SHARECROPPING AND THE CAPITALIST TRANSITION IN AGRICULTURE

Some Evidence from the Highlands of Ecuador

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Sharecropping has been the subject of much debate among economists concerned with static efficiency and, to some extent, with equity. This paper shifts the focus to the dynamics of structural change. The research reported adds to the discussion a detailed account of a large number of sharecropping contracts and why they vary, and offers a theory of the relationship between sharecropping as practised in the Ecuadorian province of Carchi and a particular pattern of structural change which is described as the transition to an agrarian structure dominated by capitalised family farms. The prevalent use of wage labour on sharecropped land, and the place of sharecropping in intergenerational asset transfers are shown to be important elements in explaining this transition.

1. Introduction

During the 1960s and 1970s several economists published analyses of sharecropping. Most of these papers were theoretical and centred on the effect of sharecropping on the level of production as compared with other forms of tenure, with time and space implicitly held constant and with particular emphasis on the choices open to the landowner.

Essentially, this literature (from Cheung to Newbery and Stiglitz, with variations from Bell and Bardhan) dealt in statics: to the innocent outsider, the central question it seemed to pose was whether sharecropping was an imperfect mechanism to deal with a perfectly competitive world or the perfect mechanism to deal with an imperfect world – and in particular with the market imperfections and risks associated with particular factors of production or the uncertainties of ecology and climate. To the cynical outsider the

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arguments of Cheung and Newbery appeared to be an elaborate rearguard action to reinforce the opponents of land reform in poor countries. Although the debate divided some neo-classical economists from others, were they not all united against the Marxist Bhaduri, who had dismissed the institution as 'semi-feudal' and an obstacle to capitalist, or any other, development?

This literature lacked two dimensions – that of time, and that of the agrarian structure in which sharecropping is observed. The introduction of a time dimension – in other words the explanation of either how contracts change or else of how the practice becomes more or less widespread among a population – has been the notable and innovative contribution of a social anthropologist, A.F. Robertson, in three important articles [Robertson (1980, 1982), Bray and Robertson (1980)].

Robertson's main contribution has been to point out that if we place sharecropping relationships in the context of a household cycle they will often be seen to fit in rather neatly: 'the time factor in contract formation and transformation draws attention to the hazards of construing variation of an essentially intergenerational type in the categoric idiom of social class' (1980, p. 421). In the Malaysian and Ghanaian cases he has studied, as well as in his general article on the subject, Robertson repeatedly comes back to the theme of sharecropping as a mechanism which functions so as to facilitate the devolution of property within households or between members of different households.

Robertson is extremely hostile to anything which has a whiff of Marxism or social class about it. He is dismissive of the 'Marxist' prediction that sharecropping will disappear with capitalist development and of the conception of sharecropping as a conflict-ridden relationship between members of opposing classes of landlords and tenants. In contrast – or so it would seem – he is particularly concerned with the stabilizing, equilibrating role of sharecropping. Indeed, in the conclusion of his 1982 article on the Ghanaian institution known as *abusa* he waxes almost lyrical on the subject.

There is no doubt that Robertson's is the only truly innovative contribution since Cheung, if by that is meant a contribution which shifts the terms of the debate. He has finally obliged us to think of sharecropping not merely as a contract between two people with unchanging interests, but as a contract which may change over time with the interests of the parties, or as part of a changing relationship governed by invariant, cyclical domestic processes.

In many ways this paper can be seen as a further pursuit of the lines of analysis initiated by Robertson – in its account of sharecropping in relation to age, inheritance and kinship, and in the (brief) comparison of contracts with kinsmen with contracts with non-kinsmen. But in other ways I have pursued different lines which, I hope, will further enrich the discussion. In particular, I have replaced a discussion of sharecropping in general with a discussion of the structure and function of sharecropping in different structural contexts, varying both in time and in space. Thus if sharecroppers and sharecropping are different in the Punjab and in Ecuador, I do not take this as an invitation to say that the term should be applied in the one place but not in the other. Rather, it is an invitation to compare the institution in the two places and understand why it varies. I reject completely the a priori idea of a necessary contradiction between the capitalist mode of production and sharecropping, and I reject completely the idea that sharecropping tenants and landlords necessarily belong to opposing social classes – but both contentions may hold under certain conditions. Thus I would claim that sharecropping is not 'flexible' but that, like any other contract type, it fulfils different functions in different contexts.

In relating sharecropping to changes in agrarian structure, the paper develops the thesis that the practice has a particularly important part to play in the emergence of an agrarian structure dominated by what I have called capitalized family farms. The paper begins by describing the variety of cost-sharing arrangements observed in our study of Carchi province, and it emphasizes the importance of the use of wage-labour on sharecropped land; these sections are more noteworthy perhaps for the empirical detail they provide on contracts, which can be seen as a contribution to the debate initiated by Cheung. But the main point is one which takes Robertson's concern with time away from the 'microstructural' (as he calls it) onto the level of the regional agrarian structure and of the analysis of types of agrarian capitalism and the conditions for their emergence, to reach the conclusion that under certain conditions, which seem to be present in the Ecuadorian province of Carchi, the type of sharecropping which is described here, far from being an obstacle to capitalist development, is in fact a catalyst for a pattern of agricultural capitalism dominated by capitalized family farms.

2. The functions and functioning of sharecropping in the highland areas of Carchi province, Ecuador

The Ecuadorian province of Carchi is a region where some, at least, of the more pessimistic predictions about capitalism in agriculture do not hold. There has been a massive increase in production exclusively among small and medium-sized producers: potato output in the province multiplied 17 times between 1961 and 1980, increasing its share of national production from 13% in 1967 to 35% in 1974. The output of broad beans has multiplied by 5 between 1961 and 1980. This productive expansion has not been accompanied by either large-scale unemployment, or by large-scale seasonal migration to low-paid employment elsewhere. There has not been an increase in the proportion of landless in the population, and – over a period of one

hundred years – the dominance of great estates in the agrarian structure has been reduced rather than accentuated. The province boasts the highest rate of literacy in Ecuador – in the rural areas, in 1974, 76.2% of children aged 6–12 went to school.

Is this therefore a case of agrarian capitalism 'without tears', of an eldorado which proves that capitalism can bring prosperity to all? Of course not. The decline of the great estates has not led to a substantial reduction of inequality of landholding overall. The main trend is the reinforcement of the 'middling' category of farmers. Furthermore, several factors now herald the end of the potato boom: the concentration on potatoes in some parts of the province, often by small producers who could not afford to leave land fallow; the widespread abuse of pesticides, which are invariably applied too often and in excessively strong doses even (perhaps especially) by the smallest producers; the climatic change, and reduction in rainfall brought about by deforestation as colonization has advanced upwards towards the high grasslands (paramo). These factors, and the rising pressure of wages, tend to increase costs, and we now observe the emergence of a new phenomenon. In the place of labour-intensive, high-risk, potato production, the more prosperous 'middling farmers' are turning towards the much less risky and less labour-intensive business of specialized dairy farming. For this activity they can obtain long-term low-interest loans from the Development Bank, which they use to buy cattle, sow pasture and fence in fields, and their milk production fetches a price fixed by the government. This is the type of unit which will dominate the region in years to come, and which can be described as a 'capitalized family farm' (C.F.F.). 'Capitalized' because of the weight in its activities of the capital invested in cattle and fixed capital. 'Family' because of the active involvement of the owner in the day-to-day management of the unit, and because of the relatively small requirements in wage labour (perhaps 3 permanent workers to look after an exceptionally large herd of 80 cows).

This pattern need not imply that the remainder of the rural population will be either wrenched away from the land or forced to have recourse to low-paid seasonal wage migration, or forced to depend ever more on wage labour for their survival. The quantity of migration from this region is, without doubt, very high; but the 'quality' of that migration is also high, and therefore leads to a real reduction of pressure on the land. According to our survey, migrants from this region tend to go to Quito, above all to attend secondary school, financed by their parents, and they tend to remain there; they tend to work in small scale business or in the bureaucracy and not in domestic service or construction, let alone seasonal agricultural work – which are the classic refuge of migrants from poverty-stricken regions.

For those who remain behind, and who do not succeed in accumulating capital and land, the prospect is uncertain but not catastrophic. Labourintensive crops will not disappear overnight, and indeed the withdrawal of the C.F.F. from potato growing will perhaps improve earnings from growing them, while sustaining some local demand for labour – for there is little prospect of mechanization in this crop in the foreseeable future.

What are the historical circumstances which have favoured an evolution in Carchi so different from the pattern of involution which is observed elsewhere within the Andean region, and which dominates pessimistic accounts of agriculture in the 'Third World'? We cannot give a firm answer to this question, but we can certainly point to specific features of the region's recent history which have influenced the development of the agrarian structure in the two areas of Carchi which we studied in detail.

One of our areas is the parish of Huaca, which until the 1930s was dominated by a single vast *hacienda* which disintegrated from its own inanition. The owners sold off parcels of land to smaller farmers and, under a combination of pressures from the government and the local population, also sold a large stretch of uncleared hillside forest land to a group of people who formed the 'Colonia Huaqueña'. Subsequently, as the agrarian reform of the early 1960s loomed, other groups formed cooperatives and bought land from the Church. It is important to note that many purchasers were migrants from neighbouring Colombia, and it is striking to note that many purchases were financed by bank credit or by concessionary terms offered by the landlords themselves. The purchasers were not 'the poorest of the poor'. Few could have foreseen, when the hillsides began to be cleared of their dense forest, that this would prove to be extremely fertile land, and the potato boom took off in the 1950s with the spread of the use of chemical fertilizers.

El Angel is our other study area. Here the great estates began to sell off land at a later date, in the early 1960s, when an agrarian reform threatened, and in the face of pressures from the artisans and supervisory estate personnel. These people organized cooperatives, obtained bank credit, and bought land on concessionary terms. Once they had paid off their debts, they parcelled out the cooperatives' land among the members of the cooperatives. Most of this was done without the direct intervention of the Agrarian Reform Institute. Former attached labourers of the estates (huasipungueros) have had to content themselves with marginal plots of high grassland of low fertility, at the price of their loss of secure, though very badly paid, employment. Production had not grown very rapidly in this area until the recent (late 1970s) expansion of potato growing, and one can think of the area as being at an earlier point in the same broad evolution observed in Huaca.

Our study is based on a sample of 100 owners of land drawn proportionately from the official cadastres of the two areas and from different strata of owners according to value. The sample contains 45 people from Huaca and 55 from El Angel. (A detailed account of the sampling method and of the questionnaire is available from the author.) The data were gathered in the period between December 1979 and April 1980.

In both areas cultivation occurred mostly between 3000 and 3500 metres above sea level. The 'story' one was told in Huaca was that quite a lot of people had substantially increased their wealth by cultivating potatoes since fertilizers were first introduced in the 1950s, but that nowadays there was not much money to be made in the crop. There had always been price risks, but to these were now added the risk of losing a crop or obtaining very low yields on account of diseases, frost, drought, and the spiralling costs of pesticides and fertilizer used in ever-increasing quantities at ever-increasing prices. Between mid-1980 and mid-1981 the price of fertilizer rose from some \$350 per 100 lb. to over \$500, while the general price level rose only some 13%. (\$ signifies Ecuadorian sucres.) Despite its decline, the potato retained a dominant position in Huaca, and whereas those who had already accumulated some capital could comfortably switch all or most of their activity to milk production, those who still had to accumulate capital found it hard to resist a crop in which yields and returns (prices and pests permitting) far outstripped anything that could be made in other crops. Potatoes were an obsession, a temptation and a gamble, as well as the main ingredient of three meals per day.

In 1980, the rule of thumb used by the producers was that it cost \$40,000 to plant, cultivate, harvest and transport to market one hectare of potatoes. At the exchange rate prevailing for most of 1980–81 (\$27 to the U.S. dollar) this was US\$ 1,481. The cost of fertilizer, again as a rule of thumb, would be, in 1980, US\$ 260 per hectare while the cost of seed, if purchased, would fluctuate, like the price of the product. The price per quintal of 100 lb. of top-grade potatoes during the year from August 1980 to August 1981 fluctuated between extremes of \$150 and \$400. Wage labour accounted for roughly one third of costs, according to our pilot surveys. Yields were extremely vulnerable to the weather (frost and drought) and to blight and rust. They were considered low in comparison with the 1960s and early 1970s.

These figures give an idea of the costs and risks involved in potato production, and form an essential background to our account of sharecropping. More or less obliged by circumstances to juggle with wild price and yield fluctuations and uncertainties, producers manage a portfolio and spread risks, and in this sharecropping plays a central role by enabling them to diversify both price risk – in time – and climatic risk – in space. In order to cope with extreme price volatility producers seek to sow several times during the year, and if this stretches their resources in time, labour, land or managerial capacity they look for a sharecropping partner. Similarly, although it is considered best from the point of view of capital investment to concentrate one's landholding in space, the risks of frost and rainfall variation compel a diversification in the location of the crops, and one can achieve this by sharecropping on someone else's land.

In our study we registered 550 sowings, of which 196 were conducted under sharecropping arrangements. Out of the sample of 100, 93 were involved in agricultural production in 1980-81 and 55 engaged in sharecropping, either as owners or as sharecroppers. Twenty-nine producers produced exclusively under sharecropping arrangements. Sharecropping contracts are essentially about cost-sharing: with a few exceptions, the crop is equally divided at harvest time, and each partner employs his own workers for the harvest. In wheat, barley and maize the contracts are fairly simple because there are not many inputs: chemical inputs are hardly used at all, so there is only seed and labour to divide between the partners. In broad beans some chemical inputs are used to spray the plant with insecticide, but again the costs are small. It is in potato cultivation that costs are high and their distribution correspondingly complex. The costs can be listed as follows: draught power (animal or mechanical) in the preparation of the soil, and in certain tasks such as earthing up, varying a lot according to the initial condition of the ground; seed, fertilizer, chemical pesticides and the labour to spray them (with a back-pack); and, last but not least, labour. Fertilizer and labour are the most expensive items, followed by pesticides, seed and draught power. The amount and cost of seed and fertilizer and draught power can be fixed in advance, while the pesticide required, and the labour to spray it, is more uncertain because it varies somewhat with the weather. Each item may be paid for by the owner, or by the sharecropping partner, or it may be divided equally between them. Why other proportions are not used is a puzzle. Although there are without doubt biases in the distribution of the fruits of these contracts, I avoid the 'landlord-tenant' formulation because I do not wish to give the impression that these are necessarily exploitative relations, or that the bias is always in favour of the landowner. Indeed, our data show that, out of 60 contracts for which we have details, the cost of fertilizer was shared equally between the partners in 69.5%, the cost of pesticide in 66.6%, the cost of draught power (animal or mechanical) in 50.9%, the cost of seed in 45.0% and the cost of labour in 42.4%.

The pervasiveness of sharecropping, and the ephemeral character of the contracts – which are emphatically not long-term relationships and rarely last beyond the harvesting of one crop – leads us to look for an explanation of the choice of contract type rather than for an explanation of why people sharecrop at all. We can therefore begin by examining variations between contracts rather than differences between sharecroppers and other producers. Out of 57 contracts in potatoes 19, the largest category, can be called 'equal shares': this is a contract in which either all costs including labour are divided equally between the parties, or where one partner pays for seed and fertilizer, and the other for labour and pesticides (5 cases out of the 19). From this modal point we branch out, so to speak, to contracts which load the greater part of the costs, prima facie, on the owner or the sharecropping partner. The second most frequent observation in potato cultivation is a

contract in which the sharecropping partner pays the full labour costs but all other costs are equally shared between him and the owner of the land (11 cases). After these, the next most frequent contract was one where the sharecropping partner paid for seed and the remaining costs were equally divided and another where the partner paid all costs in full (8 cases). In the last case the contracts either specified a correspondingly unequal sharing of the product, or else they were with elderly relatives in need of support.

It does seem that the contracts in which all costs were divided equally between the parties tended to be found among the wealthier members of our sample. Whereas the average landholding for the sample as a whole was 8.13 hectares, among this group those who leased land out had an average holding of 11.5 hectares, and those who took land in had an average of 9.75 hectares. If we look now at table 1 we will see a remarkable variation in the distribution of contracts both by size of holding and by locality: the 'all by halves' contracts are concentrated among the larger landowners in Huaca, and in the middle in El Angel. The contracts in which the tenant pays for or performs - all the labour are found exclusively in Huaca and are concentrated in the middle of the distribution. Other types are concentrated at the bottom in Huaca and show no particular pattern in El Angel. Further indication that the larger-scale producers tend to choose the 'all by halves' contract, is found in table 2, where producers are classified by an Index of Agricultural Activity: here the 'all by halves' contract in Huaca is concentrated totally in the upper part of the distribution, the contract where the tenant pays for labour and the rest is in halves is in the middle (in Huaca only) and other contracts are distributed between the middle and lower parts. Although the pattern for El Angel is not so pronounced, the same

	'All by halves'		Tenant pays labour, remainder by halves		Other		
Hectares	Huaca	El Angel	Huaca	El Angel	Huaca	El Angel	Total
0.1-0.9	0	0	1 (9.1)	0	3 (9.4)	3 (7.4)	7 (6.5)
1.0-1.9	0	0		0	3 (9.4)	2 (5.0)	5 (4.7)
2.0-2.9	2 (33.3)	2 (11.1)	0	0	3 (9.4)	8 (20.0)	15 (14.0)
3.05.9	0	1 (5.6)	0	0	6 (18.8)	11 (27.5)	18 (16.8)
6.09.9	0	7 (38.9)	4 (36.4)	0	8 (25.0)	7 (17.5)	26 (24.3)
10.0-14.9	2 (33.3)	4 (22.2)	4 (36.4)	0	0	6 (15.0)	16 (15.0)
15-19.9	0	2 (11.1)	2 (18.2)	0	5 (15.6)	0	9 (8.4)
20-29.9	2 (33.3)	0	0	0	2 (6.3)	2 (5.0)	6 (5.6)
30-39.9	0	0	0	0	0		0
40+	0	2	0	0	2 (6.3)	1 (2.5)	5 (4.7)
Total	6	18	11	0	32	40	107

 Table 1

 Contract type by size of holding (all crops) (percentages in brackets).

				Tena	nt pays l		-			
Index		by halve aca El A			inder by a El An	<u> </u>	Othe ——— Huao	r ca El An	gel T	Total
0-3.9	0	6	6	1	0	1	13	22	35	42
4.0-9.9	0	2	2	6	0	6	9	13	22	30
10+	6	10	16	4	0	4	9	5	14	34
		—	—		—		—			
Total	6	18	24	11	0	11	31	40	71	106

Table 2								
ontract typ	be ^a by ind	dex of agric	ultural pro	duction. ^b				

^aAll crops.

^bThe index is constructed on the basis of hectares under crops at any point in the last 3 months of 1980. A hectare planted under potatoes counts for 4 units, and under any other crop 1 unit. These figures are divided by 2 if the crop is under sharecropping, whether the producer concerned is owner or sharecropper. In this way the index reflects the comparatively high cost of potato growing, the cost-sharing nature of sharecropping contracts and the difference in the productive cycles of the two areas studied. In Huaca potatoes and broad beans were planted all year round, while in El Angel these and other crops (largely absent in Huaca) were planted in September and October, largely.

	'All by halves'			provides remainder es	Other			
Quintals	Huaca	El Angel	Huaca	El Angel	Huaca	El Angel	Total	
1-49	1	4	10	0	12	14	41	
50+	5	4	1	0	5	1	16	
Total	6	8	11	0	17	15	57	

Table 3
Contact type by scale of planting and locality (potatoes only).*

^aQuantity unknown: one case.

tendency is perhaps beginning to appear. From this account we draw two conclusions: firstly, that the larger producers are interested less in rent on land than in a return on their capital. Secondly, that because they engage in larger-scale sowings, which require large inputs of wage labour, and because the day-to-day recruitment and supervision of workers is left to the sharecropper, the owner-partners among them must forego half the land rent (in the strict sense) in recognition of this.

Let us now set contract types against the scale of a sowing as in table 3. This has the advantage of depending not on the estimate of the scale of operations of *one* of the partners, but rather on the actual scale of their *joint* operations. It is one approximation we can make to the hypothesis that sharecropping contracts vary with capitalist development: we find that in Huaca 5 out of 6 'all by halves' contracts are for sowings of 50 quintals or more (corresponding roughly to 2.5 hectares), while in 10 out of 11 contracts where the tenant provides labour half the remaining costs are for sowings of less than 50 quintals. The same relationship between contract and scale of operation is even emerging in El Angel, where there was no consistent relationship between contracts and landholding.

We may say then that all the indices, whether based on one partner's landholding or on the scale of his productive activity, or in particular on the scale of the joint operation to which the contract refers, point in the direction of an association between the scale of operations and the modal 'all by halves' contract. It would seem that as capitalism advances in its early stages it does not lead to the disappearance of sharecropping, but perhaps even to its further proliferation, while creating forms of sharecropping in which the pursuit of rent on land is subordinated to or at least counterbalanced by returns to other inputs, both variable and managerial.

The idea that sharecropping is a contract between a richer partner who owns the land and a poorer one who is landless receives very little support from our data. Only in a minority of cases was the sharecropper completely landless, and even in these cases, which arose above all in Huaca, the nature of the contract gives us reason to believe that he was not as poor as his landlessness might lead one to believe. This in turn fits with the idea that as capitalism develops so land loses its importance as an indicator and source of wealth relative to capital, in fixed or money form.

3. The use of wage labour in sharecropping partnerships and its implications for capitalist farming

To pursue this idea of a capitalist partnership further let us look at the use of wage labour under sharecropping.

Table 4 shows the type of labour in 179 sowings, distinguishing between those under sharecropping arrangements and those under owner-operation.

	Owner operation		Sharecropping		Total	
	N	%	N	%	N	%
Only wage labour	60	54.1	49	72.1	109	60.9
Mixed family and wage labour	30	27.0	11	16.2	41	22.9
Only family labour	21	18.9	8	11.8	29	16.2
Total	111		68		179	

Table 4	
Labour use under sharecropping and owner-	operation.

It points to a strong preference for wage labour under sharecropping. In keeping with the idea of a partnership, both the sharecropper's own labour and the owner's own labour count as 'family' labour, so it is not clear from the table whose labour is being substituted by the wage labour, or who is profiting by its use – in other words, who is 'exploiting' it. This lack of a distinction between owner and sharecropper is consistent with the description of sharecropping by the producers in terms of a partnership: if the sharecroppers are sharing costs of production, including labour, are they not in effect partners, joint capitalists exploiting wage labour?

This description is partly supported by our data, but not fully. Our data are most reliable, as far as family labour is concerned, with respect to the producer's own labour input on any particular sowing, because replies tended to be rather vague where the labour of other family members was concerned. If we compare owner-operated with sharecropped plots, we find that the producer provided his - occasionally her - own labour in 87 out of 110 cases (79%) on the former, and in 41 out of 68 cases (60.3%) on the latter. Here the producer might be owner or sharecropper on the sharecropped plots, however. But if we compare the labour input of owners and sharecroppers on sharecropped plots alone, we find a very strong contrast: where he was owner the producer worked in 55.9% of the cases (19 out of 34) but where he was the sharecropper he worked in almost all of them (16 out of 17, 94.1%). It would appear, then, that sharecropping is a device designed to gain access both to the sharecropper's own (read family) labour and to the wage labour which he can recruit and supervise through the networks which he knows best. Indeed, one might think of the practice in a different way as well: might it not be the case that the sharecropper gains access to the land essentially on the condition that he hire wage labour and pay all or part of the costs thereof? This contrasts with A.K. Sen's (1966) assumptions, and with one of the conclusions of A. Sen's meticulous work on India (1981). A. Sen has found that landlords rent land out under sharecropping to gain access to the unpaid labour of the sharecropper's family: although payment of that labour is embodied in the sharecropper's share of output, its cost to the landlord is much lower than the equivalent amount of wage labour would be if purchased on the open market - especially if the intensity and quality of family labour are taken into account. Our data also show sharecropping as a mechanism for gaining access to labour, but not only to unpaid family labour; indeed, under contracts where labour costs were shared, the sharecropping partner even charged for his own and his family's labour at the same rate as that paid to hired workers.

The analytical importance of this finding is not that it 'disproves' A. Sen's (1981) thesis: it does not. Clearly innumerable differences between his findings and ours can be accounted for by different social and economic conditions in far-flung parts of the globe. Rather, it concerns (inter alia) the central

question of whether Carchi farmers are 'peasants' in the usual meaning of the term or not. One assumption which underlies the writings of authors from Chayanov through to A.K. Sen (1966), A. Sen (1981) and Lipton (1977) is that the poverty of poor farmers/peasants forces them to apply far more unpaid family labour to their fields than a wage-paying capitalist farmer could afford under similar circumstances – and A. Sen, in his work, says that landowners are acting as if (or even because) they understand this. This assumption also underlies the interpretation of the frequent – though still controverted – finding that there is an inverse relationship between size of farm and yields per hectare – especially in South Asia.

Now what our data point to is the difficulty, at least in the context of the area studied, of distinguishing peasant producers from others. If the sharecroppers described here are to be called peasants because, one way or another, they provide cheap labour which capitalists cannot get hold of on their own, then what do we do about the fact that they use probably more hired labour than family labour? In addition, we know that many of them are also owner-operators on their own account and some even rent land out as well as renting land in, which only makes the assumed contrast between peasant and capitalist hazier. The solution to this definitional difficulty is the same as that I have reached in other more purely theoretical work on the subject, namely to remove the concept of a peasant producer as one who uses almost exclusively family labour. Instead we should define this producer as one who through ties of primary loyalty, kinship, para-kinship and networks of 'contacts' has access to types of labour, paid or unpaid, which are not available on the larger, more impersonal labour market. To recall the words of a famous advertising campaign: 'the peasant producer has access to those parts of the labour market which capitalists cannot reach'. In addition, the word 'peasant' should be used as an adjective to describe these features of production and of the labour market in which the producer operates, rather than as a noun, so that we avoid the necessity of drawing an absolute, unbreachable dividing line between 'peasant' and 'capitalist' [Lehmann (1986)].

The practice of sharecropping, as it occurs in Carchi, can be conceived as a mechanism which takes advantage of the peasant features of production in the region but enables peasant producers to make the transition to capitalist farming, by providing the access to capital which complements their advantage in the labour market. Thus, the very factor which others have pointed to as imprisoning peasant producers in their poverty – namely the cheapness of their labour – can here be seen to be enabling them, under these perhaps very special conditions, to escape from it. Further research in other places is obviously required if we are to ascertain how truly unique this case really is. My own suspicion is that cases appear 'exceptional' only when new questions are asked about them, and that once people inquire into these sharecropping partnerships elsewhere Carchi will sink into the mediocrity it so richly deserves. One might go even further; maybe the practice of sharecropping is taking the place of the class polarization predicted by so many analyses of capitalist penetration in peasant farming which, according to the young Lenin (1899), inevitably occurs when commodity production erodes and supplants the 'natural economy' of the peasantry. It does so in order to create a market for commodities by wrenching the peasants out of a system in which they could meet their own needs without having to buy commodities. It also does so in order to create a class of people dependent on wages for their livelihood, to provide labour for the emerging capitalist farms. The peasantry, and their 'natural economy', are doomed to disappear.

It is a powerful story, and although few would quarrel with the long-term prediction, many have debated the length and nature of the transition period, and the type of agrarian structure which it predicts will arise in place of the peasantry. Many have also quarrelled with the implicitly arcadian view of the peasant past [Lehmann (1982), Macfarlane (1978)].

Sharecropping can, under suitable conditions, 'replace' class polarization, in a functional sense, by offering a mechanism of access to wage labour without requiring the violent expropriation of the peasantry's land. By giving the sharecroppers something akin to an equity in an (ephemeral) enterprise, and by even sharing the rental income with them, the capitalist farmers can find partners with access to the 'peasant' labour market, who will recruit and supervise labourers among a population who, for the most part, are not landless. These sharecroppers then have an incentive to take the time to find labourers, among their peer-group and age-group. Being (as we shall see) generally younger than the owners, the sharecroppers can call on members of their age-group, who are more likely to be available, and can above all find labour among people who are only available for short periods. In other words, sharecropping offers a mechanism of gaining access to labour in the absence of a mass of landless labourers. Of course, if the history of this region had been different, if there had been no collapse of the haciendas as a result of internal disintegration and the pressures of local artisan and supervisory strata, and of agrarian reform, if the opportunities to colonize the highlands and bring their unusually fertile soil under the plough had not existed, if all these conditions had been absent, then things might have been very different.

4. Sharecropping, the family and the domestic cycle, and their implications for capitalist farming

Occasionally people in Carchi refer to a model of the life cycle in which a young man begins by renting land in as a sharecropper, and then gradually builds up the capital needed to buy land which, in middle age, he can more or less work on his own. As he grows old so he is increasingly likely to rent land out to sharecroppers. It sounds idyllically Chayanovian and fits well

Age	Rent out	Rent in	Age- group total
2039	3	6	14
%	21.4	42.9	
40–49	6	5	23
%	26.1	21.7	
% 50–59 %	6 25.0	5 20.8	24
6069	11	2	23
%	47.8	8.7	
70+	6	1	16
%	37.5	6.3	
Total	32	19	100

Renting	in ar	nd renting	g out	under	sharecropping,	by
-	ag	e (percen	tages	read a	cross). ^a	

Table 5

^aExcludes those who both rent in and rent out. $X^2 = 8.2, P(X^2) = 0.92.$

with the analyses of sharecropping by Robertson mentioned in the Introduction. It is also, in a sense, supported by our data: table 5 shows that, among owners of land (who are the only ones qualified to be in our sample) the propensity to rent land out is greatest among those aged 60 and over and those under 40 tend predominantly to rent land in. If we take into account that the landless are excluded from this sample, and that 14 out of 57 people involved in sharecropping in our study stated that their sharecropping partner was landless, then we could add on a notional number of landless young people renting land in at the top of the table, who find themselves at the beginning of the ideal cycle.

Even so it would be wrong to draw from these data any conclusion stronger than that some people do follow this ideal cycle. To support a stronger conclusion, our data would have to support two corollaries of the ideal cycle. These are (a) that larger owners tend to lease out and smaller ones tend to lease in, and (b) that older people tend to own more land than younger ones. Unfortunately neither corollary is supported. What emerges then, is an indication that although some people may follow the ideal cycle, many others either fall by the wayside or start in a much more advantageous position than the ideal would lead us to believe.

The young men who start out renting land in do not go empty-handed to potential partners. Since these are cost-sharing contracts they must have some means of paying their share of the costs. Perhaps they will find a partner who agrees to advance all costs against a settlement at the time of harvest (a futures contract in effect), but even in this case they will need to have the means to reimburse the partner if their share of the product turns out to be worth less than their share of the costs. So a young man needs a backer, and inevitably this often means his father or mother, directly or indirectly. Even more often, it means that he is sharecropping with his father or mother on their land.

So even if the sharecropping system does enable the young landless to embark on a road to landownership, it does not in the least follow that it will help the children of people who have been landless all their lives to reach a higher social status and greater wealth than their parents. This does not invalidate our more general thesis: the claim that sharecropping plays a role in the rise of the capitalized family farm does not, it should be recalled, imply that it helps to bring about a redistribution of income, land, wealth or any other desirable good.

When a young man needs backing he is receiving capital, even if it is merely in the form of a 'good name' or some sort of guarantee - however informal or implicit - that a loan will be repaid. In effect, we are describing inheritance as a process spread over a long period of time, not a lump transfer at a particular moment. In itself this is far from unique: indeed if we think of all parental expenditure on children in any society we will realize that it is absolutely standard, though the manner in which the transfer is spread over time is infinitely varied. The importance of the process of inheritance in this discussion lies in the part played in it by sharecropping. Are these partnerships between father and son and other pairs of close kin different from contracts with anyone else? If we take the two main types of contract we find that the 'modal' 'all-by-halves' contract accounts for 24.1% of contracts with close kin (7 out of 29) and 23.8% of contracts with others. The contract under which the sharecropper pays for all labour costs but shares all other costs equally accounts for 48.3% of contracts with close kin (14 out of 29) and 38.1% of contracts with others (8 out of 21). There is no significant difference between the type of contract agreed between fathers and sons and brothers or in-laws, and the type agreed between partners not bound by such ties. Intra-family relationships are governed to a surprising extent by careful, explicit calculation of the costs and benefits of economic partnership. Even so, the elements of trust and credit backing mentioned above, may crucially distinguish many of these relations from those the sons may have outside their immediate kinship network, and these elements do not of course figure in the classification of contracts.

In a context of labour shortage and high rates of permanent urban migration, and with the recent expansion of land available to the small and medium producers after the dismemberment of the great estates, those in the younger generation who remain in the countryside are able to drive a hard bargain with their parents. As a result some – but by no means all – of them can build up their assets and when their parents die have little trouble in buying out the share of the inheritance due to their migrant siblings. Thus a 'virtuous circle' is set in motion by a concatenation of favourable circumstances, which include the prior dismemberment of the great estates. But the problems of labour shortage and ecological degradation remain: in Huaca today, and in El Angel tomorrow, the combined pressures of labour costs, declining yields and volatile prices are driving the more prosperous farmers out of potato production and into dairy farming – which requires consolidated holdings, has a much higher capital-to-labour ratio, receives cheaper and longer-term bank credit (against the security of a herd of cattle) and enjoys a stable government-fixed price for dairy production. In other words it is dominated by capitalized family farms. Sharecropping has been an essential feature of the transition towards this type of farming, but sharecropping has no place in it, for in it the labour supply constraints that sharecropping primarily exists to cope with are substantially reduced.

It is extremely important that the reader should not gain the impression that this path towards an agrarian capitalism dominated by capitalized family farms is being promoted here as the only, or even the principal path of transition in Latin America. It has been the mistake of many innovative suggestions about development in the past to proclaim themselves as universal and unconditional. Let me therefore briefly contrast the path outlined here with what I have called the 'involuted' path [Lehmann (1982a)].

In the involuted path we find that the great estates are modernized rather than dismembered, or else preserved as units even after appropriation by collectivist land reforms such as occurred in Peru. The permanent workforce is reduced and marginal plots of land are distributed to surplus workers. The estates rely increasingly on the supply of seasonal labour from these and other neighbouring smallholder communities who in their turn have little room for expansion. Many migrants go to work in unstable urban employment, and therefore retain a foothold in their communities of origin, which means that pressure on the land is not reduced. In Carchi, in contrast, there is a substantial amount of permanent migration. In Southern Peru - where the involuted path seems to be particularly prevalent [Figueroa (1982)] - the 'peasant' institutions which survive, such as comunidades and practices of labour exchange and reciprocity, often seem to be a mask for capitalist relations: ritual co-godparenthood, a fundamental Andean institution, is frequently riddled with patron-clientage in which the patron, in exchange for or against the promise of a favour of some sort, obtains the client's labour at a reduced price [Fioravanti-Molinié (1982)]. Within the nuclear family itself the transmission of land to one or another of the next generation is not a transparent process with clear rights for all concerned, but rather a complex and implicit bargaining process in which the older people hope that the prospect of receiving a lion's share will tempt one of their offspring to look

after them [Sánchez (1982)]. Here, the 'rich peasants' rely on these mechanisms of patron-clientage and on the peasant network to guarantee them cheap labour and do not develop into capitalized family farmers, even though obviously their businesses have many capitalist features.

5. Markets

In this section a complementary argument is developed which relates sharecropping, as observed in Carchi, to the C.F.F. on the basis of synchronic, or static features of the land and labour markets rather than the diachronic, dynamic features of inter-generational transfers of land and capital.

In the standard model of a South Asian village the landlord is able to make a tenant provide all labour, and still takes half the crop, probably because the tenant is locked into dependence on him in a set of different markets, for credit, for land, and for labour. He may be in debt to the landlord over a very long period, so part of the 'rent' is in reality an interest payment. Thus,

$$r = px - pc$$
,

where r is the total income on all the landlord's resources invested, p is total production, c is the landlord's percentage contribution to costs, so that it is <1, and x is the landlord's share of output and is also <1. This is the equation which is always 'in the minds' of sharecroppers and landowners: each is asking himself what is the difference between his share of the costs and his share of the output. The rent in this equation is by definition a residual. But maybe there is a structural divide between those societies where rent is a residual and those where it is an 'objective' datum yielded by the market.

In the 'classic' Indian village, rent is a residual, and it is impossible to distinguish rent on land from rent from power and monopoly in interlinked markets. The basic determinant of rent should be the value of the land multiplied by the rate of interest. But where the state bank lends at 10%, the money-lender at 100%, the landlord at 50%, and so on, there is no way of knowing 'the' rent on land. Furthermore, the sharecropper's overall rental payment includes, in all probability, a variety of interest and mortgage payments, protection money, debts of gratitude, signs of good will and so on. Rent on land as charged is bound up with all these inextricably.

The complexities of dealings in these conditions are notorious: the sharecropper may appear to be providing all the labour, but on closer inspection it may turn out that some of that labour is owed to the landlord in repayment for a loan, or a mortgage, and so on. Such complications may seem obscure to us, and we may indeed feel, with Bell and Zusman (1976), that the agents would do best to 'save themselves the bother of detailed arithmetic and settle for that magic number' of 50:50. But the agents probably do not feel like that, they probably know what each is paying for what and think in terms of cost-sharing. The comparison of relative shares in costs and output as in the formula presented above quickly tells them where the advantage lies once all these other payments have been separated out, yet the multi-strandedness of the relationship is obviously crucial in determining their relative bargaining power.

Now the development of capitalism may reinforce these petty monopolies or it may undermine them. If it undermines them, then interest rates become more uniform, influenced by big banks, and rent on land becomes a more discrete, identifiable quantity. The effect of this on sharecropping should, in an 'ideal' world, lead to a cost-sharing partnership in which the distribution of output mirrors the distribution of costs with an allowance made for a rent on the land. (If the landlord foregoes all or part of the rent, then this would be explicitly negotiated.) In the process, however, and in tune with other expected effects of capitalist development, the poverty-stricken landless tenant will disappear, since even a tenant now needs resources to get access to land. At that point, indeed, and setting aside the need to spread climatic and price risks, there is little to choose between sharecropping partnership and selfcultivation: sharecropping amounts to the same as buying shares in a business, and can be described as a partnership.

But what about the transition? In the transition one would expect to find the parties bargaining more explicitly over cost shares, as the rental element slowly settles down. Leaving the output share at 50:50 not only for convenience but as a benchmark against which to set cost shares, and alleging the relative risks and costs of each activity or input, they will haggle, each trying to steal a march on the other by offloading a cost or a risk. The outcome is complicated contracts as we have observed in Carchi, which, if reduced to their money equivalents, may well differ only marginally. But it is not, in the short run, in everyone's interest to reduce the bargaining framework (i.e., 'you pay for fertilizer and I will pay for the seed', etc., etc.) to a straightforward arrangement in which each agrees to contribute so much money. Many owners and many tenants will hope to keep a margin for haggling and gaining a few extra pennies. Furthermore, imperfect markets, especially in credit, do not disappear overnight, and we may suspect that this accounts for some of the variation in contracts in Carchi: that is, the inequities may often conceal an interest payment where no explicit charge is made on a loan between partners, for example. The rental element, for its part, is implicit in the bias of the contract, but it is not a rent on power exercised through interlocking monopolies - that much should be clear from our brief analysis of inequality between the parties.

It would seem that in Carchi, the absence, for historical reasons, of certain kinds of institutionalised monopoly has facilitated a different type of transition from that encountered in much of South Asia and elsewhere in the Andes. The later stages of the transition are hinted at by the presence of the medium-sized dairy farms which use little wage labour and have no use for sharecropping arrangements. Thus we would conclude by saying that this type of sharecropping characterizes – and conceivably stimulates – one particular, but not necessarily uncommon, path of transition to capitalist agriculture. It is now for further research to inquire whether what we have observed is exceptional and unique, or the upshot of circumstances which can be, and have been, replicated elsewhere.

6. Conclusion

One feature of the now quite voluminous literature on sharecropping is that although so much of the theoretical discussion hinges on the details of contracts, few of the contributors have provided an analysis of observed contracts in any particular situation. The article by Bardhan and Rudra (1980) raises expectations on this score, but in fact only compares 'standard types of contract' for each of a large number of villages, so they cannot do more than gain a general impression of trends. Variations within villages are not part of their brief. In the research reported here I have tried, with Miguel Murmis, to begin to fill this gap. The practical problems involved should not be underestimated, but we have shown that at least as far as gathering the details of contracts is concerned, these are not very serious: it is in the details of costs of production and use of labour – which one might in a subsequent analysis wish to set against the features of the contracts – that difficulties arise. There are also obvious problems in these settings in obtaining reliable information on the properties and borrowings and lendings of informants.

The contracts show a wide range of variation and of course the fundamental importance of cost-sharing, and the case study also gives little support to any notion that sharecropping is inimical to entrepreneurial activity and capital accumulation by either sharecropper or landowner. The contracts have forced us to write of sharecropping in this context as a capitalist partnership rather than as a form of tenancy.

However, we are also forced to recognize that the structure and function of sharecropping varies widely in different social settings. One implication of this proposition is that the theoretical analysis of sharecropping as a pure contractual form cannot lead very far if the social setting is not specified.¹ It

¹A Marxist might capture the point by saying that it is after all just a contract, not a relation of production, and this is borne out in straightforward logical terms by our observation that wage payment – a relation of production – is found pervasively within sharecropping arrangements in Carchi.

would appear that in the stereotype of an Asian village, the pattern of 'sharecropping with interlocking monopolies in different factor markets' operates, and the landlord extracts an array of arbitrary payments which constitute in effect a rent on power. In such a setting patron-clientage and personal dependency are dominant elements in relations of production and exchange, even in the guise of parental obligations and para-kinship relations, where the underlying character of the transaction, in relation to labour or to inheritance, is characteristically opaque.

In the setting described here, in contrast, and which is on the path towards a structure dominated by the C.F.F., the rental element in contracts can be fairly closely identified, and may even be absent if the tenant has heavy responsibilities for supervision and recruitment of labour. Also, the terms of contracts between parents and their children show a degree of transparency and calculation and an absence of that personal dependency which is present in 'peasant' arrangements and therefore in the involuted path. The contracts are short term, because those involved want to keep their options open to plant in different locations and because in the absence of interlocking monopolies there is no particular reason to continue sharecropping with the same person over a long period. (We only have two cases of people sharecropping with their employer.) It is possible, of course, that if the setting was marked, say, by severe seasonal unemployment the sharecroppers would, as in Bardhan's (1980) hypothesis, trade security for earnings and try to sustain a long term relationship. But in that case the setting would hardly be one resembling the path towards C.F.F. dominance.

I have further tried to show how the type of sharecropping prevalent in Carchi may facilitate the transition to a system dominated by capitalized family farms, on account of its role in enabling (some) people to accumulate land and capital at a relatively early stage in their lives and in providing a mechanism for a gradual transfer of wealth from one generation to the next.

So much for comparisons between areas with different structural characteristics. Within the areas we have studied contracts also vary. The main variable explaining their variation seems to be the volume of inputs under the contract which is related to the joint wealth of the partners involved. In brief, and somewhat crudely, the greater the average landholding of the partners the more likely they are to draw up a contract in which all costs including those of labour are shared equally between them, and in which, therefore, the owner of the land foregoes half the rent on the land which one would normally expect to accrue to him. He foregoes this half, presumably, in recognition, implicit or not, of the sharecropping partner's heavy recruitment and supervisory tasks in large sowings. It is not possible, in this area at least, to explain contract variation in terms of the *relative* landownership of the parties involved (a proxy for power).

Finally, we come to the importance of wage labour employment in

sowings under sharecropping. People are surprisingly more likely to employ wage labour on sharecropped land than on owner-operated land; producers are unsurprisingly more likely to work themselves when cultivating their own land on their own than when renting it out. I would venture to suggest that this finding, especially given the clear statistical tendencies on which it is based, introduced a new dimension into the analysis of sharecropping. My interpretation is that in the case studied, sharecropping is a device to gain access to labour caught in the 'peasant' labour market and that specialists or insiders, who are brought in as sharecroppers, are required to gain that access. Insofar as these specialists or insiders are themselves peasant producers, this shows that sharecropping offers to some of them, if they are lucky perhaps, a chance of escaping from the peasant network and embarking on a career which will transform them into capitalist producers. Thus the cheapness of peasant labour, far from imprisoning them in their poverty, seems to offer some of them at least an escape route from it, contrary to much contemporary thinking.

Now this may sound very optimistic but various features of the case studied may make it a rather special one. The particular form in which land was redistributed – with minimal bureaucratic meddling – and the particular stratum to whom it was distributed – one of artisans and village petty bourgeois, for the most part – clearly helped. Thus if Carchi is indeed embarking on a virtuous circle, and if the redistribution of land has had a role in setting it on this trend, let no one think that it was as a result of the redistribution of land from the great estates to the poorest peasants. It wasn't. Similarly, if the particular way in which sharecropping is practised here has a role to play in this trend, let it not be thought that it offers an opportunity of social mobility to a mass of poor farmers. To some, perhaps, but by no means at all.²

²Further empirical background and theoretical elaboration can be found in Lehmann (1986).

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