodologically, 'Evans ... felt that the landscape was the best tool for conducting research' (2002: 543). It was this combination of theoretical influences and methodological diversity that led Evans to conclude that the rundale system and its contemporary survivals, as evidenced in folk accounts of practices remaining in memory, constituted a system of great antiquity with potential origins in the early Iron Age (Evans 1939: 24). Connections between the eighteenth and nineteenth century rundale system and its hypothesized Celtic counterpart were thus established on the basis of extrapolation from contemporary field evidence, incorporating both archaeological and folklore data.[5]

In a series of papers delivered to the Geographical Society of Ireland, Andrews (1974, 1977) criticized what he saw as the homogenizing effect of studies, such as those of Evans, conducted within a 'regional personality construct'.[6] Buchanan later noted that, despite criticisms to the contrary, such formulations were essential to 'make connections across great distances of time and space, to stress ecological settings ... and to show the relevance of space-relations in the evolution of culture' (Buchanan 1984: 133). Whelan and Doherty provide potent criticisms of Evans in this respect, by noting that Evans's work claimed to produce a study of settlement, which offered a direct window to a form of great antiquity, empirically rooted (if limited to a Western-Atlantic fringe context). According to Whelan, Evans's idealist model engendered a sense of a peasant world as:[7]

> ... fundamentally a timeless one, a little tradition which endured through the centuries, and with underlying continuities with remote pre-history ... by studying these timeless survivals in the modern world, one could trace the whole sweep of Irish settlement history from its genetic origins in prehistory. (Whelan, 1999: 187)

Citing 'numerous subtle and political and philosophical differences', Graham (1994: 194) rejects the notion of a distinctively 'Evans school' of geography and suggests that McCourt's approach departs significantly from that of Evans. Throughout his writings, McCourt maintains a separation between the 'rundale' as social practice, as spatial configuration (the clachan), and as a system of infield-outfield cultivation (McCourt 1971, 1955). McCourt's approach arrives at a dynamic conceptualization of 'the rundale': 'Not [as] a homogeneous population at a given time, but ... one exhibiting manifold features of variation inside a framework of broad similarity' (1947: 1), and in its broader historical context as 'scattered dwellings and compact farm units ... [with the] possibility of the former at any time evolving into or emerging from the latter' (1971: 127).

McCourt of course is right to emphasize the dynamic nature of the rundale, but we suggest that it involves more than just physical settlement patterns – rotating from scattered dwellings to compact farms. If this is a feature of change within the rundale system, the conditions that allow such a strange pattern to emerge need to be investigated.

Kevin Whelan has developed a perspective on the rundale system in terms of its adaptability to nuances of context (environment), particularly the marginal conditions of the western seaboard within which the rundale system thrived (Whelan 1995, 1999). Whelan's approach marks a significant departure from previous pronouncements on the emergence, nature and antiquity of the rundale system, by depicting it as a functional adaptation to specific ecological conditions. But this approach is very close to a form of environmental determinism, which has a consequential tendency to underplay the complexity of the social determinisms, especially the social relationships within the rundale.

Countering Whelan's adaptive determinism is Yager's culturalism. Writing on the village of Faulmore, Co. Mayo in 1976, Yager commented that '... its palpable collective spirit led me to suspect that a more thorough-going communalism lurked in the past' (Yager 2002: 154), concluding:

> It is safe to assume that co-operative work ties were cemented by a strong sense of neighbourly affiliation and a lively evening social life, as I saw myself in Faulmore in the 1970s. Rundale was more than a technical arrangement; it was a way of life. (Yager 2002: 162)

Yager concludes that a utilitarian 'group mind' formed the basis of the rundale system, thereby idealizing communality at the level of interpersonal interaction, and perhaps over-emphasizing the historical permanence of collective sentiment.[8] This charge has underpinned much of the debate over the antiquity and subsequent emergences of rundale throughout history, in the issue of the validity of evidence-forms (McCarthy 2002: 534). It has been noted by various authors (Graham 1994: 184; Crossman and McLoughlin 1994: 80, 89; Nash 2005: 52) that critiques themselves are contested knowledge forms, constituted within particular parameters of appropriate academic practice.

In tracing the origins and trajectory of the development of the rundale system, therefore, we are left with a body of material situated within a philosophical and methodological debate of polar opposites: those of 'anthropogeographic' extrapolation from fieldwork on surface features both material and cultural (those

associated with the 'Evans school'), against an adherence to formal (spatial) documentation (Andrews). Consequently, we are left with an idealist-reductionist dichotomy in our literature corresponding to the authors located within the respective opposing positions above: idealist to the extent that the supposed antiquity of the rundale system emerges within a framework of anthropogeographic generalization,[9] and reductionist to the extent that its form, function, and origins may only be understood through abstract spatial units,[10] and within a deterministic framework of functional adaptation. In this respect, McCourt's approach held greater promise for reconciling these contested aspects, as his analysis had already moved far beyond Evans's initial hypotheses and provided for the possibility of a number of context-dependent rundale emergence scenarios, and, as we will see, for a number of mechanisms of decline and re-emergence over time.

Evans employed a particular methodology with the explicit aim of overcoming what he saw as the 'arid minutia of an elaborate bibliographical apparatus' (1992: 15). In this respect, and as noted by Graham, subsequent historical-geographical criticisms were notably deficient in their ability to cope with social structures and even more so social processes, through an over-reliance on privileged documentary sources (Graham 1994: 194, Crossman and McLoughlin 1994: 87). Notwithstanding Evans's own inability to cope with the diversity of social structures in rural Ireland (especially class), his comment that 'one must admire these scholarly aims so long as curiosity is not stifled by technique, and the scaffolding does not obscure the building' (Evans 1981: 15) lends further credence to the argument for a theoretical, systemic development of discussion of the rundale and a revision of the conceptual constraints implicit within critiques from an empiricist-spatial tradition.[11]

More recently, James Anderson identified the contradictory tendencies of the rundale system with regard to the contrasting values of communal and individualistic attitudes:

> (Rundale) was based more on communal than on individual enterprise, originally in kinship groups, later on partnership farms. Co-operation and equity were among the guiding principles, though by the nineteenth century ... more competitive and individualistic attitudes often prevailed. (Anderson 1995: 448).

We want to argue that these contrasting tendencies do not just operate on the level of the psychological mind-set of the participants but are actually determinants of the diverse economic and social structures of this agrarian system. The aforementioned frameworks applied to the rundale have failed to examine the internal processes that have determined how the rundale system has gone through many metamorphoses – it was never a timeless entity. To unlock the unity of these diverse forms, we turn to Marx to provide us with the materialistic key.

## 3. Marx (and Engels) on the Agrarian Commune

According to John Maguire, Marx proposed a typology of agrarian communal forms in which communal property is combined with private property in varying combinations. These types are identified by Maguire in the works of Marx as the *Oriental* or *Asiatic,* the *Ancient* and the *Germanic* forms of agrarian communities. These primitive forms of community have evolved from an archaic form in which communal property existed without private property (Maguire 1978: 212). Marx stated this evolutionary tendency in the agrarian communal forms in the following way and suggested that the Russian commune is a variant of the Germanic form:

> Primitive communities are not all cut according to the same pattern. On the contrary, they form a series of social groups which, differing in both type and age, make successive phases of evolution. One of the types, conventionally known as *agrarian commune, (la commune agricole),* also embraces *the Russian commune.* Its equivalent in the West is the very recent *Germanic commune.* (Marx, cited in Shanin 1983: 118)

Marx in his unsent letter drafts to Vera Zasulich classified the Russian commune as the latest developed form of communal property – developed from its earlier archaic form. It had three main characteristics:

1. The Russian variant of the agrarian commune was 'the first social group of free men not bound together by blood ties' (Marx, cited in Shanin 1983: 119), while the archaic community was determined by close blood relations between its members.
2. In the agrarian commune the house and garden yard belong to the individual farmer, while in the more 'archaic' type of village community there was no private ownership at all.
3. The cultivable land, 'inalienable and common property' (Marx, cited in Shanin 1983: 119), is periodically divided among the communal members, each of whom works his own plot and appropriates its fruits.

Marx suggested that inherent in these three concrete characteristics is a *'dualism'* which 'bestows the agrarian commune with a vigorous life'. This dualism is based on the opposing trends of individualism and communality where, in the case of the Germanic/Russian commune, the house and garden yard was the private preserve of the individual family and subsequently 'fostered individuality' and the rest of the commune's land was for communal use. In the third draft of Marx's letter to Vera Zasulich,[12] according to Shanin's re-ordering of their presentation, we have the most theoretically developed conceptualization of the agrarian commune by Marx. In this draft, Marx seems to be attempting to bring out the dialectical moments (and contradictions) inherent in the continuing evolving relationship of communality and individualism and their varying concrete manifestations.[13] In attempting to explain these moments he uses a variety of concrete categories to identify the differing relationship that the dualism conveys on the social relations of production. Individualism is expressed through the use of such categories as *personal, individual, private* and *property (private).* These are contrasted on the communal side of the dualism with categories such as *collective, communal, common* and *co-operative.* All of these

adjectives are applied across various moments of the social relationships of production.[14] Those categories that attempt to conceptualize the impact of individualism on the immediate production process generally suggest a process of disintegration, e.g. *fragmented, scattered, petty* and *parcellized*. The tremendous variety of categories used by Marx in these drafts suggests that he had a very deep understanding of the complex nature of the evolution of the agrarian commune from its archaic form of prehistory to its contemporary variant forms – Oriental, Germanic, Russian (and Rundale). The problem as Marx saw it was that their evolution and devolved essential structures varied considerably from location to location.[15] What is definite is that Marx sees them emerging from a common archaic form which he identified as primitive communal property:

> It (primitive communal property) is (not) a specifically Slavonic, or even an exclusively Russian, phenomenon. It is an early form which can be found among Romans, Teutons and Celts, and of which a whole collection of diverse patterns (though sometimes only remnants survive) is still in existence in India. (Marx, cited in Shanin 1983: 49)

What remnants remain of communal property depended on how the process of individualization had eroded the communal aspects of the commune. Consequently, the dualism of communality and individualism allows the researcher to assess the degree of communal disintegration. And, crucially, the comparative aspect of this procedure of assessment revolves around the concept of property (communal and private) and how it relates to concrete spatial forms that were under the auspices of the agrarian commune. In the original archaic form of the commune, all land was communal; so, emerging from that communal property base meant an increasing integration of private property over the communal lands. Therefore, the concepts of communal and private property are phenomenal forms which operate at the concrete level, while the concepts of communality and individualism are abstract formulations since they are part of a concealed 'inner dualism' (Marx, cited in Shanin 1983: 104). As part of the hidden essential structure of the commune, they, as abstract concepts, are the initial concepts used by Marx to uncover the determining laws and tendencies of this particular mode of production. In the following, Marx's draft highlights the concreteness of the property relationships and the analytical role of the 'inner' dualism:

> It is easy to see that the dualism inherent in the 'agricultural commune' may give it a sturdy life: for communal property and all the resulting social relations provide it with a solid foundation, while the privately owned houses, fragmented tillage of the arable land and the private appropriation of its fruits all permit a development of individuality incompatible with conditions in the more primitive communities. It is just as evident that the very same dualism may eventually become a source of disintegration. (Marx, cited in Shanin 1983: 109)

It is crucially important to observe not only how the abstract dualism manifests itself in the concrete forms of the changing property relationships (concrete dualism which we would expect to exist within the spatial plane) but also how that abstract dualism incorporates production and consumption relationships. Therefore, the abstract dualism of communality and individualism merely gets us under the surface of the agrarian commune to uncover a possible structural link between the communal property relationships and production relations; it does not provide us with a dynamic conceptualization which can explain change in this particular mode of production.

As a consequence, the dualisms of individuality and communality and communal and private properties provide us with simple classification devices that can highlight how far the particular commune under examination has moved on from its archaic origins. These classification procedures operate essentially at the level of the spatial, although the more abstract dualism of communality and individualism appears to be moving towards incorporating production and consumption relationships as well. In the following, Marx discusses how this dualism has had a dissolving effect on the stability of the commune:

> It is no less evident, however, that this very dualism could eventually turn into the seeds of disintegration. Apart from all the malignant outside influences, the commune bore within its own breast the elements that were poisoning its life. (Marx 1983: 120)

This was especially so, according to Marx, when labour was engaged on individually-held plots and the subsequent fruits of that private labour were enjoyed by the individual and his immediate family.

> It gave rise to the accumulation of movable goods such as livestock (and) money ... Such movable property, not subject to communal control, open to individual trading in which there was plenty of scope for trickery and chance, came to weight heavily upon the entire rural economy ... It introduced heterogeneous elements into the commune, provoking conflicts of interest and passion liable to erode communal ownership first of the cultivable land, and then of the forests, pastures, waste grounds etc. (Marx, 1983: 120)

What is interesting to observe is that this mobile capital merely erodes – it does not determine its destruction.

Consequently, to conclude this section, it seems that the crucial determining factor of change within the agrarian commune does not reside within the dualisms identified, nor is it the emergence of exchange-value, as this merely 'undermines', 'dissolves', 'erodes' etc.; neither of them 'causes' the balance within the dualism to swing one way or the other. However, since the transition involves a property relationship, which in turn is about changing the usufruct of a spatial entity within the communal lands (Marx stated that it 'leads first to the conversion of the arable into private property'), it must be determined by changes in the customary rights of land-holding through the social mechanism of the communal council or the intervention of an external power to enclose the communal lands (the state or a landlord), or both. However, before we turn to this, we

need to explore the nature of ownership both communal and private within the context of the agrarian commune.

## 4. Marx on the Changing Forms of Property Relationships: Property Form as determined by its Mode of Production

Again, John Maguire provides some useful theoretical insights into Marx's ideas on communal and private ownership within the draft letters. Maguire suggests that Marx and Engels were always interested in the concept of ownership – private property as the legal cornerstone of capitalism and communal property as the future basis of communism. According to Maguire, Marx throughout his career emphasized the inability of primitive communal ownership to handle the complexity of human development, but:

> The theoretical import of communal property was to illustrate the merely historical necessity of private property, and to back up the abstract theoretical possibility of post-capitalist communism by showing that communal property had once already been the basis of social formations. In this vein, Marx frequently emphasizes the 'artificial' nature of private property ... (Maguire 1978: 213)

What did Marx mean by the artificial nature of property relationship? Answering this question will hopefully bring us closer to identifying a methodology from Marx's apparent eclectic work on the agrarian commune.

Marx and Engels in their various works engaged in a constant critique of the speculative philosophy of law and especially how it attempted to put forward idealist analyses of law based on the reification of legal concepts.[16] The danger in the speculative philosopher's approach to understanding law and the legal system was that of treating law as autonomous – a mere working out of its own logic or, as Marx put it, based 'on a so-called general development of the mind' without any recognition that the decisive factors shaping law were economic relations (Marx 1977: 20). Consequently, Marx reacted against this idealistic reification by continually demonstrating the dialectical relationship between the economic base of society and its ideological superstructure – including the legal system.[17] For example, in Volume 3 of *Capital*, Marx gives his most explicit statement on the nature of private property in land and in doing so links up its legal form with the economic conditions prevailing at the time – capitalism:

> Landed property is based on the monopoly by certain persons over definite portions of the globe, as exclusive spheres of their private will to the exclusion of all others. (Marx 1981: 614)

And:

> With the legal power of these persons to use or misuse certain portions of the globe, nothing is decided. The use of this power depends wholly upon economic conditions, which are independent of their will. The legal view itself means that the landowner can do with the land what every owner of commodities can do with his commodities. And this view, this legal view of free private ownership of land, arises in the ancient world only with the dissolution of the organic order of society. (Marx 1981: 618)

Accordingly, following the logic of Marx's argument, communal property and private property can only be adequately understood by putting them into the economic contexts (conditions of production) of societies, with differing economic contexts producing differing forms of property. Marx makes this point more explicit in the following passage, where he locates the specific forms of property relationships not only in differing types of agrarian communes but also in differing conditions of production:

> Property – and this applies to its Asiatic, Slavonic, Ancient Classical and Germanic forms – therefore originally signifies a relation of the working (producing) subject (or a subject reproducing himself) to the conditions of his production or reproduction as his own. Hence, according to the conditions of production, property will take different forms. The object of production itself is to reproduce the producer in and together with these objective conditions of his existence. This behaviour as a proprietor – which is not the result but the precondition of labour, i.e. of production – assumes a specific existence of the individual as part of a tribal or communal entity (whose property he is himself up to a certain point) ... (Marx 1964: 95)

Consequently, in order to uncover the essential structure of the agrarian commune wherever it is located along the evolutionary path, it is necessary to clarify not only the social relations of the commune (its property relationships) but also its production relations with the land. It is crucially a 'double relationship' in which the individual is a member of the community, and in which this social relationship mediates his relationship to the land (Sayer 1987). To deal with this type of complexity, Marx developed the framework of the mode of production. In this light, the numerous examples of agrarian communes mentioned by Marx in the drafts and beyond are differing concrete variants of the same mode of production – primitive communism.

## 5. Marx and Engels on the Irish Rundale

Included in this list of concrete variants was the rundale system. From what sources we have available to us,[18] with regard to Marx's and Engels's research on the rundale, the first explicit mention of this agrarian commune comes from Engels's *Anti-Duhring* (1878).[19] Marx's first published reference to the rundale is in part three of his *Ethnological Notebooks* (Krader 1974), where Marx is taking excerpts from Maine's *Lectures on the Early History of Institutions*. In this reference to the rundale, Marx seems to be reinterpreting Maine's description of the rundale by challenging his use of the legal term of severalty to explain the relationship of the communal members to their arable land. Marx, in *Grundrisse*, described this as a form of individual possession (Marx 1973: 492) rather than private property, which the legal term of severalty would suggest. And, crucially, this type of possession was mediated through the agrarian commune and communal

*Girls Setting Seed Potatoes, Breaking Clods with Spade, Glenshesk, Co. Antrim (Robert J. Welch) 'National Photographic Archive'*

property. The next reference to the rundale comes from Engels's *The Origin of the Family Private Property and the State* (1884), which was based on Marx's comment in the *Ethnological Notebooks*. As the reader can see, it displays a deep understanding of the rundale system:

> Forty or fifty years ago village fields were very numerous and even today a few rundales, as they are called, may still be found. The peasants of a rundale, now individual tenants on the soil that had been the common property of the *gens* till seized by the English conquerors, pay rent for their respective piece of land, but put all their shares in arable and meadowland together, which they divide according to position and quality into *gewanne*, as they are called on the Moselle, each receiving a share in each *gewann*; moorland and pasture land are used in common. Only fifty years ago new divisions were still made from time to time, sometimes annually. The field-map of such a village looks exactly like that of a German *Gehoershaft* (peasant community) on the Moselle or in the Mittelwald. (Engels 1884: 194)

What Engels is suggesting here is that the feudalization of Irish land began with the Plantations, since which all occupiers of Irish land have had to pay a rent to a landlord, thereby becoming tenants. However, such tenancy is only one form of property relationship and it can co-exist with communal property, because the emergence of private property does not imply the demise of the commune, especially since peasants are still 'putting all their shares in arable and meadowland together'– communally. This idea of a communal property relationship continuing to exist even after the attempted introduction of feudal land-tenure relationships during the Plantations of Ireland reiterates an earlier point made by Engels in his *Anti-Duhring*, that the rundale as a form of community ownership was able to continue to exist under 'indirect feudal bondage' (Engels 1878: 481).

The final reference appears in the revised edition of the *Communist Manifesto* of 1888, when, in a footnote, Engels changed the famous line *'The history of all hitherto existing society* is the history of class struggles' to 'all *written* history' (Engels 1888: 34, emphasis added). As the footnote discusses, the emergence of class was predicated on the dissolution of primitive communities and the rise of private property. This empirical fact was, according to Engels, unknown in 1847 when the first edition of the *Communist Manifesto* was published, but:

> Since then, Haxthausen discovered common ownership of land in Russia, Maurer proved it to be the social foundation from which all Teutonic races started in history, and by and by village communities were found to be, or have been the primitive form of society everywhere from India to Ireland. (Engels 1888: 34)

The theoretical pronouncements, then, that Engels and especially Marx made on the agrarian commune and its variant forms across time and space include the Irish rundale as a concrete manifestation of this particular mode of production of primitive communism.

## 6. The Rundale Forms of Communality and Individuality

As we have uncovered from Marx's work on the agrarian commune, communality without individualism has only existed under the archaic form of this mode of production. All the other devolved forms – the Ancient, the Oriental, the Slavonic, the Germanic and the Russian – are penetrated to varying degrees by the element of individuality, to the extent that this integration of the two gives each type of agrarian commune its concrete particularity. Therefore, although communality and individualism are diametrically opposing each other as aspects of the social relations of the devolved agrarian communes, they were essential components of this communal production. What we need to investigate is how they specifically manifested themselves in the rundale form and subsequently impacted on the actual conditions of production – the land. These processes – the social (the property relationships), the economic (production relationships) and the ecological – form a unity within a mode of production as the following testifies:

> Now this unity, which in one sense appears as the particular form of property, has its living reality in a specific mode of production itself, and this mode appears equally as the relationship of the individuals to one another and their specific daily behavior towards inorganic nature, their specific mode of labour (which is always family labour and often communal labour). (Marx 1964: 94)

And crucially, because of this essential unity, the reproduction of any one of these processes is simultaneously a reproduction of the other two:

> To be a member of the community remains the precondition for the appropriation of land, but in his capacity as member of the community the individual is a private proprietor. His relation to his private property is both a relation to the land and to his existence as a member of the community, and his maintenance as a member is the maintenance of the community, and vice versa, etc. (Marx 1964: 73)

So the interpenetration of these 'property', production and ecological (natural) processes determines the essential structure of the primitive communist mode of production. Let us begin our analysis of the rundale agrarian commune with the property relationships, but not forgetting the problems associated with dealing with this level and its inherent tendency to reify property categories. The most identified and controversial category associated with the rundale is *gavelkind*, which Gibbs suggests is an entity that has evolved from the Brehon Laws:

> What traces did Brehon Law, though abolished by the Judges and the Lord Deputy, Sir Arthur Chichester, leave in the habits and sentiments of the people, and can any of those traces be observed at the present day? Of the custom of Tanistry we hear no more; but the custom of gavelkind long survived, reappearing, under English law, in the form of tenancy common down to the early part of this century; and it may still be traced in the love of holding property in families, in the tendency to subdivide the land, and in an unfavourable shape, in Rundale, where the tenement is made up of a number of scattered patches of each particular quality of the land. (Gibbs 1870: 4–5)

According to De Laveleye, the English word gavelkind comes from the Irish *Gabhail-cine*, which denotes 'accepted from the tribe' (DeLaveleye 1878: 124–25). And this 'tribal' social relationship continued to exist under the rundale system in the nineteenth century:

> There are, however, very extensive common lands, covered with grass and heath, which serve as pasture for the cattle. Portions of the communal domain are cultivated in turn, according to the practice still in force in many countries, and especially in the Belgian Ardennes; the occupancy is, however, only temporary, and the ownership still remains in the tribe. The system of periodic redistribution, with alternate occupancy, is still maintained under the form of rundale. A great part of the soil was subject to methods of tenure and agrarian customs, strongly impregnated with traditions of the old joint ownership. (De Laveleye 1878: 124–25)

This system of periodic redistribution of land, mentioned by De Laveleye, was described by Arthur Young as 'change-dale' (Young 1892: 215–16). Therefore, the concrete social practices of gavelkind and changedale – where 'occupancy (of land) is only temporary' in the rundale system – suggest that communal property and private possession co-existed together.[20] Gavelkind meant that all members of the rundale commune had a right to access the land and none of them were able to alienate their share of it. And this communal property relationship allowed equality of access for all communal members.[21]

But gavelkind under the rundale system did not mean access to equal amounts of land but to equal accessibility to communal lands.[22] According to Eric Almquist in his work on Co. Mayo, these rights of access were given to both men and women, and in certain instances may have been given to illegitimate children and orphans (Almquist 1977: 95). The most important implication of this devolved form of gavelkind within the rundale context is that this system accommodated the claims of new families and existing family members. All the commune's members had a claim to both the arable and grazing shares of the communal land by birth (Almquist 1977: 93). And these shares were divided among the members with regard to soil fertility, as William Tighe observed:

> The custom of these partners, when the ground is broken for tillage, is to divide it into shares or what they call 'lochs' and they are so desirous of making divisions equal in value, that each portion though small, does not always lie together but in scattered fragments according to the quality of the soil, so that a man having two acres of tillage may have two roods in coarse ground, two in deep, two in stony and two in wet, if these varieties happen to occur, when the division is made out … (Tighe 1802: 18)

Therefore, with regard to the procedures of landholding under the rundale communal conditions, the amount of arable land held by an individual member was never quantified by a determinate or definitive measurement system, such as acres, furlongs, roods etc, but was determined by the potential ecological output (or value) of the land area and the sharing out of its ecological output equally among the communal members. A similar method of share allocation was done for the pasture grounds of the commune, where the share/unit was known as 'a cow's grass' – the amount of pasturage needed to support a cow.[23] Marx suggested that a similar tendency among the Russian communal members to engage in a process of spatial fragmentation was determined by the need to equalize the 'chances of labour' and thereby secure the same economic benefits for each of the communal members who possessed individualized usufruct rights.[24] Within the rundale, 'personal usufruct is thus combined with communal ownership' (Marx, cited in Shanin 1983: 119). The process of 'changedale' determined that any possession of communal lands by the individual members was to be of a temporary nature. Otway identified the existence of periodic redistribution among rundale communes in Co. Mayo in 1841:

> … in the land appropriate to tillage, each head of the family casts lots every year for the number of ridges he is entitled to … and moreover the ridges change ownership every third year, a new division taking place. The head of the village … makes the division, requiring each tenant to

> cast lots for his ridge, one in a good field, another in an inferior, and another in a worse. (Otway 1841: 35)

As a consequence of the existence of gavelkind and changedale within the rundale agrarian commune, there was no private property in the soil, and this determined that the individual member had only possession of continually changing pieces of the communal lands. The only space that may have been permanently occupied by an individual family was the clachan house and its adjoining walled garden and haggard. There is some evidence, though, to suggest that commune members exchanged their clachan cottages in a similar fashion to the changedale operating in the arable infield (Buchanan 1973: 592–93). Marx summarized this social relation to the soil (the conditions of production) thus: 'What exists is only communal property and private possession' (Marx 1964: 75).

Accordingly, the essential social form of production of the rundale system was the necessary reproduction of individuals as communal members, as Marx stated with regard to this particular mode of production:

> The member of the community reproduces himself not through co-operation in wealth-producing labour, but in co-operation in labour for the (real or imaginary) communal interests aimed at sustaining the union against external and internal stress. (Marx 1964: 74)

In a real sense, then, this particular mode of production was essentially about producing people as its major 'product' of production, not just as 'dot-like' entities but as communal members of a particular agrarian commune, whose communality valorized itself in the need 'for the continued existence of the community' which required 'maintenance of equality among its free self-sustaining peasants' (Marx, 1964: 73). However, the valorization (Marx 1964: 72) of communal property requires maintenance not only of the material conditions of the commune in a production process, but also of the 'possessory rights' associated with the complex aspects of communal property. To reproduce the latter, it was necessary to have an institutional entity that stood above the everyday activities of the commune in order to maintain the customary codes of communal property relationships – the commune's council.

## 7. The Communal Self-Government: The 'King', the Council of Elders, and the Supernatural

The customary mechanisms of communal accessibility as manifested through the concrete processes of gavelkind and changedale needed a governing apparatus of some sort to oversee the continuation of these particular customs and others concerning the regulation of everyday life of the communal members. There is evidence to suggest that within each commune there was a council of elders, headed by a local 'King'. Peter Knight, in his survey of Erris in the Irish Highlands in 1836, describes the function of such a King and his council:

> There is a headman or King [Raight I had understood to be 'King', until Mr. Hardiman, the celebrated antiquarian and author of the History of Galway, told me that it meant 'Kanfinne', or 'head' of the local tribe, according to the Brehon administration][25] appointed in each village, who is deputed to cast the lots every third year, and to arrange with the community what work is to be done during the year in fencing, or probably reclaiming a new piece [though for obvious reasons, this is rare] or for setting the 'bin', as it is called, that is, the number of head of cattle of each kind, and for each man, that is to be put on the farm for the ensuing year, according to its stock of grass or pasture – the appointment of a herdsman, also for the whole village cattle, if each person does not take the office on himself by rotation – a thing not infrequent. The King takes care generally to have the rent collected, applots the proportion of taxes with the other elders of the village; for all is done in a patriarchal way, 'coram populo'. He is generally the advisor and consultor of the villagers; their spokesman on certain occasions, and a general man of reference on any matters connected with the village. He finds his way to the Kingly station by imperceptible degrees, and by increasing mutual assent, as the old King dies off. (Knight 1836: 47–48)

The various functions that the local king performs in this account underline the importance of the fact that his 'office' and the council of elders comprised a form of self-government, which 'is simply the particular part of the whole social system which deals with general questions' (Maguire, 1978: 230–31). Maguire continues:

> ... Marx believes that in primitive communal society there is no in-built antagonism between individual and collective interest ... it is a case of genuine self-government, where the members of the commune are not subject to a centre of authority outside them. (Maguire 1978: 229)

Dewar, in his observations of Tory Island, identifies this aspect of self-governance:

> ... the inhabitants are still unacquainted with any other law than the Brehon code. They choose their chief magistrate from among themselves and to his mandate, issued from his throne of turf, the people yield a cheerful and ready obedience. (Dewar 1812: 166)

There are a number of other references made to the existence of this kingly (and queenly) station in the West of Ireland. Ó Danachair (1981) makes extensive reference to a multitude of kin-based 'king' selection methods: in Claddagh, the king survives until the late nineteenth century (1981: 17); reference is made to a queen in Erris (1981: 20); the ordnance survey letters make reference to a king on Iniskea (1981: 23); and, on Inishmurray, reference is made to a 'monarch' (Robinson 1924, cited in Ó Danachair 1981). The king in all instances exhibits a definite set of characteristics attesting to his suitability:

> As to the qualities desired in the king, we are not left in any doubt. Stature, strength, comeliness of person are mentioned, as are justice, wisdom and knowledge. Literary attainment is desirable; a good talker, a good storyteller, knowledge of two languages, the ability to read and write, all of these were laudable in the King. A

> degree of economic well-being or independence was also thought fitting. He had very positive and definite functions. The regulation, division and apportioning of fishing and shore rights and the allotment of tillage and pasture land was left to him, and in some cases, he appointed subsidiary officers such as herdsmen. He was expected to maintain traditional laws ... in some instances we are told that he specifically punished wrongdoers. He was expected to speak for his community in their relations with the outside authority. (Ó Danachair 1981: 25–26)

It is interesting to note the discrete personal characteristics needed to become the local king, which indicate the diverse roles such a functionary had to play. But what is crucial to emphasize is that the vast majority of the accounts of the communal king stated that it was not a hereditary position; he was chosen from among the communal members, as Lewis testifies in the following:

> ... the islanders had a resident king chosen by and from among themselves, and an ancient code of laws handed down by tradition, which it was his duty to administer; though the king had neither funds for the maintenance of his dignity, nor officers to enforce his authority, the people generally submitted voluntarily to these laws, and were always ready to carry out his judgements into execution. (Lewis 1837: 250)

The democratic procedure of the kingly election is important to point out, in that it highlighted that this was essentially a form of self governance, where the decisions were not imposed upon the members from a central authority but from their own king and council. This becomes critical, in light of the fact that disputes were a constant feature in the rundale system of farming on account of the indeterminate nature of land holding26 as the following suggests:

> The least trifle is a cause of disagreement. They were formerly perpetually quarrelling about their share of stock, and about what ground should be tilled, and who should occupy the different parts of it. The fences round the cornfields are made in the most temporary manner because the fields would be pastured in common after it was let out in tillage. (McCourt 1947: 233)

Constant disputing meant that they needed a mechanism that stood apart from their own personal needs and adjudicated in these communal disputes. Wakefield comments on this:

> ... and the elders of the village are the legislators, who established such regulations as may be judged proper for their community, and settle all disputes that arise among them. (Wakefield 1812: 260)

Therefore, the King and the council of elders oversee not only the continuation of customs but also establish regulations for the commune as a whole, and settle all disputes that may arise among the commune members (Sigerson 1871).

Finally, there is another aspect of this style of informal self-governance, which has a supernatural dimension to it. According to Ó Catháin and O'Flanagan in their study of place-names for the townland of Kilgalligan, Co Mayo, where an old clachan existed, there was a high density of 'supernatural places that were only visible to the local eyes'. Especially important were the connections between the fairies and land boundaries. These boundaries were protected by the fairies, and the local people did not like to work the land too near the boundary in case they would anger the fairies (Ó Catháin and O'Flanagan, 1975: 267). Further:

> Such tangible supernatural features ... were palpable reminders of the existence of the otherworld, and they were both respected and feared. Their presence in Kilgalligan, as in other parts of Ireland, has frequently served as a determinant governing the arrangement of fields and crops, tracks and ditches, and even the location of dwelling houses and other buildings. (Ó Catháin and O'Flanagan 1975: 268)

Within the rundale landscape, then, there were certain spatial nodes, which were perceived not only as 'spiritual' but as also performing the role of protecting the boundaries of the commune, without the need for on-the-spot surveillance. This form of communal governance is essentially a moral code embedded in the landscape through the medium of oral culture (Slater 1993). The 'fairies' patrolled the individual plots and the communal lands while the commune's members slept. But let us leave the world of the fairies and come down to the mundane – the spatial and temporal aspects of the agrarian commune of the rundale.

## 8. Simple Communal Production: The Spatial and Temporal Configurations

In our discussion of the social relationships of this particular mode of production, we highlighted how the dualism of communality and individualism realized itself in the property forms of communal ownership and individual possession over spatial aspects of the commune's lands. Therefore, it is necessary to outline the physical layout of the rundale communal lands and the activities that occur within these spatial entities.27 Buchanan provides a summary of the diverse aspects of the rundale spatial layout in the following:

> Their land lay mainly within a single townland, a territorial unit whose mean size for the country is about 325 acres. If the townland was large, it was sometimes divided among several Rundale groups, each holding its land in lots separate from the others. The system varied greatly in detail, but had five main components: common arable or infield, an outfield used for pasture and periodic cultivation, common meadow, rough grazing which usually included peat-bog, and small enclosures near the farmhouse for gardens and haggards. Finally, the settlement was usually in the form of a loose cluster of dwellings and outbuildings. (Buchanan 1973: 586)

The latter cluster of dwellings or village has been described by the term clachan.[28] The infield area of the communal land was the main location for the production

of arable crops. According to Buchanan the physical appearance of the infield looked like the following:

> The infield was normally held in rectangular strips, varying in length from 50 to 250 yards according to slope and soil conditions, and not more than 20 yards in width. Most were cultivated with the plough, and where the spade was used, the plots were demarcated by low, earthen banks, known by such terms as 'mearings', 'ribs', 'roddens', 'teelogues', or bones, and a higher earthen bank frequently bounded the infield. (Buchanan 1973: 586)

The ploughs used were either an ordinary lea-plough, or else a special paring-plough, and both these ploughs broke up the sod to be later shoveled into ridges or lazy-beds (Evans 1967: 144). The spade was the main instrument of production in the arable infield. The importance of the various types of markings in the infield becomes explicit when we realize that the infield was divided up into individual plots – sums or collops, which had a tendency to change hands under changedale. And the constant variability of land-holding under gavelkind and changedale had the effect of leaving much of the arable infield unenclosed or very badly fenced off from the outfield. During winter, the commune's livestock roamed freely throughout the infield and outfield, which also tended to damage the fencing between these two areas.[29]

The lack of permanent and solid fencing must be seen as an effect of the indeterminacy of landholding under the rundale system. This can be accounted for, firstly, by the need to constantly expand the infield to accommodate the increase in the commune's population and, secondly, by the prevailing custom of allowing the livestock to winter on the arable infield. The Ordnance Surveyors for Co. Donegal were especially observant of the lack of hedgerows and trees as a form of permanent fencing in rundale areas.[30] The consequence of the lack of permanent fencing was that the commune's livestock had to be strictly supervised, either by constant herding or by the tethering of animals. Evans describes this feature:

> The old customs of tending ['herding'] the cattle and tethering or spancelling them also derive from the Rundale phase with its lack of field-divisions and fences. 'Cattle, sheep and goats', wrote Arthur Young, 'are all in bondage, their forelegs tied together with straw ... cocks, hens, turkeys and geese all have their legs in thraldom.' Various devices for limiting the freedom of farm animals are still widely used; even the hen with her chickens around her will be seen tethered by the leg to a stone or iron weight. (Evans 1967: 55)

The lack of hedgerows and subsequent herding or tethering of livestock is caused by the inability of the communal members to grow such permanent fences on account of the number of years it takes to grow into effective fencing, a time period never allowed by the indeterminacy of this type of communal land-holding. The outfield tended to complement the infield in the production of livestock – mainly cattle and sheep (Buchanan 1973: 586–87). The outfields, combined with mountain pastures, were the physical areas where livestock production was essentially carried out. The allocation of communal grazing land was calculated by the number of units of infield land allotted to each communal landholder. As with the plot held by the communal member in the arable infield, the amount of pasture land held was not devised by the acre, but by 'a cow's grass – a collop', which again reflected the indeterminate nature of landholding within the rundale system. The outfield was therefore the source of fodder for the livestock and sometimes hay:

> Where natural meadows existed along river or lake their use was carefully regulated to give each farmer a share of the infield. Sometimes the land was divided into plots scattered as in the infield, worked in severalty and grazed by herding the animals, each on its own plot. Occasionally the hay was mowed by communal labour and then divided in shares, with common grazing. But most of the grazing had to be found elsewhere in summer, and especially in mountain districts there are traditions of moving livestock long distances to seasonal pasture. (Buchanan 1973: 587)

During the summer period, there was a tendency for the animal stock to be moved from the vicinity of the clachan village to mountain pasture, depending on whether the commune had a right of pasturage on a particular mountain. In the old traditional custom of booleying, the animals were herded to these mountain pastures. This form of transhumance was done communally; again, like the outfield, each individual member was allowed to pasture so many heads of cattle and sheep. In this way, most rundale communes had certain grazing rights to mountain pastures and, at times, other rundale communes may have shared the same mountain pasture (Hill 1887: 18). The process of transhumance or booleying was mainly carried out by the young people of the commune, especially the young girls and women (Graham 1954: 76). The young people of the 'booley' not only herded cattle and sheep, they also churned milk into butter, spun the flax and knitted wool. The young men collected these products produced in the mountain booley and brought them back to the clachan on a weekly basis (Graham 1954: 14). At Halloween the livestock returned to the clachan from the summer booleying and between St. Patrick's Day and Halloween the livestock were either herded in the outfield or on mountain pasture, in order to allow the communal crops to be grown in the infield (Evans 1979: 50). Consequently, during the winter months the commune's livestock was allowed to feed on the stubble of the crops harvested in the infield. Generally, no hay was grown for winter feeding and this lack of winter fodder was made up by allowing the livestock into the infield:

> In the Upper portion of the Parish the spade is necessarily used ... The tenantry in the high grounds grow no hay and feed their cattle in winter usually on oaten straw, which is shorn very close to the ground, and much grass is consequently in the butts of the sheaves. (*Ordnance Survey Memoirs*, Parish of Urney, Co. Donegal, 1836: 6)

The arrival and departure of the commune's livestock to and from the infield during winter had important

consequences for the cropping of the infield, as the infield was unsuited for the winter sowing of crops:

> ... in this parish from the first week in November until the latter end of April, the entire fair of the country resembles a great common, where cows, horses and sheep graze promiscuously, a man's cabbage garden is not secure from the depredations of his neighbour's cattle. It is no uncommon thing in winter to see a man drive his cows or sheep to a distance from his own farm, where he thinks the grass is better or the shelter warmer. (*Ordnance Survey Memoirs*, Parish of Pyemoaghy. Co. Donegal, 1836: 53)

Hence, not only was autumn sowing restricted by winter cattle-feeding practices, the types of crops grown were also extremely limited under the rundale system of crop rotation. From the evidence of the Ordnance Survey memoirs and reports it seems that white crops predominated. Potatoes began the rotation followed by barley (except in mountain areas where it was found to be unsuitable), then oats and flax and back to potatoes again (*Ordnance Survey Memoirs*, Parish of Urney, Co. Donegal, 1836: 67). It is interesting to note that within this type of crop rotation there was no fallow or lea allowed. This led to the extraordinary situation that this arable infield was never rested nor rotated with any other spatial location within the agrarian commune. Within the rundale crop rotation system there appear to be two essential crops missing – wheat and green crops. Wheat is not sown because it is sown in autumn and harvested in spring and it therefore would interfere with the winter pasturing of livestock on the stubble of the infield. Green crops are also excluded not only because of the livestock occupation of the arable land in wintertime but also because green crops demand the use of plough technology which did not exist under the rundale system. Spade husbandry was the essential labour process of the rundale commune, as is indicated by the existence of 'lazy-beds' or ridges in the commune's infield.

Finally, with regard to the spatial configuration of communal lands, there was the clachan – a 'loose cluster of dwellings and outbuildings'. T.C. Foster gave the following description of a clachan:

> There is no row of houses ... but each cottage is stuck independently by itself, and always at an acute, obtuse or right angle to the next cottage as the case may be. The irregularity is curious; there are no two cottages placed in a line, or of the same size, dimensions or build. As this is the largest village I ever saw, so it is the poorest, the worst built and most irregular and most completely without head or centre, or market or church or school of any village I ever was in. It is an overgrown democracy. No man is better or richer than his neighbour. It is in fact, an Irish Rundale village. (Foster 1846, cited in Buchanan 1973: 594)

As previously stated, there is some evidence to suggest that the commune members interchanged their cottages in a similar fashion to the changedale system operating in the arable infield. The clachan was also the physical location for a number of communal activities, as Evans indicates:

> Apart from the co-operation implicit in the openfield system there was a good deal of sharing in other ways. Thus there would be a communal corn-kiln for drying the grain before grinding, a knocking stone for pounding barley, and in some districts a corbelled stone sweat-house which took the place of the village doctor in treating rheumatic pains. (Evans 1979: 32)

According to Gailey, the communal kilns were sometimes worked by individuals but mostly by the commune when a larger quantity of grain had to be dried (Gailey 1970: 52). The drying of large quantities of corn is attributed to the malting of corn preparatory to the illicit distillation of poitín (*Ordnance Survey Memoirs*, Parish of Inniskeel, Co. Donegal, 1836: 25).

What we have discovered in our survey of the spatial configuration of the rundale's lands and the diverse productive activities within them is that they were essentially determined by the indeterminacy of individual possession of land. And the central hub of the amount of land possessed is determined by the individual's access to the infield, which in turn determines the amount of livestock allowed on the commune's pasture land. This indeterminacy of land-holding manifests itself in the concept of collop or sum, which as we have discovered was originally the amount of land necessary to feed a cow – 'cow's grass'. Knight suggests the origin of this type of rundale measurement and its extension into the arable infield:

> The holdings are by sums or collops, which originally meant the number of heads of cattle the farm could rear by pasture, but, as some tillage became afterwards necessary, they divided the crop-ground into collops as well as the pasture, and each farm then had its number of tillage collops and grazing collops. The tillage collop is supposed to be capable of supporting one family by its produce. (Knight 1836: 46–47)

The concept of the collop is not really a measurement of land area such as the acre, but it is a measurement of the physical output of land, taking in the quality of the land necessary to keep a family or a cow. Consequently, its spatial dimensions may vary from location to location depending on the quality of the land. But probably its most crucial characteristic is its ability to be flexible, not only with regard to soil qualities but also with regard to ensuring an equal standard of living among the rundale members. For example, the incorporation of the potato within the commune's crop rotations would allow the tillage collop to reduce in size, because the potato would produce more yields per unit area than any other crop. The arrangement of both grazing and tillage collops with regard to their redistribution in changedale and the amount of collops held by each individual commune member, therefore, needed a communal organization. This complex set of procedures was provided by the commune's council of elders, headed by the commune's 'king'.

Therefore, the commune's council had to arrange not only the productive behaviour of its direct producers but also the technical exploitation of the physical means of production. This involved two processes. The first process concerned the actual physical location of the

commune's means of production (i.e. the areas designated for tillage and for pasture) and the distribution of those means of production on an equal basis between the communal direct producers. The second process involved organizing the respective working periods of the individual producer in a coordinated way so that no one individual member could upset the working periods of the other communal members (e.g. vacating the infield after the last day of October). All these complex arrangements had to be based on customary rules and laws, where the actual production process of the commune as a whole had to be communally organized to the last detail. Therefore, the inherent tendency of the rundale commune was to reproduce its members as equal members of the commune. It was not primarily concerned with the production of wealth but with the physical reproduction of its members as members of the commune (i.e. use-value production in essence). In order to achieve this aim, it was necessary to attempt to continually maintain and preserve the established equilibrium of shared physical resources between the communal members. But, if the essential social form of communal production is the reproduction of communal members, any increase in their numbers will demand a reallocation of these communal resources, which will in turn undermine the initial equilibrium. Marx stated this in the following way:

> If the community as such is to continue in the old way, the reproduction of its members under the objective conditions already assumed as given, is necessary. Production itself, the advance of population (which also falls under the head(ing) of production), in time necessarily eliminates these conditions, destroying instead of reproducing them, etc., and as this occurs the community decays and dies, together with the property relations on which it was based. (Marx 1964: 82–83)

The dynamic of this particular mode of production is population growth, which is ironic. This situation comes about because the essential social form is the reproduction of communal members, yet an increase in the number of members, which is a 'natural' consequence of family reproduction practices – especially where agricultural work is done with family labour – causes a realignment of communal resources. Marx highlighted this tendency with regard to the Ancient variant of this mode of production:

> For instance, where each individual is supposed to possess so many acres of land, the mere increase in population constitutes an obstacle. If this is to be overcome, colonization will develop ... Thus the preservation of the ancient community implies the destruction of the conditions upon which it rests, and turns into its opposite. (Marx 1964: 92–93)

Therefore, in order to accommodate new family members, the rundale agrarian commune had to engage in an expanded form of communal production.

## 9. Expanded Communal Production

The overall reproduction process of the rundale system concerns not only the physical reproduction of the direct producer, his immediate dependents and the social relations of communality and individualism that 'rest' upon those physical conditions of production, but also the financial reproduction of the commune and its members. In the eighteenth and nineteenth centuries, all members of Irish society were tied into a monied economy, whether they were from the city of Dublin or Tory Island. The rundale communities of the West were no exception to this trend.[31]

All of these processes of reproduction, although distinct in their respective determinations within their own processual forms, are inherently connected to each other because they mediate each other. A contraction or collapse of one will have a major impact on the other processes of reproduction.

### *a) Increasing Parcellization of Land and the Subsequent Fragmentation of the Labour Process*

The major constraint of the rundale system on its physical reproduction process was the inherent tendency of the system to subdivide the means of production in order to accommodate its growing population. An example of such subdivision is the Gweedore estate, Co. Donegal:

> By 1851, subdivision had almost reached its physical limits and the arable area per holding had become very small. The average arable per holding had fallen to 2.3 acres, while the average per person was .43 acres. (Douglas 1963: 11)

And this subdivision of the arable land, coupled with the arable land increasingly 'colonizing' the pasture lands of the commune, caused a devastating decline in the physical subsistence of the communal members:

> To make matters worse, in the early decades of the nineteenth century ... the numbers of livestock had to be reduced, with a resultant decline in protein-giving milk and butter in the local diet. Thus in the eighteenth century the diet had included 'milk, curds, butter, fish, rabbits, potatoes and bread', in 1802 'potatoes, benefits of seashore and a little oaten bread, milk and butter', but by 1840 'potatoes, and peppered water with occasional sprats and salt' were said to be the main foods. (Douglas 1963: 11–12)

We have already discovered from Marx's analysis of primitive communism that the essential consequence of attempting to maintain the equality of communal membership was to allow members' children access to the communal land, but this custom imposed an internal stress in that it was necessary to continually subdivide the commune's means of production in order to accommodate its growing population of direct producers. Buchanan identifies this trend in the rundale system, specifically in the growth of the clachans:

> In Western districts meantime, clachans not only survived but actually grew in number and size. For example, four to eight dwellings was an average size in the early eighteenth century, but by the first decade of the nineteenth century, clachans in Co. Donegal averaged

> thirty dwellings, rising as high as 120 to 200 in Co. Clare. The chief reason for this increase was rising population, which in the rundale system was accommodated by subdivision of holdings in the customary practice of gavelkind inheritance. Towards the end of the century, pressure of population was so great that even farms formerly held in severalty might become rundale holdings, in this way, the new generation of joint-tenants building their houses alongside the original dwellings to become clachans. (Buchanan 1970: 153)

But the degree of immiseration depended upon the development of communal subdivision, which varied from rundale commune to commune, and was determined by population increase. The rundale system did not posit a surplus population outside the social conditions of reproduction, but attempted to accommodate all its increasing communal membership within its own communal system. As a consequence, not only was there a tendency to encourage population growth, there was also little tendency towards emigration:

> The survival of the infield-outfield system of farming in parts of South-east [Derry] until late in the nineteenth century may have been an important factor in limiting emigration from that area, due to the way of life it represented, as well as through its economic effects. The subdivision of land held in common, associated with this form of agriculture, meant that some increase of population could be absorbed, even though there might be a fall in the standard of living of the whole community; in those districts where subdivision had halted, however, the problem of obtaining land for the members of an increasing population could only be solved by emigration. (Johnson 1959: 155)

So, where there was no barrier of access to land, not only were communal members encouraged to stay, they could also get married without waiting to inherit the leasehold, as occurred where the landlord class determined accessibility to land. In consequence the rundale members tended to marry early. There is some evidence to suggest that they married frequently at the age of sixteen and, in one instance, the combined ages of one couple did not exceed twenty-eight (*Ordnance Survey Memoirs*, 1834, Parish of Desertagney Co. Donegal: 11).

Therefore, early marriages, determined by communal access to land, led to massive population increase in rundale areas. But this type of social and sexual reproduction process has inherent dangers as indicated by the increasing immiseration of the rundale's physical means of subsistence. The lowering of the physical standard of the means of subsistence narrows the ability of the commune to continually reproduce itself. Concretely, this involved the commune subsisting more and more on the potato as its staple crop for subsistence. And any contraction in potato crop yields can force the communal members into a situation where they have no choice but to emigrate. Emigration in this context is the emigration of entire families as they flee starvation, which has come about because of collapse of the physical means of reproduction to maintain itself.

As we have already stated, the arable infield of the rundale system was the hub of the whole system. The infield of the commune was organized through the system of spade husbandry with its inherent structure of 'lazy beds' or ridges. And in the system of changedale, not only were the ridges rotated every one or two years, they were also given to new members of the commune. The consequence of the latter tendency was that the arable infield tended to be increasingly 'parcellized' into smaller individually-held plots and that it physically began to expand upon the outfield and the pasture lands of the commune. This, coupled with the physical digging of the lazy beds, meant that the arable area expanded every year, as the following passage from the Devon Commission (1845) suggests:

> A change takes place in occupation every two years, owing to their mode of tillage, which is very singular. They grow their crops in very wide ridges, which are formed into inclined planes: one side of the ridge being two or three feet higher than the other. The seed is spread upon the ridge and it is covered from a furrow always dug from the high side, so that every year the mould of the field is moved by the breadth of the furrow, or about eighteen inches, from one side of the field to the other. Hence the necessity of a change every two years. (McCourt 1947: 56, quoting from the Devon Commission)

Of course this inherent expansion of the arable infield does not necessarily suggest that the actual location of the infield changed. The opposite is true. The arable infield never rotated with the outfield, but was constantly cropped as is indicated in the following account from the landowner J.N. Thompson's diary, Carndonagh, Co. Donegal:

> The system of rundale is still rife and prevails over most of this estate. The ditches are for the most part mere dividing lines over which cattle and sheep can freely pass, even on the best farms well fenced fields are a modern improvement ... People too are beginning to understand something of rotations of crops; formerly after potatoes, barley or oats was grown till the land would no longer give corn, then perhaps a wretched crop of flax, then potatoes again. Upland grass was not thought of, and pasture land was quite apart from arable. Some land was always ploughed, other land never, but always kept in pasture. Some of the land I now have I do not think had been rested within living memory. (Thompson, n.d., circa 1801–1833: 237)

These emerging trends of more intensive cultivation of the arable land (through the process of plot subdivision) and the necessary expansion of the arable out on to the pasture lands of the commune were a direct consequence of the rundale system's need to engage in expanded reproduction. This inherent and essential tendency of communal production had a major impact on the labour processes of this particular mode of production in the concrete context of the rundale commune. Because of the necessary requirement to accommodate new family members and allow them access to the arable infield, this spatial area becomes increasingly 'parcellized' (Marx, cited in Shanin 1983: 113) – breaking down into smaller and smaller plots of tillage cultivation. Probably one of the

most extreme example of such a process of parcellization, reported by Bell, was the case from Donegal for the 1840s in which 'one man had his land in 42 different places and gave up in despair, declaring that it would take a very keen man to find it' (Bell 2008: 55). Marx has suggested that the land is the essential 'condition of labour' (Marx 1964: 74); with the increasing partitioning of the commune's infield, the labour process itself becomes more fragmented with the declining size of the individual plots of cultivation. Fragmentation of the labour process under these dispersed spatial conditions 'compels a dispersion of strength and time' (Marx, cited in Shanin 1983: 122) of the labour power of the individual communal member and his immediate family. And, although these arable 'tillers' were to be seen working in the infield and apparently side-by-side with each other, they were actually working not with each other but were engaged in 'uncoordinated individual activities on scattered means of production, where each follows the logic of his particular situation and nobody has an overall plan of the totality' (Maguire 1978: 224).

Labouring under these fragmented conditions, the individual commune members appropriated the fruits of their own labour not only from the arable infield but also from the pasturing of livestock on the communal grazing grounds. This surplus product was then sold as a commodity in a market, and thereby the commune entered into simple commodity production.

### *b) Simple Commodity Production under the Communal Conditions of the Rundale*

Marx, in his discussion of the Russian variant of the agrarian commune, suggested that fragmented labour was the key factor in the private appropriation of surplus product and its realization into exchange value. In the case of the rundale commune, the accumulation of money by the individual communal members was necessary for them to reproduce themselves as members of a society beyond the immediate confines of their particular commune. Money was needed to pay the landlord, the priest, the taxman, the merchant trader and the usurer.[32]

Consequently, the mediation of money within the social relations of production in the rundale commune determined that a certain proportion of the commune's surplus product had to be produced for exchange value. And although the essential 'precondition for the continued existence of the community' was the 'maintenance of equality among its free-sustaining peasants', the commune had now become dependent on the accumulation of money to meet these expenses. Whether these necessary expenses were paid by the commune as a whole or by individuals depended upon the degree of individualism developed within each rundale commune.

Besides producing agricultural products as marketable commodities, strategies were developed by the communal members that involved essentially adding more exchange value to the actual agricultural products, by changing 'primary' products into more 'finished' commodities. These subsidiary activities included brick-making, fishing, kelping, knitting, flax spinning, the weaving of linen cloth, and the illicit distillation of alcohol. In the Parish of Inniskeel, Co. Donegal for example, poitín was produced:

> Barley and oats are the only descriptions of grain grown in the parish, from the universal practice of illicit distillation. (*Ordnance Survey Memoirs*, 1836, Parish of Inniskeel Co. Donegal: 25)

The production of poitín was aided by the communality of the rundale system, and the subsequent difficulties that the Revenue officers had in identifying the individuals involved in producing this illicit alcohol was due to the communality of landholding under the rundale system (Bonner 1969: 82–83). But these subsidiary 'industries' to agricultural production must be seen as an attempt to counteract not only the diminishing material returns from the rundale's immediate agricultural production process but also the diminishing financial returns from the traditional agricultural commodities of the rundale system. But, as can be seen from the apparent diversification of these subsidiary products, their production was extremely nonspecialized and consequently undercapitalized with regard to their production techniques. Therefore, the development of this type of commodity production never got beyond the stage of a putting-out system (linen and wool), in which merchant capital dominated rather than industrial capital as under the capitalist mode of production. However, whether a particular rundale community produced these subsidiary commodities depended on its specific historical conditions and locality as the following indicates for the Parish of Inniskeel, Co. Donegal.[33]

> In the districts neighbouring the seashore the females are universally employed in [the] spinning [of] linen yarn – in the mountainous parts of my parish they knit woollen stockings, and on average the knitters earn 5d per day. The neighbouring district of [the] Rosses is celebrated for its knitting of woollen stockings. (Bonner 1969: 69)

In Mayo, for instance, spinning yarn was later substituted by seasonal migration and egg production from rundale areas (Almquist 1977: 253–254). But these subsidiary 'industries' and their specific development function more to reproduce the rundale system as a whole than as a determining structure in this particular mode of production. The reason for this is that these industrial activities were never engaged in under communal conditions of production, and the determining structure continued to be the need to reproduce the individual as a communal member. It should be stressed, however, that the development of exchange-value production meant that more of the rundale system became dependent on market relationships, which had the tendency to encourage the accumulation of money capital by individuals rather than by the commune as a whole.

In the previous section, we observed how population increase imposed severe constraints on the rundale's production process, as it led to increasing fragmentation of the labour processes on the scattered plots. But this tendency had to cope also with the necessary commercialization of production, incorporating both agricultural and 'domestic' industries. The combination of

these two tendencies called for expanded production. But what was crucial for expanded production was for the commune to attempt to maintain the market/subsistence balance. For example, for Clare Island, Co. Mayo, Whelan argues that, as the potato became the subsistence crop of the villagers, the oat crop was 'increasingly assigned to the market' (Whelan 1999: 81). This demarcation became so pronounced that the local island population eliminated oats from their diet to the extent that they became overdependent on the potato as their only source of subsistence.

The twin stresses of accommodating the rundale's increasing population and of the need to engage in commodity production put extreme pressure on the capacity of the existing means of production to produce sufficient products to meet these competing needs. In fact, these production demands for physical subsistence and commodity production were limiting the development of each other. With increasing population, more of the communal land would have to be given over to providing more of the physical means of subsistence. This eventually would limit the area of land for commodity production. But it is interesting to note that it could not happen the other way around, in that, if the area under commodity production grew to the detriment of the commune being able to provide sufficient subsistence for its members, existing and new, the whole *raison d'être* for this form of communal production would collapse i.e. the continuing maintenance of equality, if (and unfortunately when) the subsistence crop failed.

### *c) The Consequences of Restricted Land for Spatial Expansion on the Expanded Communal Reproduction Process*

Marx, in his discussion of the reproduction of the agrarian commune, made it clear that an increase in population in the context of maintaining equal possession of land among its members can become an obstacle to that process of reproduction. Equality for the new members cannot be achieved under the existing spatial conditions. 'If this (obstacle) is to be overcome, colonization will develop ...' (Marx 1964: 92). Here, the agrarian commune in question will need to expand spatially in order to provide the land required to maintain that share equality. With regard to the rundale, this necessary process of spatial colonization ideally meant establishing a new commune on unoccupied lands, with its own infield/outfield and clachan locations, which would halt the process of land parcellization. But in the Irish context, especially from the Plantations onwards, this seemingly necessary process of colonization was limited by the impositions of landlordism and their associated form of land tenure. As a consequence, the rundale communes were themselves colonized and many may have been pushed out of the fertile lands and onto the bogs and mountains by the landlords in search of increased rents.[34] Whelan gives an example of this type of external colonization of the rundale communes for the West of Ireland in the early part of the eighteenth century, as cattle grazers, through the power of the landlords, got their hands on the fertile rundale lands, by evicting the members. He quotes an account by Charles O'Hara of this instance of rundale farmers' removal from the limestone lowlands:

> By 1720, the demand for store cattle from the south had reached us (in Connacht) and the breeding business grew more profitable. Many villagers were turned off and the lands which they had occupied were stocked with cattle. Some of these village tenants took mountain farms but many more went away. About 1726, the graziers, encouraged by the markets, first raised the price of land in order to cant all the cottagers out of their farms. (Whelan 1999: 78, quoting from Charles O'Hara)

The implications of this expropriation of the rundale communes from the low-lying fertile lands may have been quite profound and impacted on them in various ways. Firstly, it limited their own ability to colonize, as the landlords grabbed a large proportion of the West of Ireland land for the grazing entrepreneurs. Secondly, being left with only bog and mountain to exist upon, the rundale communal members had no choice but to physically colonize these marginal lands. Thirdly, since they were being colonized, their essential need to colonize in order to maintain equality could only be met internally – within their own communal lands which they themselves controlled. And since the original arable infield is the essential hub of the established commune, and therefore could not be interfered with without undermining the social and material basis of the communal production, the only alternative left was for the agrarian community members to colonize their own 'waste land', in which they had traditionally 'booleyed' their livestock. Clachans, as the most visible indicator of the rundale system therefore, began to 'spring up' not only in old booley mountain locations but also on so-called compact farms where the original legal tenants were able to undermine the landlord's resistance to land subdivision by allowing a rundale commune to establish itself upon these previously enclosed tenant farms.[35]

In certain instances, the landlord attempted to maintain some sort of formal control over this clandestine development by issuing partnership leases to some of the rundale communal members. But, in reality, the landlords in this situation had lost control of access to their estates, and thereby the determination of accessibility had moved from the landlords to the agrarian communes. But this countertendency of the landlord class to maintain its colonial control over 'legally' held estates was very much determined by the power relationships between the landlords and the communes – between formal legal state processes and the customary landholding system of the rundale communities. And, crucially, this resistance to the full operation of landlordism on the part of the rundale commune was very much predicated on their respective overall processes of reproduction. A collapse or even a significant contraction in any one of these mediated processes of reproduction would not only weaken the commune but could spell disaster for the commune as the landlords, seeing a weakness in their ability to resist, pounced on them with the full power of the state legal and military apparatus. Consequently, the sustainability of the rundale system was not dependent upon one essential structure but was determined by a diverse unity of its reproduction processes. Not only had the commune

members to survive the vicissitudes of the market and the ever-present opportunism of the landlord class to enclose their communal lands, they also needed to sustain the fertility of their lands, which they physically subsisted upon. The land and its inherent ecological systems on which the rundale communes physically maintained themselves on had to be constantly reproduced.

## 10. The Socio-ecological Metabolism of the Rundale and its emerging Metabolic Rift

Marx has provided us not only with the complex theoretical tool of the mode of production which has allowed us to begin an exploration of the dynamics of the rundale communal system of production, but he also developed a conceptual framework which can help us to understand the role that the ecological system played in the reproduction of this particular agrarian system.36 According to John Bellamy Foster, the theoretical cornerstones of Marx's materialist understanding of society's ecological base were his concepts of the socio-ecological metabolism and the metabolic rift (Foster 1999). These 'ecological' concepts operated at a particular level within the overall workings of a mode of production. As part of this essential aspect of a mode of production, society directly engages with the forces of nature, in which there is a necessary exchange (or flow) of materials from nature to ourselves, and from ourselves back to nature. Marx used the concept of metabolism to capture this reciprocal exchange of materials between living entities such as ourselves and the natural environment. Crucially, this process of metabolism includes both the natural and social forms of exchange and this exchange takes place at the level of the labour process within a particular mode of production. Marx states this in the following with regard to how man engages with nature through this process of socio-ecological metabolism:

> Labour process ... regulates and controls the metabolism between himself [man] and nature. He confronts the materials of nature as a force of nature. He sets in motion the natural forces ... in order to appropriate the materials of nature in a form adapted to his needs. (Marx 1976: 283)

Therefore, the complex relationships expressed in the concept of socio-ecological metabolism are present in all modes of production, but take on a specific form depending on how they are embedded into a particular mode of production.

Marx, inspired by the work of the German agricultural chemist Von Liebig, developed the concept of metabolic rift to explain the situation when the socio-ecological metabolism becomes disrupted and the nutrients from the soil are not adequately replenished during the agricultural production process. The consequence of this ecological trend is that soil exhaustion emerges as the nutrients continue to be extracted from the soil. The decline in the natural fertility of the soil was due to the disruption of the soil nutrient cycle. As crops and animal products were being produced in agricultural fields, nutrients such as nitrogen, phosphorous and potassium were being 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 also removed and not replaced naturally. 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, which had to be replaced by human intervention or the conditions of reproduction in the soil structure would be permanently undermined. Secondly, the excretion of these nutrients in the urban environment tended to cause pollution in the local waterways (The River Thames in London in the nineteenth century, for example).

As we have discovered in our analysis of the expanded form of communal production, the rundale commune was engaging in commodity production, which saw agricultural products, such as various types of livestock and crops, thrown onto the market. These rundale agricultural commodities with their embedded nutrients were similarly searching for exchange value as capitalist commodities and subsequently entered into the diverse circuits of commodity exchange in this global market context. And, like capitalist agricultural products, their nutrients were forever lost to the local rundale eco-system that helped produce them. In this context, it is likely that the local ecosystems of the rundale communes suffered a similar disruption of their nutrient cycle – a metabolic rift.

### *a) Balancing Livestock with Crops as a way of maintaining an uninterrupted Flow of Nutrients: a 'leaky' Ecological Solution to the Metabolic Rift within Simple Communal Production*

O'Sullivan and Downey provide a good summary of what was seemingly required to maintain the ecological sustainability of the rundale system of farming:

> The sustainability of rundale farming required the effective integration of the crop and tillage dimensions of the system. In particular, a dynamic ecological equilibrium had to be maintained between livestock-carrying capacity ... and the optimization of crop production. (O'Sullivan and Downey 2008: 23)

And, as we have discovered in our discussion of the simple form of communal production, the arable infield was permanently cultivated and never rested to allow it to restore at least some of its fertility naturally. This endemic metabolic rift was determined not solely by overcropping but also by use of a poor crop rotation system, which did not allow any possibility of the soil restoring fertility by the application of nutrient replacing crops such as red clover or peas, etc. The exclusion of 'green crops' from the rundale crop rotation system meant that white crop rotation dominated the arable infield, which in itself can lead to soil exhaustion. Continuous white crop rotation without fallowing meant that the arable infield could not avoid the emergence of the metabolic rift and its physical manifestation in soil exhaustion. The following Ordnance Survey report from Donegal, where rundale was prevalent, testifies to the determining effects of metabolic rift on local agriculture:

> Rotation of crops is badly attended upon here. After they raise their crops of barley, they sow corn after corn, until their land is exhausted before they begin to potato it. (*Ordnance Survey Memoirs*, 1835, Parish of Donagh)

So, in this context, the only means through which the soil could be replenished of its 'lost' nutrients was if the rundale members, either collectively or individually, came up with a strategy which 'sourced' the required nutrients from the non-arable lands of the commune. And, since no artificial fertilizer existed at this time, any attempt at maintaining the fertility of the infield 'was fundamentally dependent upon the availability of animal manure, its single most important nutrient component' (Whelan 1997). Therefore, livestock, especially cattle, performed contradictory roles with regard to the metabolic rift in the rundale system of farming. As potential commodities, the nutrients that they absorbed into their own metabolic system, which became physically part of that system, were to be permanently lost when they were moved off the communal land and sold to cattle buyers. Thus, they were part of the rundale's metabolic rift – a rift in the nutrient cycle of the communal pasture lands. However, while roaming and grazing on the communal pasture lands and even on the winter stubble of the arable infield, they were 'harvesting' the soil's nutrients, which had been metabolized in the natural grasses and flora of the meadow ecosystem. In processing these nutrients through their digestive system, they were not just 'deconstructing' the concrete plant forms of the nutrients but simultaneously concentrating these released nutrients into a more socially useable form of animal manure. In this last stage of the animal phase of the socio-ecological metabolism, the nutrients pass through the body of the beast to finally emerge in a concrete form that can be used by society. Within the animal phase of the metamorphosis, the nutrients get transformed into a transportable form, and in this form they move from their original soil location. When the excrement leaves the body of the animal, it provides the material conditions for the 'socio' to be reunited with the 'ecological' in this constant metabolic movement of nutrients. But in this stage, society becomes the necessary conduit, as the excrement is gathered up to be later put back into the soil. In the case of the rundale, this transfer of nutrients occurs between the communal pastures of the outfield and commonage (including the infield stubble during the winter months) to the individual arable plots of the infield. But, in order to facilitate the accumulation of animal manure, the livestock of the commune were penned in various kinds of spatial locations for short periods of time. The most dramatic example of this was the keeping of livestock, especially milking cows, during the winter nights within the houses of the clachan. At one end of the house the livestock were penned in by a low partition wall, where they had a littering of straw (Collins 2008: 302). The dung was brought out of the house and piled into individual dung-heaps near the door of the clachan house. Evans has even suggested that the lay-out and location of the clachan on the side of a hill was planned in order to facilitate the movement of the manure downhill and into the infield.[37] Another location for the accumulation of useable excrement was when the livestock were moved to their summer booleying grounds on the common mountains. In the evenings, the cows were brought down to a rectangular enclosure beside the booley huts for milking and were kept in over night (Bell 2008: 53). Again this facilitated the construction of a dung 'hill'. The removal of the manure from the stockpiling locations was 'almost entirely the work of the female members of the families' and it was 'conveyed in baskets on women's backs' (Robertson 2007: 244). With increasing parcellization of the land into smaller individual plots and the subsequent scattering of these plots throughout the infield (Marx, cited in Shanin 1983: 122), the work of transporting the dung became more physically demanding as it had to be brought to more and more locations within the infield.

Within the infield, the manure was brought to the lazy beds which were being prepared for the potato crop. This was so because the potato crop was the only crop manured in the white crop rotation. The manure was then selectively placed on the potato lazy beds as the following testifies:

> He does not spread the manure under the seed, but ribs or prabbrias them. Ribbing is done two ways. The first method was to make a hole in the ground with a stick made for the purpose and drop the seed in it. But a better way is found out – the man digs five shallow marks with a spade in which the dropper deposits the seed, he then digs five more and throws the clay off the spade on the seed already dropped, and so till the Dale is finished. When the fibres of the seed shoot forth [which could not extend so well otherwise] the manure is spread as thin as possible, set sightly dressed, dressed neatly, and by the shovelling heavily a good crop is expected. Some neither set nor rib but prabbin their potatoes. (*Ordnance Survey Memoirs*, 1835, Parish of Donegal, Co. Donegal: 5)

The implication of this selective application of the manure to the lazy beds in the arable infield suggests that the manuring process was inadequate to overcome the loss of nutrients from the tilled soil and thereby unable to repair the damage done to the nutrient recycling process by the metabolic rift. More nutrients apparently leaked from the ecological system than were replaced by the rundale members and this was manifested in the continuing decline in the fertility of the soil. One possible solution to the metabolic rift was to find more nutrients from other sources than the communal livestock – other non-animal fertilizers. But it must be pointed out at this stage in the analysis that, with the continuing presence of the metabolic rift (even after animal manure was used to counteract its effect), the amount of crop production had to keep pace with the population structure of the commune and its necessary financial requirements. The consequence of this is that the arable infield had to logically expand outwards in order to take in new spatial areas that were not as depleted of the soil nutrients as the original infield. The problem was, however, that the new arable plots were on old communal pasturing grounds.

### *b) Enclosing the Outfield as the Final Attempt to thwart the Metabolic Rift under the Expanded Communal Production*

The direct producers attempted to counteract the natural tendency of white crop production to exhaust the land by using a diverse range of natural fertilizers with the potato crop, such as marl, lime, burnt sod, peat, mud, sea-sand and shells and bones (Collins, 2008: xv). Of course, cattle manure is constantly used when available and, near the seashore, seaweed was the commonly used form of manure.[38] However, the ability of manure to recuperate the soil's condition from the effects of the metabolic rift depended not just on an adequate availability but also on the quality of the nutrients 'gathered', and the 'harvesting' of the nutrients was determined by the amount of livestock that the commune had. But, with the growth in the commune's population and the subsequent need to expand arable production for subsistence, the demand for manure increased accordingly. But the supply of dung manure was itself limited by the expansion of the area given over to arable production, since the arable area had to encroach on pasture land; the amount of stock, particularly cattle, had to be restricted accordingly. Therefore, as the demand for manure increased with the expansion of arable, its supply was reduced proportionately. McCourt identifies this problem and the measures taken to overcome it:

> ... less grazing also meant fewer stock could be kept, thereby reducing the quantity of manure at a time when an increase was necessary to sustain corn yields on the infield where diminishing shares, because of increased population, were expected to produce an expanding cash crop. Two short-term measures helped to postpone the crisis. Enclosed pasture was provided on the outfield; and the intensive application of shell-sand, seaweed and, in some areas like Lecale, marl, allowed continuous cropping of the infield to continue, albeit not indefinitely'. (McCourt 1981:125)

The important general conclusion to be reached from our examination of these tendencies was that the manuring process of the rundale system was totally inadequate in preventing the ever-diminishing crop returns due to soil exhaustion. In fact, the failure of the manuring process to revitalize the soil caused even further expansion of the arable cultivation over the pasture, as the commune tried to make up declining yields through further colonization of the commune's own pasture lands, even encroaching on the communal bog and mountain commonage. These newly-reclaimed arable areas produced higher crop yields:

> There were three large tracks of reclaimed bog, quite flat without any fences which produce superior crops. (*Ordnance Survey Memoirs*, 1834 Parish of Clonmany Co. Donegal: 25)

Initially these arable plots were allocated according to the amount of collops or sums held in the original infield, but later these plots were given over to individuals on a permanent basis (Buchanan 1973: 595) and probably enclosed on a permanent basis. Consequently, reclamation of land for arable production for expanded reproduction meant that the commune had only two possibilities, as Buchanan stated:

> But reclamation of land for cropping led to curtailment of grazing, and a reduction in the number of livestock meant less manure for the infield when animals grazed the stubble. Livestock numbers could be maintained if alternative winter fodder was available and root crops were an obvious solution, used in combination with a green fallow, which in turn would help maintain the fertility of the infield. If this was adopted, however, livestock would have to be denied access to the infield in winter. There were two possibilities: to provide enclosed pasture for the livestock or to enclose the infield strips. The former was often achieved by enclosing the individually owned plots on the outfield, or on the edge of the common grazing; but the latter required common agreement since it denied rights of common grazing. This was impossible to achieve where changedale was practised, and it became increasingly difficult as subdivision progressed. (Buchanan 1973: 595–596)

It is interesting to note that there was greater flexibility in the outfield to allow for the development of individualized landholding than in the arable infield. These newly-enclosed fields were thereby capable of overcoming the declining productiveness of the arable production under the rundale system. But this measure came at a price, in the sense that these new cuts allowed for a greater individualization of communal production. Therefore, this practical solution to declining soil fertility was the beginning of the gradual process of disintegration of this form of communality within the pasture lands of commune. This final process began on the fringes of the rundale system rather than in the essential core of the system – the arable infield. The reason for this was that root crops and artificial grasses not only needed to be physically enclosed, they were also winter-sown crops. This could not be done if the rundale commune wanted to maintain its communality within the arable infield. McCourt sees the consequences of such alternatives:

> In such circumstances, the ultimate solution lay with the 'new husbandry' – the introduction into the rotation of root crops and green fallow, usually clover, which provided alternative fodder in winter and summer, and enhanced soil fertility. However, being winter crops, the stubbles could no longer be thrown open to the stock after harvest in the traditional way. The alternative was to consolidate and enclose the infield, creating compact holdings more attuned to the production of a commercial surplus. (McCourt 1981: 25)

The inability of green fallow to integrate itself into the arable infield was not just determined by the communality of changedale, but also by the customary time restraints of booleying. The booleying of livestock from the infield to the mountain pastures and back again was the determining factor in the timing of sowing and harvesting of the arable crops. There was a dramatic strategy that the rundale commune could take in order to overcome the problem of booleying and crop production. This was to enclose some of the outfield and mountain pastures so that the commune could grow winter-sown potatoes and wheat, which seems to have happened in West Ulster (McCourt 1981: 125), leaving

the infield to oats and barley. And it was only a matter of time when the infield would be enclosed, leaving the only remnants of communal land to be mountain commonage and bog. The rundale agrarian commune had now become a patch-work of small enclosed fields which existed beyond the clachan. And becoming such a spatial entity meant that the process of individuality had finally ousted communal property relationship from the infield and the outfield and banished it to the areas of commonage. This all came about because of the inability of the rundale commune to deal with its metabolic rift.

However, the enclosure of the communal pasture lands and the subsequent triumph of individualism over communality were rarely achieved by the communal members themselves, through this process of internal colonialization. What mostly occurred was that the landlords, seeing a very visible decline in the fortunes of the rundale communes, took the opportunity to take back their control of the rundale lands and subsume the members under a rental regime. The Great Famine provided the ideal opportunity for the landlords to send in the crowbar brigade, which Marx dramatically expressed in a headline taken from a Galway newspaper of 1852: 'The sun that rose on a village sets on a desert'. This recolonizing of their rundale landed estates through enclosure by the landlord class is therefore about external stresses on the rundale system and how that communal system was subsumed under a feudal mode of production (Slater and McDonough 1994). We have only concentrated on the internal stresses, in order to address the essential dynamics of the rundale agrarian commune. The external stresses are about the co-existence of the rundale agrarian commune with other modes of production and that is another story!

## 11. Conclusion: The significance of socio-ecological metabolic system

What we have attempted to uncover in this essay were the internal tendencies and laws of development of the rundale agrarian commune. In this pursuit we discovered that the system of production was very much prone at the ecological level to soil exhaustion. With Marx's concept of the primitive communist mode of production we were able to account for the emergence in Ireland of a particular socio-ecological metabolism which created a metabolic rift in the agricultural ecosystem of the rundale agrarian commune. And the specific characteristics of this rundale socio-ecological metabolism were the increasing penetration of individualism over the various communal aspects of the rundale system. This itself was 'fueled' by the inability of the commune to cope with its own population growth. These levels of determination formed a complex unity, which we needed to unravel in order to discover the internal dynamics of the rundale agrarian commune.

What we believe is significant in the Marxist approach is how the material form of an object metabolizes with the social and natural forms and their respective processes in which the immediate forms are mere moments in a constant state of flux. An agricultural product is not just a physical amalgamation of nutrients it also possesses diverse social forms which can be valorized under various social conditions. For example, an agricultural product can realize itself as a commodity with exchange value in the market place. But that same money form of the agricultural product can be partly used to purchase seed or pay the rent, or even provide a donation to the priest. Accordingly, the exchange form of the original product becomes a moment in the social processes of the rental system, the circulation process of circulating and fixed capitals and the social costs of reproduction. The same physical object simultaneously performs functions for the natural ecosystem and the social processes of production. Crucially the material object of the agricultural product acts as a conduit for the natural and social processes that not only pass through the physical entity but also structure that entity in their metabolizing movements. For example, a potato, if left to natural evolutionary propensities, as a moment in the natural ecosystem, will eventually rot and return its nutrients to the soil. But, when the same potato is metabolized as a mere moment of a social process, it is destined to be physically appropriated by society either as a commodity or a means of human subsistence, and its departure from its immediate ecosystem will create a rift in the soil nutrient cycle – a metabolic rift. In this context crop production under whatever agricultural system will give rise to a metabolic rift with regard to the original ecosystem that 'produced' the crop as it is removed from that ecosystem. Therefore, the concept of metabolic rift is very much part of the natural ecosystem, although it is a disruption in the flow of the ecosystem's nutrients. But, crucially, what determines this metabolic rift in the natural nutrient cycle is the specific social form in which our potato is embedded. For example, if the potato is to be a commodity, its respective nutrients will be lost forever as it gets traded to far-off locations through a market system. However, if it is destined to be consumed locally as a means of subsistence, its encased nutrients may make it back into its ecosystem of origin. But this depends on the manuring practices carried out by the crop cultivators. If the human excrement is actually collected and reapplied to the depleted original ecosystem, then the metabolic rift is overcome. But, in reality, nutrients 'harvested' from other soil locations is more likely to happen as we discovered when the grazing cattle of the rundale commune were gathering nutrients while grazing from the communal pasture lands and the individual families were spreading them as manure onto their respective tillage plots of the infield. Consequently, it is the socio-ecological metabolic process rather than the metabolic rift that becomes the more significant determination in the overall flow of nutrients out of and into the ecosystem of the farmed lands. It is the specific social conditions under which the direct cultivators work in their labour processes that determine the flow of nutrients. The metabolic rift is therefore a mere consequence of the socio-ecological practices performed by the agricultural producers which are themselves determined by the specific mode of production under which these producers are working. The socio-ecological metabolism of the mode of production becomes the essential concept of analysis through which we can explore further our societal relationship with nature. And Marx's legacy to us of the twenty-first century is that he has provided us with the necessary roadmap to continue such a vital intellectual exploration.

## Notes

[1] Dunlap (1980) coined the term 'human exemptionalism' to describe this academic trend.

[2] See also Benton, 1996, and Foster, 1999.

[3] 'Queen's School', in this sense, refers broadly to subsequent (mainly doctoral) graduates of the Queen's Institute of Irish Studies, whose work constitutes the most comprehensive body of collated knowledge on the rundale system to date. For a complete bibliography of McCourt, see Thomas 1986: 19–21 ('A bibliography of the writings of Desmond McCourt'). For a complete bibliography of Estyn Evans, see Buchanan et al 1971: 264–276 ('A bibliography of the writings of E. Estyn Evans').

[4] Doherty's comments give an interesting insight into the theoretical underpinnings of early twentieth- century Irish historical scholarship, most notably the broad 'Darwinian assumptions of unilinear development' occluding the possibility of nucleation in early Irish settlement patterns (Doherty 1999: 56).

[5] According to Evans,

> There is no incontrovertible evidence for the existence of the single-farm system in pre-Celtic Ireland, but both literary and archaeological evidence shows that the raths, cashels and crannogs of the Gaels were the isolated homes of chieftains and freemen. Where then did the peasantry live? Neither history nor archaeology furnishes us with much evidence, but working back from the recent past, we can say that the traditional unit of settlement accompanying rundale or infield/outfield system ... was the hamlet or kin-cluster. Both clustered settlement and some kind of infield/outfield agriculture have their historical parallels in Highland Celtic Britain, and these cultural traits have accordingly been labelled Celtic ... (Evans 1992: 53)

[6] Andrews points out the distinctions between Evans's approach and that of the broader established tradition of Historical Geography. His situating anthropogeographic generalization against historical-geographical specialism allows us to glimpse something of the broader paradigmatic debates occurring in geography throughout the 1970s. Notwithstanding, the implications of Evans's work are of a relatively static and unchanging society of Celtic descent, 'who live in clustered kin groups and practise something analogous to rundale cultivation, remaining largely unchanged until 18th century market influences begin to undermine the peasant economy' (Andrews 1974: 1).

[7] The 'peasant model' that emerged from Evans's work faced subsequent criticism in the context of T. Jones Hughes's writings on the diversity of pre-famine Irish class structure:

> The peasant scenario elided class differences by ignoring the intense social stratification of pre-Famine Irish life ... [Jones-Hughes] established (long before it became fashionable among historians) that pre-Famine Ireland was not an undifferentiated mass of unrelieved poverty and that class, itself determined by broader economic forces, was the key to understanding Irish settlement history in the post-seventeenth-century period. (T. Jones-Hughes, cited in Whelan 1999: 188)

Kevin Whelan has attempted to overcome the reductionist models of Irish society as expounded by authors such as Evans, developing a pluralist schema of regional archetypes to overcome the epistemological limitations of earlier work – the 'deceptive homogeneity' – and, in relation to the archetype of the small farm, he locates the emergence of rundale clearly within a context of functional adaptation (Whelan 1999: 190 and Whelan 1995: 24).

[8] Gibbons has placed similar emphasis:

> Concern for others in extreme situations was not discretionary, a matter of private charity or philanthropy, but was part of the underlying connective tissue of society. So far from being obsolete in Ireland, moreover, these sentiments formed the basis of the moral economy of the countryside as exemplified by the communalism of the 'Rundale' system in Irish agriculture, and the close webs of affiliation through which rural townlands wove their identities. (Gibbons 1997: 253)

[9] The extent to which Evans idealized peasant society has been questioned by Crossman and McLoughlin (1994: 90)

[10] The debate itself began (and featured prominently in the later works of McCourt) over the accuracy of Seebohm's, and later Meitzen's emphasis of the Einzelhof pattern of settlement across Ireland as a seventh-century Celtic continuity, to the exclusion of clustered settlement (McCourt 1971: 127). Subsequent studies and critiques of approaches to the rundale have relied heavily on limiting spatial arguments (Graham 1994: 194).

[11] See Doherty (1999: 55–56) and Whelan (1999: 187–188) for a criticism of Evans's theoretical formulations on peasant society. See Jones-Hughes, 'Society and Settlement' (cited in Whelan 1999: 188) for a development of the diversity of class structure; see Graham (1994) for a discussion of the political context of Evans's writings; see Crossman and McLoughlin (1994: 80) and Graham (1994) for comments on Evans's noted avoidance of political, religious and class dimensions.

[12] Dated February/March, 1881 (Shanin 1983: 117).

[13] The problem of interpreting what Marx is attempting to express in the drafts is compounded by his continually eliding the concrete level of analysis with a more abstract level of analysis – the two forms of dualism is an example of this practice.

[14] Adjectives applied by Marx across various moments of the social relationships of production. Italics indicate our proposed opposing concept where Marx did not specify one in his original draft.

Property element.....collective element
Individual labour.....collective labour
Petty/small plot cultivation.....communal cultivation
Individual possession.....collective possession
Fragmented labour.....co-operative and combined/collective labour
Personal usufruct.....communal usufruct
Private property.....communal/common/social property
Private appropriation.....collective appropriation
Private land.....communal land
Private ownership.....communal/common ownership
Personal labour.....collective labour
Movable property.....fixed property
Privately owned house.....communal house
Fragmented tillage/agriculture.....large-scale agriculture
Individualist – agriculture.....collective agriculture
Individually owned.....jointly-owned

Augmented labour .....co-operative labour
Individual production.....collective production
Individual trading.....communal trading
Scattered means of production.....socially concentrated means of production.

[15] Marx stated this in the following way: 'The history of the decline of the primitive communities has to be written (it would be wrong to put them all on the same plane); in historical as in geological formations, there is a whole series of primary, secondary, tertiary and other types' (Marx, cited in Shanin 1983: 107, footnote C).

[16] See Cain and Hunt (eds), 1979.

[17] See Head, 2008: 32.

[18] See Anderson (2007) for comments on Irish manuscript material written by Marx and Engels during the 1860s.

[19] 'Among the Celts, Germans and Slavs community ownership can still be traced historically, and among the Slavs, Germans and also the Celts (rundale) it still exists even in the form of direct (Russia) or indirect (Ireland) feudal bondage' (F. Engels, 1878 – Engels's preparatory writings for Anti-Duhring. p. 481). 'Rundale holdings in part of Ireland, now the most common form, arable land held in severalty, (This describes the thing wrongly) [sic], while pasture and bog are in common. But only fifty years ago, cases were frequent in which the arable land was divided in farms which shifted among the tenant-families periodically, and sometimes annually.' (ibid.) Marx makes reference to the rundale by commenting on Maine's poor conceptualization of its essential structure:

According to Maine,

> 'the Irish holdings "in rundale" are not forms of property, but modes of appropriation'. But the lad [sic] himself remarks: 'archaic kinds of tenancy are constantly evidence of ancient forms of proprietorship ... Superior ownership arises through purchase from small allodial proprietors, through colonization of village waste-lands become in time the lord's waste, or (in an earlier stage) through the sinking of whole communities of peasants into villeinage, and through a consequent transformation of the legal theory of their rights. But even when a chief or lord has come to be recognized as legal owner of the whole tribal domain, or great portions of it, the accustomed methods of occupation and cultivation are not altered. (Marx 1881: 5)

[20] Marx refers to this trend in the following way:

> Where property exists only as communal property, the individual member as such is only the possessor of a particular part of it, hereditary or not, for any fraction of property belongs to no member for himself, but only as the direct part of the community, consequently as someone in direct unity with the community and not as distinct from it. The individual is therefore only a possessor. What exists is only communal property and private possession. (Marx 1964: 75)

[21] Writing of Tory Island, Fox describes the presence of equal opportunity to access the communal land in the following way:

> Every child of a landholder has a right to a portion of his or her land, no matter what happens to the land, all the heirs retain a claim to it ... But that every heir has a right, and can make a claim, does not mean that every heir gets a portion. Some will, some will not. Some will press their claims and be denied, others simply will not press them at all. But, in the end, every household will end up with some land ... (Fox 1979: 99)

[22] In Béaloideas, the Irish Folklore Journal, Seamus Ó Duilearga stated the following:

> The principle of rundale was that each legitimate participant in the division should get not an equal amount of land in superficial extent, but an equal amount in value. If the farm lay on a hillside, each person in the division got some of the good land below and some of the poor land high up the hill. (Ó Duilearga 1939: 290)

[23] In Mayo, this cow's grass was called a collop and in Ulster it was known as a sum. These 'units' would be broken down further where a sum equals three parts of a horse, four sheep, eight goats or twenty geese. (Evans 1967: 36)

[24] In one of his letter drafts to Vera Zasulich, Marx stated this tendency in the following way with regard to the communal arable ground:

> The members, without studying the theory of ground-rent, realized that the same amount of labour expended upon fields with a different natural fertility and location would produce different yields. In order to [secure the same economic benefits and] equalize the chances of labour, they therefore divided the land into a number of areas according to natural and economic variations, and then subdivided these areas into as many plots as there were tillers. Finally, everyone received a patch of land in each area. (Marx, cited in Shanin 1983: 122)

[25] Knight's original footnote.

[26] See Mac Cnáimhsí 1970: 83 for how fighting acted as a bar to improvement through disputes over lot quality.

[27] See Uhlig 1961 for a discussion of the agricultural commune in Western and Central European context. See in particular Uhlig (1961: 291–293) for a discussion of the 'The clachans of Ireland' with comparisons to the Germanic form.

[28] Evans invokes the term 'clachan' to differentiate functional settlement (defined as former nuclei of townlands, containing services such as shops and inns) from those associated with rundale:

> Here and there, especially in the west, we see little 'clusters' 'onsets' or 'clachans' of peasant houses, a dozen or so together ... the houses were clustered without plan or order (and never strung together end-to-end) generally in some sheltered hollow in the richest part of the townland ... the village had neither shop nor inn, and required little besides salt and iron from the market town. These self-sufficing communities were held together by blood ties and by the exchange of services under the Irish open-field or 'rundale' system of cultivation. (Evans 1967: 47–50)

[29] The following report of the Ordnance Survey for Co. Donegal confirms the lack of fencing, under the Rundale system:

> There are large districts totally unenclosed ... cattle during the winter being permitted to roam at large, destroying the wretched fences now in use, they must be consequently made a new each successive spring. (Ordnance Survey Memoirs, Parish of Iniskeel, Co. Donegal, Royal Irish Academy, Box 21, ms, p.5)

[30] Ordnance Survey Memoirs, Parish of Desertagney, Co. Donegal, Royal Irish Academy, Box 21, mss: 9–10.

[31] Marx identified the financial guns that pounded the walls of the Russian agrarian commune with the following question:

> How can the commune resist, pounded by state exactions, plundered by trade, exploited by landowners, and undermined from within by usury! (Marx, cited in Shanin 1983).

Similar guns had the rundale communes in their sights. Nixon, for example, attempted to impose poor law tariffs upon his tenants, despite their valuations falling below the £4 threshold (Mac Cnáimhsí, 1970: 193). The practice of 'taxing' rundale sub-tenants through increasing rates in accordance with agricultural prices is noted by Cunningham (1981: 30).

[32] The mere existence of the rent payments between the rundale commune and the landlord, coupled with payments for governmental taxation such as county cess and poor law, and church tithes would be sufficient in itself to force the rundale commune into commodity production. But, the commune had also to pay a certain amount to cover production costs such as seeds, spades and milking equipment, and like everyone in Ireland at the time they had social costs – marriages, church dues, dress and when necessary purchased food. Although the rundale village lacked elements of a real village, such as an inn and shops, this does not suggest that they did not buy and sell commodities. Evans suggests the following:

> Itinerant 'tinkers and tailors' paid periodic visits and with the peddlers and beggars brought news of other districts, but the economic and social needs of the hamlet were met by periodic visits to the fairs and by seasonal gatherings of various kinds. (Evans 1979: 31)

[33] Knight (1836) also remarked on the extent of illicit distillation in Erris.

[34] Such enclosures on the Nixon and Leitrim estates in Donegal, and the resultant stress placed upon the rundale has been discussed by Mac Cnáimhsí (1970) and Mac Aoidh (1990).

[35] See McCourt: 'Even when it is evident that fragmentation had occurred through the subdivision of an original group of two, three contiguous farms, these in the beginning were also often held in severalty' (McCourt 1971: 131). See also Currie on the various circumstances through which rundale emerged in Derry: '... (iii) the need for co-operation in clearing, enclosing and draining land which would have been beyond the technical and financial capacity of the individual tenant, despite the fact that contemporary leases lay the responsibility for such work on the lessee and not the landlord; (iv) the abundance of marginal land especially mountain, bog, and natural meadow which was 'conducive to exploitation by the communal methods of rundale' (Currie 1986: 100).

[36] Downes and Downey explore the concept and dynamics of 'systems' in detail (see Downes and Downey 2009).

[37] Evans even suggested that:

> The Irish clachan was often placed at the infertile apex of a deltaic fan, the slope facilitating the washing and carrying-down of the accumulated manure, human as well as animal. (It is an interesting detail that for this purpose the women went with the cows and the men with the horses). (Evans 1956: 299)

[38] However, it should be stressed that, although the use of seaweed as a fertilizer was extremely beneficial to the potato crop, it had detrimental effects on other crops, as the following quotation from the Ordnance Survey Reports from Donegal suggests:

> Their land they say does not answer for oats and flax, and this defect they attribute to the constant use of sea manure. (Ordnance Survey Memoirs, 1835, Parish of Clondavaddog, Co. Donegal).

# Responses

## Ted Benton

As an outsider to the literature on the Irish rundale community, I found this piece of great interest for two main reasons. One is the straight-forward one, that it provides a really fascinating analysis of the structure and dynamics of this distinctive form of social organization. But is has a wider, conceptual importance, in putting to the test recent re-workings (or, for some, re-readings) of the historical materialist legacy. These have been prompted by the urgency of our contemporary ecological predicament, and they have involved both recovery of neglected work by Marx and Engels, as well as work of theoretical reconstruction within the tradition. Even so, this newer work has tended to focus almost exclusively on the ecological problems of modern capitalist societies. This essay draws on the ecological re-workings of the materialist tradition, but uses them creatively – and successfully – to understand the internal tensions and dynamics of a non-capitalist social formation.

As Slater and Flaherty point out, the concept of 'mode of production' is a quite central starting point for analysing what Marx called the 'metabolism' of forms of human social life with the rest of nature. This concept includes both the forms of social relationship through which productive activity in relation to nature is conducted and the substantive interactions between human labour thus organized, and the naturally given conditions, means and materials employed. The concept enables transcendence of the 'nature/ society' dualism that has limited the ability of both natural and social scientists to provide fully integrated accounts of human socio-ecology. At the same time it avoids over-generalized approaches to the relation between 'humans and nature' that see ecological problems as resulting from 'greed', 'growth', 'hierarchy' or 'technological development' in the abstract. The different modes of production can be seen as so many qualitatively different ways in which human labour is divided and combined with the rest of nature in meeting individual and social need.

In the case of the rundale analysed here, the division of labour between different activities is combined with a normative framework defining and allocating occupation of dwelling space and the spatial distribution of different sorts of agricultural and other activities. As the analysis shows, this pattern of normative regulation of activity served both to reproduce the members of the community as such, while also maintaining a sustainable 'metabolism' between their need-meeting activity and what ecologists might call the 'carrying capacity' of the land and local environment.

The authors go on to employ an important concept – 'metabolic rift' – to characterise a process whereby these norms progressively fail to secure the reproduction of the conditions (especially soil fertility) for continuance of the system. In their account, the shift from a mainly local subsistence economy toward increasing production of commodities and integration into wider markets played an important part in this.

This analysis is innovative in, so far as I know, extending the explanatory role of the idea of metabolic rift beyond the topic of specifically capitalist agriculture. But the analysis also indicates an internal tension in the rundale prior to the penetration of market relations. This appears to have been the problem of accommodating population growth within the limits determined by the available productive land and the division within it between arable cultivation and stock-grazing. Here, yet another of the socio-ecological concepts developed in recent historical materialist thought might have some application. This is the concept of a 'second contradiction' developed especially by the US scholar James O'Connor. Again, this was initially devised to enable analysis of the ecological dynamics of capitalism, but some revised version of it could offer insights here. If land is conceptualized as a 'condition of production' (rather than, as in this paper, a 'means of production') then the ecological consequences of population growth even while the rundale was primarily as subsistence economy could be seen as exemplifying a contradiction between the mode of production and its conditions.

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## Martin Downes

What follows is a speculative commentary on what evolutionary biology and agricultural science might offer as factors in the development, continuance and decline of communal farming, especially the rundale systems discussed by Slater and Flaherty.

It is remarkable and probably very significant that the farming arrangements broadly recognized as rundale seem to have been present mostly in, or at least survived longer in, agriculturally marginal regions. So let us focus on marginal regions and carry out a thought experiment: imagine a valley with some amount of arable land on the valley floor and less-than-arable land on the valley sides where some grazing of livestock is possible. This is fairly representative of parts of agriculturally marginal Ireland. Even if we start with a single farming family occupying such a valley in the pre-industrial past, the inevitable multiplication of kin units (families), or in-migrating people, all needing access to the better (tillage) land, will lead to several households exploiting the scarce arable valley floor. At this point, the question becomes one of cooperation or competition. Crudely, each kin unit asks 'Are we better off cooperating (commonality) with the others or acting independently (individualism) of them?' In a better biological form the same question appears for each person as 'Which arrangement accommodates best my genetic tendency towards leaving more copies of my genes in the breeding offspring of future generations?' (Note that this is not quite the same as asking how many breeding offspring I have myself, because my genes are also passed on, though not as powerfully, through my relatives, notably through my brothers and sisters.) Evolutionary biology suggests that the tendency to leave more copies of one's genes has to have been universal and persistent in our ancestors. It also suggests that the copies passed on will have included genes for flexibility in how to achieve yet further breeding success, in the varied conditions encountered by successive generations. A tendency to cooperate may be expected to be expressed as long as neighbours are kin and as long as cooperation seems best for the breeding success of those carrying most shared genes.

However, as generations pass, the kin groups in our imaginary valley will become ever-more distantly related, and further, quite unrelated immigrants are likely to arrive. In that situation, and as a means of sequestering scarce resource for one's close kin group, some kind of preferential access to the scarce arable land is likely to be sought, especially by those who would gain most from it, perhaps those having largest kin groups. This preferential access may be in the form of private property or of increased access to arable arising from increases in one's cattle herd. (The latter seems to have been a common feature of rundale, at least in the later forms of it, of which we know most.) In any case, we see that evolutionary biology suggests that the likelihood of commonality should decrease with falling relatedness, in agriculturally marginal areas. Of course resource acquisition is never the whole of life's challenge for any species, and so this underlying tendency to lose communality with relatedness may be weakened by such things as stringent need for cooperation in projects of high labour requirement or in political or military defence. In other words the tendency to lose communality may be offset at times by particular needs to maintain manpower and social capital that reduce the risk of compromised reproduction.

The communal approach to land usage in rundale has received a great deal of attention; the private ownership of livestock is less mentioned. Yet livestock was a kind of key to both high tillage yields and the proportion of scarce tillage area to which the owner might claim access, in agriculturally marginal areas. Good quality arable mineral soils in more favoured parts of Ireland can produce very moderate yields under continuous cultivation and without farm manures or artificial fertilisers. This is borne out by experience with conventional continuous cropping of cereals in Ireland, where (by the application of the three major nutrients nitrogen, potassium and phosphorous, typically in short supply) it is clear that good Irish mineral soils provide enough minor plant nutrients and adequate soil structure for repeated, enormous, cereal yields. It is borne out too by the results from very long-term continuous cereal experiments on English mineral soils where wheat yields of about a tonne per hectare are common without any added nutrients at all. This is not a high yield, but it would have been acceptable enough in the past in those areas where farms and arable areas were larger, as in Irish regions of better land. Farming in marginal areas has to have been a very different matter.

In marginal areas, farms were small and land suitable for tillage very scarce. Turning to the example of our imagined valley again, it is clear that since tillage land is very scarce it is important to achieve high yields from what there is. This is so despite both the land itself and the climate often being quite poor. In those circumstances, farmyard manure is very necessary if high yields under continuous cultivation are to be obtained. That is what made livestock such an important element in rundale. And apparently, their owners had an entitlement to that amount of tillage land for which they provided

manure. If this system of retaining the fertile land for tillage crops worked properly, the cattle must have been grazed mainly outside of the arable area (the infield), in the outfield or commonage. Manure from the animals would have to have been collected, perhaps when cows were housed on straw or other bedding, between evening milking and morning milking. The farmyard manure replaced the mineral nutrients that had been removed from the arable land in crops consumed elsewhere. Otherwise, those rather poor soils would have become poorer still. Crop rotation is often thought of as necessarily including taking land out of tillage for some period in the cycle. This was convenient in larger farms on better land where tillage could be moved around most, or all, of the farm. It was less easy in small farms with only a small proportion of tillable land. But after the spread of potato-growing it became possible to devote portion of tillage land each year to this non-cereal crop. This meant that it was possible to have rotation of crops while keeping all the tillable land in continuous tillage. That practice would have reduced year-to-year carry-over of crop pathogens and improved soil fertility. Potatoes would have responded well to high levels of nutrition, and the way in which they were grown would have facilitated the heavy application of farmyard manure. This, coupled with the fact that the improved soil fertility following potatoes would be expected to improve cereal crops in succeeding years, possibly explains the observation that: 'Rotation of crops is badly attended here. After they raise their crops of barley, they sow after corn, until their land is exhausted before they begin to potato it' (Ordnance Survey Memoirs, 1835, Parish of Donagh, quoted in Slater and Flaherty). Perhaps these farmers were delivering most of their limited supply of farmyard manure at that point in the crop rotation where it gave the best food-crop response.

Despite all this, we are oddly confused about the availability of farmyard manure. On the one hand there is an insistence that grazing animals were not housed in Ireland, because the mild climate did not necessitate housing. But on the other hand there is the belief that every Irish cottage had its dungheap placed indelicately just outside the door.

In a pastoral society, animals may be herded in common but everyone knows how many (s)he owns. In rundale too, animals are private property. Indeed the crops are private property. The only things the community members hold in common is access to, and control of, a block of land. It is hard to see how crop or animal production would necessarily have been much affected had each family taken the land to which it had access at any moment, into its private ownership. It is arguable that the real benefit the communality of rundale gave appeared less in agricultural productivity than in enhanced social support and resistance to external interference, a resistance finally overcome by the landlords who broke the rundale systems up.

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## Chandana Mathur

Given Eamonn Slater's always incisive insights on Marx on the subject of Ireland, it is not surprising that the discussion of the rundale system and its eventual demise that he and Eoin Flaherty have developed, in the context of Marx's and Engels's writings on primitive communism, should be quite as impressive as it is. Fracturing the divide between the social and the natural sciences, Slater and Flaherty assemble an analytical framework that defines the essential structure of the rundale system through the complex and changing inter-relationships between property ownership and production and ecological processes, and charts the historical transformations that the system underwent. Noting that 'the socio-ecological metabolism of the mode of production becomes the essential concept of analysis through which we can explore further our societal relationship with nature', they end the essay by designating it as 'Marx's legacy to us of the twenty-first century' (24). It is really they who are to be thanked for having discerned this level of analysis across a staggering breadth of Marx's and Engels's writings – swimming against the tide of the standard presumption that this was classically modernist theory that endorsed the domination of 'nature' by 'man' – and for prising it out and honing it to apply it so powerfully to Irish rural history.

There are, however, specific moments in their discussion of rundale as a form of primitive communism where one wishes that they had pressed further. They clarify that their concern is with the internal dynamics of the rundale system ('the external stresses are about the co-existence of the rundale agrarian commune with other modes of production and that is another story!' (24)), and the external context impinges in this account chiefly through the market imperatives imposed by the colonial system ('In the eighteenth and nineteenth centuries, all members of Irish society were tied into a monied economy, whether they were from the city of Dublin or Tory Island. The rundale communities of the West were no exception to this trend.' (17)). Nonetheless, Slater and Flaherty would probably agree that the faltering of the rundale system should be seen as part of the massive global renegotiation of the relationships between peoples, labour processes and the natural world that was happening at the same time, and that this wider setting could be explored further in their account. Some of the decades and centuries discussed in this essay were also the era of mercantile adventure, of the birth of plantation agriculture and the trans-Atlantic slave trade. Thus, the 'incorporation of the potato within the commune's crop rotations' (16) is not an innocent externally introduced variable, it places the rundale system directly within these force fields of global transformation. Later, although the colonial state appears in their account as the forceful initiator of the market economy within which the rundale system came to be inescapably entangled, it would be interesting to consider the fact that this colonial power was itself undergoing a traumatic transformation from feudalism to industrial capitalism, and to ponder the social, political economic and ecological consequences that might have been belched out into the agrarian sector of 'the first colony'.

One of the most consequential outcomes of the decline of primitive communism noted by Engels in The Origin of the Family, Private Property and the State was 'the world historical defeat of the female sex'. Slater and Flaherty offer tantalizing glimpses of women in the structures of rundale governance and in its division of

labour, leaving one wishing for follow-up work on the gender dimension of the rundale commune's social relations of production and ecological relationships, and on the gender consequences of the demise of the system.

Detailing the consequences of restricted land for spatial expansion on the expanded communal reproduction process, Slater and Flaherty observe that 'Clachans, as the most visible indicator of the rundale system therefore, began to "spring up" ... also on so-called compact farms where the original legal tenants were able to undermine the landlord's resistance to land subdivision by allowing a rundale commune to establish itself upon these previously enclosed tenant farms' (20). The rundale commune was thus a site of anti-colonial resistance, and later a potent symbol thereof, as in James Connolly's formulation of 'celtic communism'. David Lloyd has argued that, for Connolly, 'in political terms, then, far from being a backward element in need of radical conscientization, the peasantry can be seen as already possessing, if in inarticulate ways, the counter-cultural consciousness that would be the basis for the syndicalist co-operative commonwealth. It should be stressed that this memory or consciousness is not for Connolly an effect of any ethnic essence or even of some deep, occult continuity in Irish culture ... It is precisely colonization, the violent rupture with a past social organization, that produces the conditions for the politically effective memory of a past formation among the dispossessed ...' (Lloyd 2008: 110). It may be difficult, but still possible, in subsequent work to tease out the forms of conciousness that might have corresponded with the ecological and production relationships and practices of the rundale commune, and their later transition into forms of political memory.

If these further demands are too numerous, it is only because the scholarship contained here is so exciting and generative!

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## Nollaig Ó Muraíle

My initial response on reading this article was one of pleasure that this intriguing topic had been tackled – even though I could not really engage with some of what struck me, as a non-specialist in the area, as excessively technical (or Marxian?) jargon. The article's subject-matter also revived memories of sharply differing views on the details of land ownership in Ireland in times past, and especially in Gaelic Ireland prior to the seventeenth-century English conquest – one thinks, for example, of the rather idealized view taken by James Connolly (1910) in relation to the communal ownership of land in early Ireland and, by contrast, the firm rejection by Eóin Mac Néill (1919: 295–7; 1921: 144–51) of the possibility of there having been even an element of embryonic socialism in the system of land tenure obtaining in early Ireland.

An aspect of the article that caught my attention was the manner in which Engels and an author like F. Gibbs (writing as far back as 1870) based some of their observations on the so-called 'Brehon Laws'. Whatever insight they were able to gain into early Irish law would have been based on the notoriously inadequate series of volumes issued by the nineteenth-century Brehon Law Commission under the title Ancient Laws of Ireland. Since that time there has been a revolution in our understanding of the Gaelic law tracts, and any attempt to deal with the roots of the so-called Rundale System of landholding that does not take certain publications of the past forty years or so into account is bound to be seriously deficient. Given constraints of space, all I can do here is mention some of the more relevant works that could be consulted with profit (and which might compel some modifications in certain aspects of the authors' thesis). Significant among these are the works of Fergus Kelly on the early Irish law tracts (see 1988: 100–8) and on early Irish farming (1997: 398–431). Important, too, are the early volumes of the New History of Ireland (Vols I to IV), with special attention to contributions from Donnchadh Ó Corráin (Vol I, 2005: 553–6); Kenneth Nicholls (Vol II, 1987: 430–3); D.B. Quinn and K.W. Nicholls (Vol III, 1976: 34–6), and from Aidan Clarke (ibid.: 170); from Louis Cullen (Vol IV, 1986: 169) and John Andrews (ibid.: 242, 244). Nicholls is also author of other important works, which anyone studying landholding in Ireland cannot afford to ignore (1976; 2003: 64–76).

I would also like to raise the question of the origin and continued usage of the term 'rundale'. It and its variants, rigdale and changedale, are assumed to be in origin English, and this is no doubt correct. But what was the native Irish term for what is often thought of as a quintessentially Irish practice? Patrick Dinneen in his great Irish-English Dictionary (1927: 914) has ronndáil as the Irish for rundale and (ibid.: 1166) talamh ronndála for rundale land, but he gives no indication of the word's antecedents and would seem to have viewed it as a simple borrowing from English. It is interesting that, since the system involved a degree of shared ownership, the Irish word he cites has the appearance of a compound that includes the Irish word dáil, meaning 'a share' – one wonders if this is a calque based on nothing more than coincidence.

My interest in this topic was aroused some time ago by the occurrence of an Irish term in the late-sixteenth-century Connacht text known as Seanchas na mBúrcach. That work includes a detailed survey of the lands on which Mac William Burke claimed rents in Co. Mayo, and in the course of it the word 'ronntáille' appears (although the manuscript reading omits the accent). The entire sentence reads (in normalized spelling): 'Ag so ronntáille tighearnais Mheic Uilliam fá Shliocht Uilleig a Búrc .i. baile Ardaigh agus Baile an Chnuic' (This is the ronntáille of the lordship of Mac William under the progeny of Uilleag a Búrc, i.e. Baile Ardaigh and Baile an Chnuic). The three authors who have hitherto dealt with the text, Hubert T. Knox, Standish Hayes O'Grady and Tomás Ó Raghallaigh (the work of the first was published in 1908, that of the other two in the 1920s), were clearly baffled by the word. Both O'Grady and Ó Raghallaigh rendered it ronnt aille and the former – following Knox (who did not edit the original text) – rather bafflingly translated it as 'extent', while O'Grady (clearly interpreting it as 'roinnt aile') took it to mean 'another portion'. Now it seems more than probable that what we have here is simply a thinly-disguised gaelicization of the word 'rental', but it is so tantalizingly close to the word rundale (and its Irish form, ronndáil, as given by Dinneen) that one wonders if,

at the very least, the latter word might not have had some influence on the form it takes in Seanchas na mBúrcach.

The foregoing brief discussion should at least suffice to show that a good deal of work remains to be done on the peculiarly Irish feature that we know as rundale. Happily a useful start has been made by Messrs Slater and Flaherty.

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## Críostóir Mac Cárthaigh

Slater and O'Flaherty's study offers a fresh perspective on the problem of rundale in Ireland. It brings a useful theoretical framework to bear on the mechanisms – both social and cultural – at the heart of the practice. The authors' analysis highlights the tensions arising from the competing needs of the individual and the collective or partnership – in Marxist ideology the dual yet opposing forces of primitive communism and capitalism. Marx argued that the elevation of private property, supported by speculative legal systems, was responsible for the 'dissolution of the organic order of society'. The theoretical framework outlined by the authors is a valid way of explaining the origins and ultimate disintegration of this system of land management.

It does not, however, adequately address the historic and spatial dimensions of rundale. From the sixteenth century particularly, the growing complexity of Irish society in terms of economic relations, population growth and colonization profoundly affected farming and settlement patterns in Ireland. As McCourt has demonstrated, rundale manifested in dynamic and flexible ways, with on the one hand common property being privatized and in other contexts compact farms devolving to fragmented openfield. Factors influencing the occurrence and regional character of rundale include diversity of habitat, availability of farm manure and receptivity to innovation and consequent change. Material culture also played a part: in the northern and western fringes, and in the highland zones, where the prevalence of rundale is most concentrated, the combined byre-dwelling was once a conspicuous element of vernacular architecture and livestock management – livestock were not housed in dwellings solely for the purpose of accumulating precious farm manure but for reasons of animal health and safe-keeping.

Rundale might also be interpreted in part as a product of social principles such as partnership, cooperation, adherence to collective decision-making and dispute adjudication, principles which appear to have been an integral part of farming in Ireland since ancient times. Indeed, partnership modes of production are still evident to a degree today – the sharing of farm machinery and other resources, and the 'meitheal' doctrine of cooperative labour. The 'king' or village head-man – a role traditionally assigned by collective agreement to a prominent individual in the group, a position which was neither permanent nor hereditary – mediate competing demands of the individual and communal, and negotiated on behalf of the group with the landlord or his agent. In this context, rundale should not be seen as a mechanism for ensuring 'equal' shares of arable and pasture but a system which facilitated an equitable distribution of varying qualities of arable land of which individuals possessed greater or lesser portions (traditionally measured in tillage ridges). Studies of rundale settlements in Clare Island and the Inishkea Islands in Mayo point to inherent inequalities in the size of tillage shares (which were nonetheless periodically rotated in accordance with rundale principles) and the related numbers of livestock kept by households on pasture land (Mac Cárthaigh 1999; Mac Énrí nd). Further detailed case studies of individual rundale settlements in the modern period are necessary to clarify internal property relations.

In a general way, the concept of 'metabolic rift' (soil exhaustion and consequent impoverishment) can legitimately be used to explain the disintegration of rundale 'communes', but as Burtchaell's study of the farm villages of south Kilkenny (which operated in a comparable way to villages in less-favoured zones) demonstrates, rundale settlements on superior land, practising improved farming methods and having stable property relations with absent landowners, ensured long-term viability of such joint-ownership schemes (Burtchaell 1988).

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## Eamonn Slater and Eoin Flaherty: Reply – The Necessity of One Science

We would like to thank the respondents for their insightful comments on our paper. As can be gleamed from them, their opinions are as diverse as the disciplines they come from. We are all too well aware of our own inadequacies and shortcomings in conceptualizing the internal dynamics of the rundale system. And, as an attempt to reply to their various comments in a general way, we would like to describe more explicitly the theoretical approach we adopted and why.

It was Marx and Marx only that attempted to develop a theoretical framework that conceptualized nature as a moving process (Darwin) that had a continuing historical relationship with the evolution of society. Crucially he simultaneously perceived human history as having a natural basis to it. Therefore, society and nature in Marx's materialist framework were not just externally connected as one entity to another but they actually interpenetrated each other in a metabolic synthesis. This synthesis of processes was and is in a constant state of movement – of evolution. Marx's dialectical materialism and in particular his concept of a mode of production created the theoretical conditions for Marx to develop analysis. These conditions included an adequate method of exposition that could deal not only with the complex relationships between the synthesized processes but also with how those 'abstract' processes determined the concrete phenomena of the rundale system. Crucially, this method of exposition was very much structured by an attempt to present the conceptualization of the data (empirical facts and abstract concepts) in a systematically arranged framework which reflected the complex relationships between the 'internal organic coherence and life process' (Marx 1978: 166) and the 'external phenomena of life' (ibid.: 165) of the rundale agrarian commune. We take our cue from Marx's following dictum.

> No natural laws can be done away with. What can change is the form in which these laws operate' (Marx and Engels 1934: 246).

This 'form' is the societal or social form, which we explicated by sifting through Marx's work on the primitive agrarian commune in Grundrisse and in his unsent letter drafts to Vera Zasulich. What we uncovered was not only the essential structural dualism of commonality and individualism but also a variety of other concepts, which allowed us to make sense of how this contradictory dualism impacted on the diverse concrete practices of communal production. These included the concepts of parcellization, fragmented labour, collective appropriation and personal usufruct etc. And crucially these became guiding principles, which allowed us the opportunity to assess the evolution of this type of agrarian commune, in all its complexity as a system, comprised of many synthesized processes, but especially with regard to the metabolized processes of nature and society. We needed logically to uncover the internal dynamics of this particular agrarian system, before moving our analysis into its next level or stage, i.e. its external relationships with the wider aspects of Irish society, e.g. the State, landlordism etc.

With regard to the whole area of exploring society's relationship with nature, we believe that it is necessary to engage in comparative investigations as we have attempted in do in this article in order to redefine and develop conceptualizations necessary to understand our unsustainable contemporary relationship. To achieve this understanding, Marx has suggested that we as academics may need to take a further step in our interdisciplinary endeavours, and become analysts within one science, as he indicated in the following:

> Natural science will in time incorporate into itself the science of man, just as the science of man will incorporate into itself natural science; there will be one science. (Karl Marx, Economic and Philosophic Manuscripts 1975 [1844]: 355)

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