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'AGRICULTURAL INVOLUTION' AND ITS CRITICS:

TWENTY YEARS AFTER CLIFFORD GEERTZ

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Twenty years have passed since the publication of Clifford Geertz' Agricultural Involution: the Processes of Ecological Change in Indonesia (1963), a work whose basic arguments had already circulated in mimeograph seven years earlier (Geertz 1956a).^{*} Initial reactions in the West, from a variety of disciplines, were almost unanimous in praise (Sharma 1964; Wertheim 1964; Heeren 1965; Jaspan 1965; Benda 1966; Johns 1966; Yengoyan 1966; Conklin 1968), although reviews by Indonesian scholars themselves, mostly appearing after the book's translation to Indonesian (Geertz 1976) were somewhat more muted (Koentjaraningrat 1975: 202 ff; Sajogyo 1976; Mubyarto 1978). "Involution" has by now become "a standard concept of textbook social science" (Evers 1980: 2) and has been used in a wide variety of rural and urban contexts in other countries to denote a particular variety of non-evolutionary, non-revolutionary change; together with the linked concept of "shared poverty" it has become part of the everyday discourse of Indonesian policy-makers and the educated middle class (including the majority who have not read Geertz' work), and there is no doubt that it has had a profound influence on all subsequent social-science research, both historical and contemporary, on agrarian change in Indonesia and particularly Java. Nearly all published work since that time has either made use of the concepts of "involution" and "shared poverty" or cast its findings explicitly in contrast to them: as one recent author has noted, "reference to Agricultural Involution can hardly be avoided whether or not one agrees with Geertz' approach" and the concern with Geertzian models has become almost "obsessive" (Gerdin 1982: 56).

The past 15 years, meanwhile, have also seen a large flow of criticism of various aspects of Geertz' book, some based on original research and some - like Agricultural Involution itself - on available literature. Many of these criticisms appear in studies not primarily directed to that purpose, but a number of recent publications have been explicitly framed as criticism of one or other

* Because of the large number of references in this overview, the bibliography is assembled at the end of the paper rather than in footnotes.

aspect of the book (for example Aass n.d.; Elson 1978; Kanō 1980; Collier 1981a, 1981b; Knight 1982; and Alexander and Alexander 1978, 1979, and 1982 in a series of articles which qualify the Alexanders for the title of chief Geertz-bashers, with a promise of still more to come). Much of this work has appeared in out-of-the-way publications and it may be useful to provide in this paper a brief summary of the main lines of criticism, as well as some overall assessment of the scientific validity of "involution" as a framework for the study of agrarian change in Indonesia.

Re-reading Agricultural Involution (AI hereafter) nowadays, it is hard to understand why this little book should have caught the imagination of a generation of Western social scientists and Indonesian intellectuals and policy-makers, indeed why it should have had any great influence at all. The backbone of the book is a brief summary, based on Dutch authors, of colonial policies for the extraction of export crops with heavy emphasis on the island of Java; despite its usefulness in making this material available to English-language readers, replacing the earlier works of Day (1904) and Furnivall (1939), there is no new information or original research on Indonesian agrarian history here (nor did its author claim so). The historical chapters are sandwiched between a theoretical section on 'The Ecological Approach in Anthropology' and a general description of Indonesia's 'Two Types of Ecosystems' by way of introduction, and a concluding chapter on 'Comparisons and Prospects' based on comparison of Japan's success and Java's failure to achieve economic "take-off" as defined by such once-popular economists as Rostow (1960). This comparison has been widely criticised, and the 'ecological approach', as Geertz himself notes at the end of the book, does not take us far in the search for "the true diagnosis of the Indonesian malaise" (AI: 154).

Despite Geertz' own ambivalence on the explanatory potential of the ecological approach, the book does appear to represent a peculiar ecological or even cultural-materialist trend in the larger corpus of Geertz' prolific work on Indonesia and other places.

Geertz is primarily known among social scientists for his injection of a third "stream" into the American anthropological tradition (besides the "American" stream of Boas, Kroeber, Lowie and their successors and the "French/British" stream of structural and structural-functional anthropology), derived from Max Weber by way of Geertz' teacher Talcott Parsons (cf. Peacock, 1981). This approach may be seen in his major works on the religion of Java (1960), on the "theatre state" in nineteenth-century Bali (1980) and in the collection of essays on "the interpretation of cultures" (1973) which comes closest to a general exposition of 'Geertzian anthropology'.

Geertz' basically Parsonian framework, with its emphasis on elucidating the cultural meanings of human action, fits in well with the 'modernisation' school popular among Geertz' former colleagues and mentors in the field of development sociology and political science in the 1950s and 1960s, with their emphasis on 'modernising' vs. 'traditional' attitudes and values, on social and economic 'dualism' and on 'diffusion'. Why then did such an author as Andre Gunder Frank, in his well-known polemic against this whole 'modernisation' school single out Agricultural Involution (together with works by Wertheim and Marx, among others!) as having demonstrated the theoretical and empirical inadequacy of the dualist theory and the diffusionist and other theses based on it, as developed and practised by Geertz' own mentors and colleagues (1973: 62f) - among them Bert Hoselitz and Benjamin Higgins, the latter perhaps unaware of what was being done to him when he provided the foreword to AI? How can Gunder Frank and Higgins like the same book? I think it can be argued that Agricultural Involution, although seemingly focused on such down-to-earth phenomena as the warm-water ecology of the flooded paddy field, Dutch colonial extractive policies, relations between sugar cultivation, population densities and paddy yields and the complexity of agrarian relations in Java, is not such a departure from 'mainstream' Geertz as many have thought.

On closer reading the main factors held responsible by Geertz for continuing agrarian stagnation in Java (if not for its colonial origins) - the absence of agrarian differentiation and the "sharing of poverty" - are seen as basically a matter of world-view, attitudes and values, i.e. as a problem of (psycho)-cultural rather than ecological, technological or even political-economic impasse.

Having mentioned "shared poverty" I should note one further peculiar aspect of reactions to Agricultural Involution, although this involves anticipating arguments to be made later. How can so much uncritical admiration have been devoted in the late 1960s to a work emphasising the absence of agrarian differentiation, the sharing of poverty, the "flaccid indeterminateness" and "advance towards vagueness" (AI: 102f.) of Javanese village society, which appeared precisely at the moment when large-scale agrarian conflicts of a pronounced class character were reaching their height, culminating only two years later in the violent crushing of militant small-peasant and landless-worker organisations by the army and Muslim youth-groups associated with the landowning classes, who joined in the massacre of hundreds of thousands of men and women (cf. Lyon 1970; Mortimer 1972; Wertheim 1969)?

"Involution" as a general organising concept

Geertz borrowed the term "involution" from the American anthropologist Alexander Goldenweiser (1936) to describe the peculiar adaptation of Javanese peasant society to a colonial system designed to extract land, labour, produce and money taxes from village economy, using a variety of methods at different times and places. "Involution" means basically the internal elaboration and rigidification of a basic pattern, rather than a change from one pattern to another - "the overdriving of an established form in such a way that it becomes rigid through an inward overelaboration of detail" (AI: 82) - and is contrasted by Geertz with the evolutionary or revolutionary "take-off" occurring in parts of "Outer Indonesia": "as the bulk of the Javanese peasants moved toward agricultural involution, shared

poverty, social elasticity, and cultural vagueness, a small minority of the Outer Island peasants moved toward agricultural specialisation, frank individualism, social conflict, and cultural rationalisation" (AI: 123).

Before summarising and evaluating the various concrete components which for Geertz make up the Javanese peasantry's involutory response to colonial extractive policies, it is worth considering the usefulness of "involution" as a general organising concept to characterise a particular, inward-turning type of change; one that may fruitfully be contrasted with "evolution" (gradual, "unfolding" change from one pattern to another, the emergence of a new form on the basis of an old one) and with "revolution" (abrupt, "overturning", violent or radical change from one form to another). Such general contrasts between types of change might be usefully applied in the sphere of productive technology, production relations or social organisation, in art, language, music, religious expression, or patterns of deference, etc. (cf. Goldenweiser's original use of the term in the field of primitive art); and it is in this general taxonomic way that many authors have found the notion of "involution" useful in a wide variety of contexts: "urban involution" (Armstrong & McGee 1971) and "the parasitic involution of capitalism" (Pieris 1970) in Asian cities; "religious involution" in Mentawai (Scheffold 1976); "industrial involution" in parts of nineteenth-century England (Levine 1977: Ch.4); involution in "semiperipheral" European economies during the seventeenth century (Romano 1974; cf. Wallerstein 1980); "agricultural involution" in Javanese (but not Balinese) transmigration settlements in Lampung (Zimmerman 1980); and as one courageous Indonesian writer has described the government-sponsored national Koran-reading competition (Musabaqot Tilawatil Quran), "cultural involution" (Su'ud 1980).

But the usefulness of the concept of involution in classifying different types of change (i.e. as a taxonomic concept) is quite a different question from consideration of its applicability in a specific historical context, the issue on which these notes will focus.

Since AI is often marked by elegance rather than clarity in presentation, I will first try to summarise what Geertz said about colonial policies in Java and the peasantry's involuntional response, mainly with the aid of some rather well-worn quotations.

Components of agricultural involution (1): colonial policies

Dutch colonial systems of extraction in Java, which at times during the 19th century provided as much as one-third of all the Netherlands state revenues (Fasseur 1975: 204) are described by Geertz in terms of the superimposition of colonial export-crop economy on an indigenous subsistence economy, in two main forms. First, during the so-called cultuurstelsel or 'Cultivation System' (1830-1870) under which extraction was essentially based on colonial appropriation of the right of the sovereign to a portion of the peasant's land and/or labour and/or produce in exchange for his right to cultivate that land, this right being taken over by the Dutch from indigenous rulers by conquest or treaties which mainly involved their paying-off with a system of money allowances. The conventional formula (which we may see for example in the writings of Governor-General van den Bosch) was the remission of peasants' land-rent in exchange for his cultivating government-owned export crops on one-fifth of his land, or providing one-fifth of his labour-time on government estates or other projects. There is much debate on how the system worked in practice; recent historical research suggests that it was not so much one "system" as a complex variety of local arrangements by which both the Dutch and indigenous rulers extracted as much as they could, often much more than the "one-fifth" just mentioned (Elson 1978; Knight 1982; van Niel 1964, 1968).

This 40-year period is for Geertz the "decisive" era in Javanese colonial history, which "stabilised and accentuated the dual economy pattern of a capital-intensive Western sector and a labour-intensive Eastern one by rapidly developing the first and rigidly stereotyping the second ... and ... prevented the effects on Javanese peasantry and gentry alike of an enormously deeper Western penetration into their life from leading to autochthonous

agricultural modernisation at the point it could most easily have occurred" (AI: 53). Thus, "although the Javanese helped launch the estate sector, they were not properly part of it: it was just something they did, or more exactly were obligated to do, in their spare time" (AI: 69).

The Cultivation System was formally brought to an end by the passage of the Agrarian Law in 1870 (which in fact codified developments already in motion) ushering in the so-called Corporate Plantation System whereby individual corporations were granted the long-term lease of uplands for the creation of coffee, tea and rubber estates: using wage labour (i.e. a conventional plantation system which up to that time had been largely absent from the scene); in the lowland sugarcane areas, the sugar mills still had no direct or continued access to land but instead leased irrigated paddy-fields on a short-term rotational basis from peasants and again cultivated it with "free" wage labour. Speaking of these changes, Geertz notes that the "mutualistic" relationship between the subsistence and commercial sectors does not change essentially "if forced labour is replaced by paid labour, if land is rented rather than its use appropriated as a form of taxation, and if private entrepreneurs replace governmental managers. Then it becomes a matter of holding down money rents and wages, and avoiding the formation of a true proletariat without the productive means with which to provide its own subsistence" (AI: 58).

Taking a broad view and leaving aside the specifics for a moment, we may see that Geertz has described something familiar to anyone acquainted with the past two decades of subsequent literature on colonial "modes of production" all over the world: a system which extracted products cheaply for capital by maintaining the subsistence sector (at a low level of technology and labour-productivity and under various constraints) rather than destroying it in favour of capitalist agriculture, so that labour for export-crop production in the "other" sector is obtainable at low cost, a part (or all in the case of forced labour) of the costs of its reproduction being borne by the subsistence sector. The mechanisms by which this

labour is drawn into export-crop production may vary from one colonial or neocolonial regime to another, or as we have just seen from one period to another in the same country, but their basic function is the same. It is this kind of view of the Javanese colonial experience which perhaps explains why Gunder Frank (but not why Higgins) likes the book, and why it has sometimes figured in Marxist debates on the "articulation" of modes of production in colonial contexts (cf. Barbalet 1976; Taylor 1979).

Components of agricultural involution (2): the involutorial response

Although many authors justly complain of Geertz' failure to provide clear, operational and testable definitions of "agricultural involution" - a failure partly due to Geertz' preference for evocative similes and metaphors rather than direct concrete statements, which makes the book so delightful to read the first time and so infuriating thereafter - the basic components of the involutorial response to colonial policies are relatively clear. They may be divided into those which Geertz regards as providing the ecological basis for involution, and "involution" itself which we may again divide into its separate components, following and further developing van den Muijzenberg's (1975) distinction between the "productive" and the "distributive" aspects of involution.

The ecological bases of involution according to Geertz were twofold. First, the remarkable capacity of the irrigated rice-terrace (sawah) ecosystem to respond to labour-intensification without loss of soil fertility, absorbing increased numbers of cultivators per unit of land and providing increased per-hectare production but with only stable (and perhaps declining) output per unit of labour: "it seems almost always possible to squeeze just a little more out of ... sawah by working it just a little bit harder ... the capacity of most terraces to respond to loving care is amazing" (AI: 35). Second, the ecologically symbiotic or mutualistic quality of the main export and subsistence crops, sugarcane and paddy: "sugar demands irrigation (and drainage) and a general environment almost identical to that for wet rice" (AI: 55) and "the expansion

of the one side, sugar cultivation, brings with it the expansion of the other, wet-rice growing. The more numerous and better-irrigated the terraces are, the more sugar can be grown; and the more people - a seasonal, readily-available, resident labour force (a sort of part-time proletariat) - supported by those terraces during the nonsugar part of the cycle, can grow sugar" (AI: 56f.).

Given these ecological bases, the involitional response of the Javanese consisted of several interrelated components. On the productive side, first, the labour-intensification of subsistence production, "an intensification made both possible and necessary by the increasing population" (AI: 77) which maintained per-capita rice production at around 100 kilograms throughout the 19th century. Next, a generally increasing complexity on both the productive or technological and the social or distributional side. In the techniques of rice production, "pregermination, transplantation, more thorough land preparation, fastidious planting and weeding, razor-blade harvesting, double-cropping, a more exact regulation of terrace-flooding, and the addition of more fields at the edge of volcanoes" (AI: 77f.), a "technical hairsplitting" which was matched by increased institutional complexity in land-tenure arrangements and in agrarian relations generally: the strengthening in the sugarcane areas of so-called "communal ownership" tenure-systems in which the village assigns use-rights to individuals (which may be relatively permanent and heritable) but exercises various residual rights of control, for example in complex rotation schemes giving the sugar mills access to whole blocks of land without completely depriving peasant families of land for subsistence cultivation (AI: 90f.); and "a marked elaboration and expansion of the traditional system of labour relations" shown in the intricacy and flexibility of arrangements for the leasing, sharecropping and pawning of land, and in labour arrangements "subcontracting, ... jobbing, work-exchange, collective harvesting and, latterly wage work" (AI: 98f.).

According to Geertz one major consequence and perhaps a cause of this internal elaboration of agrarian relations was its distributional or welfare function, in elaborating and extending the

"mechanisms through which agricultural product was spread, if not altogether evenly, at least relatively so, throughout the huge human horde which was obliged to subsist on it. Under the pressure of increasing numbers and limited resources Javanese village society did not bifurcate, as did that of so many 'under-developed' nations, into a group of large landlords and a group of oppressed near-serfs. Rather it maintained a comparatively high degree of social and economic homogeneity by dividing the economic pie into a steadily increasing number of minute pieces, a process to which I have referred elsewhere as 'shared poverty'" (AI: 97. The reference is to Geertz 1956b).

These are the elements which according to Geertz made up the involutory response of Javanese rural society, a "treading water" pattern of change which he considers to have continued beyond the 19th century and into the early Independence period: an internal elaboration of infinitely complex labour-intensive techniques in agriculture, of agrarian relations functioning to spread employment opportunities and the agricultural product among a burgeoning population "all in an effort to provide everyone with some niche, however small, in the over-all system" (AI: 82). This process of elaboration in the technology and organisation of production was "matched and supported by a similar involution in rural family life, social stratification, political organisation, religious practice, as well as in the 'folk-culture' value system ... in terms of which it was normatively regulated and ethically justified" (AI: 101). The whole process is summed up as the "advance towards vagueness" in village society, giving the quality of everyday existence "a richness of social surfaces and a monotonous poverty of social substance" (AI: 103). During the 20th century, this process has not only continued but also spread geographically: "involution ... has proceeded relentlessly onward, or perhaps one should say outward, for a process which began to be felt first in full force mainly in the sugar regions is now found over almost the whole of Java" (AI: 126).

"A brilliant hypothesis"

Before embarking on the exposition of "agricultural involution" Geertz warns us of the scarcity and unreliability of data on the peasant sector during the 19th century, so that the various stages of their adaptation "have to be described in speculative terms, shored up only by fragmentary and indirect evidence, plus some hard reasoning"; however, "the over-all nature and direction of that adaptation are clear" (AI: 70). It is perhaps the fault of over-enthusiastic readers that the ideas put forward in AI, most of them with virtually no concrete evidence, have been taken more as "discovery" than as inspired speculation; as Knight reminds us, "a brilliant hypothesis ... is what Agricultural Involution remains, and it would be a pity if it were mistaken for something more" (Knight 1982: 148). As we shall see, almost every element in the Geertzian picture encounters serious difficulties when confronted with the available evidence.

Ecological mutualism

Taking the components of involution more or less in the order in which they have just been summarised, the notion of ecological mutualism or symbiosis between sugarcane and paddy cultivation is problematic in many ways. First, although this may not much affect the general involution hypothesis, it is simply not true that "sugar demands .. a general environment almost identical to that for wet rice" and was thus "almost of necessity initially cultivated on peasant sawah" (AI: 55); sugarcane was and is normally grown under quite different conditions and had to be specially adapted to the conditions of Javanese sawah, and it was most probably considerations of labour availability rather than ecological necessity which led to the concentration of sugarcane in the irrigated areas, as Sajogyo has noted:

"The sugar mills' easy access to a rural labour force supports a strong presumption that this cheap labour was the paramount consideration in the capitalist sugar mills' concentration on the 'cultural core' (the sawah ecosystem - BW) and that a sugarcane technology was

deliberately developed with modern agronomic science and selected by the capitalists to conform to the ecological requirements of irrigated paddy! Sugar is grown in most of the tropics without such careful irrigation as in Java, indeed more often under rain-fed conditions ... Geertz has got his facts wrong in supposing that the ecological requirements of sugarcane are identical to those of wet rice" (Sajogyo 1976: xxv).

The Alexanders have pointed to further agronomic problems in the inter-rotation of sugarcane and paddy which cast doubt on the impression given by Geertz that sugarcane can be inserted into an irrigated paddy regime without fundamentally disturbing its productivity:

"The integration of an 18-month (sugarcane) and a 4-month (paddy) crop is difficult without leaving the land unused for some periods. The different systems of field irrigation (furrow and basin irrigation respectively - BW) mean that considerable labour is required for reconstruction after each crop. But the critical point ... is the difference in large-scale water requirements: irrigation systems developed with the intention of maximising sugar production are inappropriate for the maximisation of rice production" (Alexander & Alexander 1978: 210).

The same authors' calculations (based on Anderson 1972) show that in a common glebagan sequence in which a village entered a 21½-year erfpacht agreement entitling a sugar mill to plant sugarcane on one-third of the village sawah in rotation (described also in AI: 86ff.), when the time needed to convert the sawah from basin to furrow irrigation and back is taken into account, sawah was available for rice-cultivation during only 24% (and for dry crops during 20%) of each three-year cycle. A village entering into an erfpacht agreement of this kind therefore had its opportunities for paddy production cut by two-thirds (Alexander & Alexander 1978: 212).

On a more global level, there are problems with the only piece of statistical evidence furnished by Geertz to demonstrate the mutually-supportive relations between sugarcane and paddy cultivation.

Geertz uses statistics from the 1920s (from the Landbouwatlas or Agricultural Atlas of Java and Madura, 1926) to show that the main sugarcane regions of Java had proportionately "(1) more sawah; (2) more population; and (3) even though more of their sawah is occupied by sugar, more rice production than the nonsugar areas... All three 'flourish', if that is the proper word, together" (AI: 74f.). In a recent paper the Dutch scholars Hüsken and van Schaik have analysed the same data broken down by separate regions, and conclude that

"The only region where 'high density, high sawah-isation and high productivity' go together in sugar districts is the Vorstenlanden and their former mancanegara (the puppet principalities of Yogyakarta and Surakarta - BW) ... the correlation found by Geertz for all Java occurs only in the area where the Cultivation System (designated by Geertz as the primary cause of agricultural involution) was never put into operation, but where the sugar industry obtained a 'feudal' right of disposal over land and labour through contracts with the Sultans and their apanage-holders" (Hüsken & van Schaik 1980: 23 ; emphasis added).

Detailed historical research on important sugarcane-areas in which the Cultivation System was operative presents us with a quite different, unGeertzian picture which calls into question his attempt to base the notion of involution on the Cultivation System (cf. Elson 1978: 24): the diversion of peasant labour to sugarcane production seems to have resulted not in labour-intensification on the sawah remaining in paddy cultivation, but in a decline both in labour-intensity and in paddy yields, at least during Geertz' "decisive" period of the mid-19th century. In the residencies of Pekalongan and Pasuruan, which together produced more sugar than the Principalities, peasants often had to resort to faster-growing but lower-yielding varieties (padi genja) in order to harvest before the sawah was taken over for sugarcane; they also returned to less labour-intensive methods (broadcasting instead of pregermination and transplanting, less frequent weeding) and suffered drastic reductions in yields (Elson 1978; de Vries 1931; Knight 1982; cf. Alexander & Alexander 1979). Pekalongan, formerly a major exporter of rice, had become a rice deficit area by the 1850s (Knight 1982: 141); in Pasuruan, rice production declined steadily from the 1840s, and

"there is no evidence of the progressive rises in rice productivity along the densely populated and heavily 'sawahed' sugar districts of the northern littoral, the stable per capita rice yields, nor the intensified labour-absorbing agricultural techniques described by Geertz ... a detailed analysis of Pasuruan's experience suggests that the more such an area was subjected to heavy cane cultivation, the more that cultivation became a positive obstacle, rather than an operative factor, in the attainment of high rice-yields" (Elson 1978: 19, 24).

In short, the forced cultivation of sugarcane along Cultivation-System principles seems not to have inserted itself in mutually-supporting coexistence with subsistence cultivation, but rather to have "played havoc with village agriculture" (Knight 1982: 140). As Knight and others have made clear, its effects were felt not only in production but also in agrarian relations and class formation but we will postpone this important issue for the moment, turning first to the problematic question of the relation between colonial extraction, labour intensification and population growth.

The role of population growth

Available statistics suggest a remarkable and unique history of rather steady and continuous population growth in Java, at around two percent per annum throughout the 19th century (thus, doubling itself roughly every 35 years) and indeed up to the present; while there is debate on the reliability of the early 19th century estimates there seems little doubt that population was growing at this time, even if we may never know precisely how fast (Bremner 1963; Peper 1970; White 1973). As the Alexanders have carefully pointed out, Geertz' treatment of population growth is basically Malthusian, with population growth seen as a result of declining mortality and as a cause rather than a result of agricultural innovation, and labour-intensification seen as a defensive reaction to population growth (Alexander & Alexander 1979: 23), with one curious exception at the end of the book. While comparing Java with Japan, Geertz sees Java's rapid population growth after 1830 as "a result of declining mortality due to improved communications and greater security, and of increased fertility due to the labour-tax pressures of the Culture System" (AI: 137).

Some years ago I proposed a more positive, non-Malthusian interpretation of colonial population growth concentrating on the pressures imposed on peasant production by colonial exactions of land, labour and produce and their effects on the demand for children as potential producers in peasant households, the units within which the reproduction of labour power takes place; in the absence of direct evidence on reproductive behaviour during the colonial period the argument was largely speculative (White 1973). In reaction, Geertz and van de Walle while not denying that colonial policies after 1830 diverted large amounts of peasant labour into the commercial sector have argued that these new demands were "more importantly met by social reorganisation, including work and technical reorganisation, in the peasant sector" (Geertz 1973: 238) and "did not remove labour or land from rice production ... but used them when were idle" (van de Walle 1973: 244, recalling Geertz' more cynical observation already quoted, that the Javanese peasantry launched the estate sector "in their spare time").

The comfortable notion that an entire system of colonial extraction involved no more than the conversion of the natives' "idle time" into "work time" can only be countered by (nor, perhaps, should have been advanced without) more substantive evidence of the level and also the timing of colonial demands on peasant production and labour time. The evidence from sugarcane areas provided by Elson, de Vries, van Niel and Knight (some of it already mentioned) offers powerful support for the idea that, during the "formative" period of the Cultivation System, colonial labour demands did represent labour taken out of subsistence production. Peasant households in Pasuruan devoted about 180 person-days per year to sugar cultivation, so that "the 66 days of forced labour which each household was supposed to provide for non-agricultural tasks, must have seemed insignificant alongside the labour demands of the fields" (Alexander & Alexander 1979: 35), to which must be added the traditional *corvée* exactions of labour and produce still levied by the Javanese regents and lower officials. Far from supposing that these labour demands - the "rent" which smallholders were obliged to pay for the right to cultivate subsistence crops with the land and labour

that remained - could have been met in Geertzian "spare" time, it is hard to see how any time remained at all for subsistence production. We have already seen that rice-yields declined during the early years of the Cultivation System in these areas: in Pasuruan it took 30 years for paddy yields to regain their former level, a "re-intensification" which seems only to have become possible thanks to a period of rapid demographic expansion which provided the extra labour necessary to undertake it: between 1838 and 1868 the average household size increased from 3.5 to 4.6 persons, with a corresponding increase in the ratio of juveniles to adults (Alexander & Alexander 1979: 37; cf. de Vries 1931: 99).

These examples, together with other estimates of the burden of unpaid labour obligations in various parts of Java (cf. Selosoemardjan 1962: 271-284 for the sugarcane region of Yogyakarta and Arminius' remarkable 19th century 'time-allocation' study of a non-sugar district of Bagelen, 1889; also Eindresumé 1901-1903) strengthen the argument that the exaction of colonial 'rent' in its various and changing forms constituted a labour demand which was not met simply by reductions in "idle" time but required fundamental reorganisation of the household's division of labour. There is evidence of a high degree of women's involvement in smallholder cultivation and in the increasingly important off-farm activities of trade, handicrafts etc. (an aspect of the Javanese adaptation which Geertz ignores) throughout the 19th century (Boomgaard 1980); and it is reasonable to suppose that as male labour was diverted from indigenous production to fulfil colonial demands it was replaced both by increased involvement of women in directly income-producing activity and by larger family sizes through increased rates of reproduction. Recent advances in historical demography have shown the sensitivity of reproductive behaviour to political-economic change (through changes both in marriage patterns and in the regulation of reproduction within marriage) in other preindustrial peasant populations in Europe and Asia for which better records are available (cf. White 1982: 590-597). The marked increase in child-adult ratios already noted for Pasuruan is also found for Java as a whole during the early years of the Cultivation System (Boomgaard 1979: 48).

We have little historical evidence on children's labour use, although it is interesting that many districts were able to report on children's wage rates in agriculture in the 1905 "Declining Welfare" enquiry (MWO 1911); contemporary analogies can show the potential of children as a source of labour (White 1976a, 1976b and 1982:600 ff. describe a village in Yogyakarta in which half of all work was done by children in the early 1970s, although most of them were spending part of their time in school). Such fragmentary evidence as there is, then, together with analogies from contemporary research and from historical demography, supports parts of the "demand-for-labour" interpretation of colonial population growth for which no direct evidence may be available; enough to give some force to the argument that demographic expansion should be better viewed as one aspect of the peasantry's active response to colonial pressures, rather than as an exogenous cause of agrarian stagnation (cf. Alexander & Alexander 1979).

Increasing complexity in the "cultural core"

Thus far we may conclude with the Alexanders that "the stagnation of Javanese agriculture during the colonial period was less a product of ecology and demography than political economy" (Alexander & Alexander 1978: 217). Let us now turn briefly to the notion of increasing internal elaboration and complexity, which as we have seen is for Geertz a defining mark of "involution". As far as complexity in agricultural techniques is concerned, no concrete evidence can be offered in either direction (nor is any offered by Geertz) but we may note that none of the techniques mentioned as instances of this increasing complexity (AI: 77f.) are absent from Raffles' pre-Cultivation System (1817) description of Javanese paddy cultivation - many of them, such as harvesting with the finger-knife or ani-ani, are centuries older than that - with the exception of straight-row transplanting (AI: 35) which was not general in Java until introduced by the occupying Japanese in the 1940s. While per-hectare labour-inputs in paddy cultivation are high, there is some doubt whether they have increased at all since

the earliest available estimates made by Sollewijn Gelpke in Kediri (1901) and by Arminius in Bagelen (1889), or since the more detailed and careful studies made by various researchers in several villages during the 1920s (Collier 1981b); although such comparisons are dangerous because changing data-collection methods may significantly affect the results, there is certainly no firm evidence yet of labour-intensification in paddy production at any time during the colonial period, apart from the "re-intensification" in late Cultivation-System Pasuruan, which as already noted was a return to techniques abandoned during the early years of the System. There may well have been increases in the input of labour per hectare per year (rather than per crop) through the extension of double-cropping -- particularly the rapid expansion of soy-beans, maize, cassava, tobacco, ground-nuts, etc. as second crops during the late 19th and early 20th century (AI: 90-94) - but this involves no elaboration of agricultural techniques, nor is there anything "involutional" about double cropping, multiple-cropping or inter-cropping.

What about the complexity and elaboration of land-tenure and labour arrangements? It is difficult to draw any precise conclusions here, and again Geertz offers no evidence, beyond a couple of illustrations:

"A man will let out part of his one hectare to a tenant - or to two or three - while at the same time seeking tenancies on the lands of other men, thus balancing his obligations to give work (to his relatives, to his dependents, or even to his close friends and neighbours) against his own subsistence requirements. A man will rent or pawn his land to another for a money payment and then serve as a tenant on that land himself, perhaps in turn letting out subtenancies to others. A man may agree, or be granted the opportunity, to perform the planting and weeding tasks for one-fifth of the harvest and job the actual work in turn to someone else, who may, in his turn, employ wage labourers or enter into an exchange relationship with neighbours to obtain the necessary labour" (AI: 99).

Certainly there is a complex variety of forms of land tenure (cf. Scheltema 1931) and agricultural labour-recruitment (cf. Ver-sluis 1938) in Java, but are these any more complex than in other Asian societies or in land-scarce peasant societies generally, and did they increase in complexity during the 19th century or there-after? The available historical evidence on these matters has never been thoroughly analysed - not only archives, but even published sources such as the massive all-Java inquiry into native land rights in the late 1860s (cf. Eindresumé 1876-1896) have scarcely been touched, despite some useful summary analyses (e.g. Kanō 1977) - but on the basis of existing work and my own perusal of some regional data for parts of West and Central Java, I think a plausible argument can be made that land leasing and sharecropping are now, and were in the past, no more and perhaps less common than in many other Asian societies. Quite simply, the great majority of Java's paddy fields (and still more of unirrigated land) both recently and in the colonial period, appear to have been "farmed" (with or without hired labour) by their owners (or by those holding use-right in the case of "communal" land); similarly, despite the existence of many kinds of labour-exchange arrangements, Javanese smallholder agriculture has been marked since at least the beginning of this century by a rather high proportion of simple wage-transactions, involving sometimes natura payments (as in harvesting) but otherwise generally cash payments (cf. de Vries 1932; Collier 1981b; Sinaga & White 1980).

Paradoxically, a much stronger argument might be made for genuinely "involutional" tendencies to increasing internal complexity and rigidification, not in the sphere of agricultural technology and agrarian relations on which Geertz lays such stress, but in the "rest" of culture, in the increasingly refined patterns of language, etiquette, dance, batik, religious and ceremonial behaviour and mystical belief emanating not from the peasantry but from the demoralised courts of both inland and coastal Java, although the beginning of these tendencies should be dated not to the Cultivation System but to the 17th and 18th centuries (cf. Burger 1956). In these

"superstructural" areas of social life and ideology (although Geertz explicitly refrains from a priori assignment of the various bits of culture to "core" or "superstructure", AI: 10f.), on which so much of Geertz' anthropological work in Java and elsewhere has thrown light, the notion of "involution" may have greater relevance. One wonders whether perhaps Geertz' observations of these aspects of culture (the focus of his own fieldwork in small-town "Mojokuto" in 1953-54) led him to transfer these ideas to the field of agrarian relations, on a much more shaky empirical foundation.

"Shared poverty" and the absence of agrarian differentiation

Geertz' account of agrarian stagnation hangs on the role of the technical and social changes described above in spreading resources, work-opportunities and the agricultural product relatively evenly among the burgeoning population, maintaining a "comparatively high degree of social and economic homogeneity" and thus preventing the emergence of a class of entrepreneurial, capitalistic farmers who might otherwise have been responsible for economic "take-off". The assertions on "shared poverty" and the absence of differentiation have been adopted wholesale by many authors who have not themselves done research on this topic (cf. Missen 1972; May 1978; Sievers 1974; Scott 1976) but have attracted so much criticism by those who have that the task of summarizing is difficult. Of all the issues raised by AI this is the most central, not only because of its influence on later research but also because the idea of "shared poverty" and the values held to reinforce it has taken root so deeply, and serves some role in the ideological justification of the rural development policies of the New Order government.

Although Geertz devotes curiously little space (AI: 97-102) to this crucial aspect of "involution", the assertions are bold and unambiguous (cf. p 10 above) and echoed in other publications :

"rather than the rapid concentration of wealth and the formation of an impoverished, alienated proletariat,... we have had in Central and East Java a process of near-equal fractionalization of land holdings and the wealth which they represent" (1956b: 141; cf. 1956a: 34f.)

In one subsequent work Geertz appears to contradict himself: writing of colonial agrarian changes in the region of his own fieldwork he notes of the late 19th and early 20th century that "the plantation economy stimulated a change towards larger landholdings and towards the proletarianization of marginal peasants" and "there grew up.... something of a large landholding class, made up of village chiefs and well-to-do peasants...(who) in addition to being labour hirers and harvest contractors, were commonly moneylenders as well" (1965: 40ff). Geertz makes no attempt to reconcile these conflicting views but appears to view the ascendancy of this "genuinely rural middle class" (ibid.) as a temporary aberration from the overall involu-tionary pattern, caused by the sugar boom and aborted by the Depression (cf. Knight 1982: 148) and thus still to share the position of Boeke that colonial policies failed to produce "what van der Kolff rightly regards as one of Java's greatest needs: a 'virile yeomanry'" (1956: 49, cf. van der Kolff 1953: 195).

One central element in the analysis of agrarian structures is the identification of relations between those groups or classes who work on the land and those who do not work in agriculture but lay claim to part of its product. While AI discusses relations between the Javanese cultivators and the colonial exploiter at length, it bypasses virtually all consideration of the existence and mechanisms of differentiation between agrarian classes within Javanese society itself; there is simply no discussion of this aspect of agrarian structure, either before, during or after the colonial period. In view of Geertz' general appreciation of the relevance of indigenous cultural categories, this omission is all the more puzzling since Javanese village society has always conceived of its own "stratifi-cation" in terms of rather rigid categories based quite unambiguously on differential ownership of land and/or rights to communal land. While the "top-down" view of the traditional administrative elite (pryayi) may lump all village people together as wong cilik ("little people") - rather as Geertz does - within their own communities Java-nese villagers clearly distinguish different classes (which also de-termines various labour-service and tax obligations to community and

state), variously named in different parts of Java, but with the same land-based criteria of differentiation: thus in one formulation kuli kenceng are those who own both sawah, pekarangan (home gardens) and a house, kuli karang kopek have only a pekarangan and house, kuli indung or kuli gandok have only a house and indung tlosor lodge in another's house; various categories of tenant cultivators may be added (Mulherin 1971; cf. Jaspan 1961:12f; Selosoemardjan 1962:40; Sartono 1972:79; Koentjaraningrat 1967:267f; ter Haar 1948). The village of Tamansari studied by Geertz' colleague in the "Mojokuto" project seems to be no exception (Jay 1969: 313).¹

"Differentiation" is of course a relative matter, but the omission is more than a matter of emphasis. There is ample evidence (only a small part of it mentioned here) not only for the present but also for the 19th century and earlier, of the existence alongside small-holder peasant proprietors of both a substantial class of property-less households and another with landholdings far above the average, and of parallel marked differences in wealth, in stark contrast to AI's assertion that "rather than haves and have-nots there were, in the delicately muted vernacular of peasant life, only tjukupans and kekurangans - "just-enoughs" and "not-quite-enoughs" (AI : 97). These differences may have been less than in some other societies in which a more extreme "Marxist bifurcation" (Geertz 1956a: 46) has occurred, but it is still the differences and the relations between agrarian classes that demand attention because they provide the dynamic of agrarian change so completely missing in the Geertzian view. Nor is there anything uniquely Javanese about a transition in which rather than the "standard" Marxist or Leninist bifurcation into only two kulak and proletarian classes, these two opposing classes emerge and coexist with a large mass of small or marginal peasants: there may be controversy on the sources of peasant survival and its role within capitalist development, but this path of agrarian transition has been the rule rather than the exception in many parts of Asia, Latin America and southern Europe (cf. Goodman and Redclift 1981).

In summarizing some recent historical work we will follow AI's

1. Without wishing to encourage rash speculation on external influences, I might note that I have seen these categories described as Kasta Penduduk ("Castes of the population") on a village notice-board in Klaten in 1973.

focus on the Cultivation System and on sugarcane regions (although in fact forced coffee-cultivation was far the more profitable export crop venture, and involved about three times as many households as sugarcane throughout the Cultivation System, van Niel 1980); most recent work has also focused on sugar regions (some exceptions are Sartono 1966 in a non-sugar and Onghokham 1975 in a 'mixed' region). Although the picture of rural society before the 19th century is still vague, three recent studies focusing on different regions on the eve of the Cultivation System (Breman 1980; Carey 1981a; Knight 1982) provide a rather consistent picture in which three broad agrarian "classes" may be identified: in the middle, a large mass of peasants (often called sikep or bumi) with rights to land and with heavy tribute and corvee obligations (rights to land being the basis of all forms of exaction at both village and supra-village level); below them, a substantial group of landless households and individuals who attached themselves as dependents to landed peasant households (often called indung or numpang, "lodgers" or bujang, "bachelors" although not necessarily unmarried); and above the sikep class a group of village officials who in addition to their own landholdings had control of a large portion (often one-fifth) of village land plus rights to the unpaid labour of the sikeps to cultivate it, and to many other exactions -- a privileged, non-cultivator class whose office was often in practice hereditary. Given the lack of interest in the "untaxable" landless class in early colonial accounts, we know very little about their numbers (although there are indications that in some districts they outnumbered landed households, cf. Breman 1980: 22) or the nature of their relations with sikep households; sharecropping and wage-arrangements were common, and it is also clear that these dependent households, although not burdened themselves with tribute or corvée obligations, bore the main labour burden of the obligations which formally devolved on their landed "patron" households. A typical Javanese "farm", then, at this time, was no Chayanovian "peasant family farm" but rather a larger unit consisting of a "core" landed household and a number of dependents who performed most of the work on it, as tenants or farm-servants, in addition to shouldering the labour obligations due to village and state. Commodity production

in agriculture and monetization were already quite far developed, and surplus was extracted by both noneconomic and market means. Summarizing conditions along the northern coastal plain (pasisir) on the eve of the Cultivation system, Knight observes that while the basis of much rural production was noneconomic coercion by supra-local officials (labour-service and levies of produce, a part of which entered world trade as 'contingent' to the Dutch or through Chinese middlemen), there was also rural surplus extraction through market mechanisms by Chinese and other merchants who bought produce with cash or barter: "in short, alongside and suffusing a system of agricultural production based on noneconomic coercion ... was a production of commodities for cash and barter stimulated by the activities of traders and organized within the peasantry on the basis of a broad distinction between landed and landless" (Knight 1982: 130ff).

What happened to the various agrarian classes during the Cultivation System? Village officials appear to have maintained their superior position, in many areas with new sources of wealth as agents for the delivery of forced-cultivations and labour: "The Cultivation System strengthened ... the position of the upper echelon of village society by granting village heads and their assistants wide-ranging and arbitrary powers in the organization of the sugar cultivation... such men were to become, in time, a class of (in Javanese terms) wealthy large landholders" (Elson 1978:28). The main area of debate concerns the relative positions of sikep and landless, and particularly the possibility of a "levelling" tendency in the communalization of land tenure, particularly in sugarcane areas, and its re-division into smaller parcels to admit previously landless households into the ranks of the landed, thereby spreading the increasingly heavy obligations that went with land rights and at the same time smothering incipient agrarian capitalism. The detailed history of the period has not yet been written, and "until we have many more monographic studies of the impact of the cultivation systems ... at the local level, it will be impossible to make any firm judgements about how the 'landowning' sikep fared in the years after 1830" (Carey 1981a:27). Although reallocation of land rights occurred, the "levelling hypothesis" (an important part of Geertz' argument, AI: 90f.) "runs into

serious difficulties when tested against our knowledge of how the Cultivation System worked and what its effects were" (Knight 1982 : 133). Knight notes that the hypothesis had its origins primarily in Bergsma's reports on the 1868 Inquiry into Native Land Rights (Eindresumé 1876-1896): Bergsma was determined to demonstrate that the Cultivation System had destroyed the "yeoman" peasantry, but provides little evidence. On the other hand, more detailed reports from the Umbgrove Commission and from residency archives in Pasuruan demonstrate the persistence of a class of hereditary peasant landholders and significant consolidation of holdings (Knight 1982: 135f)).

Since population was growing at this time, we may also suggest that if landed villagers were contributing a proportionate share of this growth (more than a proportionate share, if modern comparisons are relevant) substantial subdivision and redistribution of holdings would anyway have been necessary for each succeeding generation of landholders (almost twice the number of the previous generation) to be accommodated in the ranks of the proprietors. Onghokham, who makes perhaps the strongest case for communalization, redistribution and the weakening of the sikep class in Madiun, still notes that "the process did not mean that village society became more democratic or that class distinctions disappeared. The founding cakal-bakal families, the numpang, and the classes between them still existed, and... the headmen still had a substantial amount of land" (Onghokham 1975: 197). Arrangements for land leasing, pawning and sharecropping, which were most widespread in the communalized regions and are cited as instances of "shared poverty" in AI, may equally be seen as mechanisms of differentiation emerging as a natural response to regulations prohibiting the outright sale of land, i.e. when the normal process of accumulation, through concentration of ownership, is institutionally blocked. Reviewing the evidence on landlessness and the formation of a free wage-labour class, land sale and leasing, and concentration of wealth and power in the pasisir, Knight concludes: "potential for development of a capitalist kind existed in rural Java in the opening decades of the 19th century... subsequent developments, far from representing the petrification of 'pre-capitalist' structures, revealed a pervasive growth of capitalist relations and purposes... There is every evidence that (the differentiation between landholders and landless)

was confirmed and strengthened by the profits which the System brought to the privileged, larger landholding groups within the peasantry" (1982: 147,149).

What emerged at the end of the Cultivation System was therefore something quite different from the homogeneous village society depicted in AI. There is no space to summarize evidence on the remaining 70 years of Dutch rule, but several sources support a picture of continuing social and economic differentiation: regional monographs of the 1905 "Declining Welfare" Inquiry (MWO), Meijer Ranneft and Huender (1926) and Meijer Ranneft's regional reports based on field observations in the 1920s (collected in Meijer Ranneft 1974) give many examples of the accumulation of resources and wealth at the "top" and high rates of landlessness at the "bottom" of village society, a process in which usury and chronic indebtedness played an important role. It is possible that the 1930s Depression and the period of Japanese occupation and independence struggles (1942-1949, a period on which virtually no evidence on agrarian changes exists), with extensive demonetization and the collapse of the export-crop industries (cf. Gordon 1979) may have been a time of retrenchment for some of the rural élite, particularly those who had diversified into off-farm enterprises; equally, those who controlled land and its product, either as surplus farmers or as landlords, may have been able to gain control of the holdings of marginal "deficit" peasants in these times of general scarcity -- we simply do not know.

After independence, various studies from the 1950s (close to the time of Geertz' own fieldwork) provide scattered but consistent evidence of further differentiation and polarization, or "re-polarization" depending on one's interpretation of the preceding decade. Most of these were not published in English, and many not published at all; the short summaries in Jaspan (1961) and Lyon's overview on "Land and Economic Polarization" (1970:15-26) provide references. Among these are the studies carried out by the Indonesian Communist Party (PKI) on land distribution in selected villages of West, Central and East Java in the late 1950s (cf. Lyon 1970:20ff.; Slamet 1965:37-42), which might be suspected of bias but whose conclusions only confirm what is known from other sources (van der Kroef 1960). Lyon summarizes the

evidence from this period :

"With the deterioration of general economic conditions...the roles of richer peasants and large landlords have undergone a shift...toward their greater relative financial advantage, so that in their functions as money lenders, hirers of wage labour, purchasers of crops and so forth, landlords are operating for the most part under very favourable bargaining conditions" (1979:26).

As Wertheim notes, it seems that

" In Geertz' picture something essential is missing. For... beside shared poverty among the poorest of the poor, certainly also a bifurcation was apparent, a process of growing divergence between rich and poor, an accumulation of land among the wealthier landowners, and an increasing tendency among them to exploit their land in a capitalistic way" (1975:199).

What then of "shared poverty" ? In the article in which the concept is introduced, Geertz explicitly relates it to the "abangan world view" of the Javanese peasantry (1956b: 141, cf. AI: 102) and elsewhere argues that agrarian stagnation in Java is at base a matter of attitudes and values: "rural economy... is prevented from changing not only by its earlier agricultural investments but by the deeply engrained value system of its members" (1956a:35); recalling a question posed in the introduction, this aspect of "involution" perhaps explains why Higgins and the "Economic Development and Cultural Change" school (but not why Gunder Frank) liked the book. No observer would dispute the existence of a pervasive public ideology of sharing and reciprocity in Javanese society -- nor the widespread, actual "sharing of poverty" within the marginal and landless classes (cf. Wertheim above); the crucial error of AI lies in assigning to this ethic a determinant role in regulating the actual relations of distribution between classes. As Gerdin notes, "Geertz' hypothesis is based on a folk model of distribution" which does not mirror the actual patterns of distribution in the society (Gerdin 1982: 222, cf. Alexander & Alexander 1982 : 8).

But whose "folk model"? As we have seen in the case of agrarian stratification, Geertz' account of Javanese conceptions of the social world mirrors an élite view. This is also reflected in the curious notion (already quoted) that "the delicately muted vernacular of peasant life" includes no "haves" and "have-nots" but only "just-enoughs" and "not-quite-enoughs". While cukupan and kekurangan may be used

to mask stark inequalities in public and polite conversation (in the way a wealthy man describes himself, for example), the poor in Javanese villages portray these differences more bluntly, in fact precisely in terms of "haves" and "have-nots" (wong duwé and wong ora duwé), together with a rich and by no means delicate vernacular depicting the mean and callous behaviour of wong duwé. Wertheim has remarked on Geertz' apparent "sociological blindness" which parallels the "blind spots" of colonial and post-colonial élites, whose vision of the harmonious and peaceful village community, characterized by solidarity and mutual aid, is derived from and promoted by the village élite themselves (Wertheim 1975: 177-214); in Utrecht's cruder diagnosis, "In all his writings Geertz seems to turn a blind eye to class distinctions and class struggle" (1974:280).

This myopic vision of Javanese society and its "peculiarly passive social change experience" (AI: 103), besides ignoring a long history of revolt and "everyday" resistance to colonial oppression (cf. Sartono 1972; Elson 1979), was hardly likely to foster a keen perception of the underlying agrarian conflicts that were to come to a head in the early 1960s. The Norwegian anthropologist Svein Aass, who lived in the village of Bangsal some 4 miles from "Mojokuto" in 1973-74, describes a community which one would not recognise in the pages of Agricultural Involution. During the late colonial period "a conflict existed between the ascendant group of landowners and rich peasants and the group of poverty-stricken villagers composed of marginal peasants, semi-proletarians and the landless. This conflict grew with time and became the principal conflict with the decline of European plantation agriculture after Independence ... It was essentially a social conflict expressing itself more and more in terms of class" (Aass n.d.: 70). Now, the "processes of accumulation and expropriation due to the commercialization of agriculture ... have resulted in a situation in Bangsal where 80% of the population depend on work on the land of other peasants, having lost control of the basic means of production, the land ... With time, agrarian relations have become not more complicated but more uniform, based on wage labour" (ibid: 257). Meanwhile harvest wages have fallen from 1/5 to 1/10 and Bangsal's largest landowner (with twenty hectares of sawah, three

rice-hullers and a fleet of Mitsubishi minivans) enjoys his television set in 'Mojokuto' (ibid: 171, 135).

The unilateral actions of the Peasants' Front (BTI) attempting to force implementation of the 1960 Agrarian Reform laws, and the ensuing massacres of 1965-66 in Bangsal were the result of "the emergence of long-standing conflicts which had only a marginal relationship with the problem of agrarian reform itself" (ibid: 217). The outcome of these political struggles has accelerated a variety of changes in Bangsal as in the rest of Java (cf. Collier 1981a; Sinaga & Collier 1975) which function to reserve a larger proportion of growing "Green Revolution" agricultural yields for the landowner, with corresponding reductions in the proportions (and often in the absolute quantities) accruing to landless labour in the form of wages. The tebasan system of harvesting, with greatly reduced numbers of harvesters and the abolition of bawon shares, made its first appearance in Bangsal in 1974: "the villagers' indignation is very strong, and only the lack of an appropriate organization can explain the absence of open conflict" (Aass n.d.: 247). Other farmers limit harvesting opportunities to those who have provided transplanting or weeding labour, unpaid, earlier in the season (ibid: 241). One harvest scene observed by Aass encapsulates the new conditions:

"Pak Solo was sitting by the field in a thatched hut, waiting to give the sign for the harvest to begin. The villagers of Sarangmanuk (one of Bangsal's hamlets) were lined up at one end of the field. Behind them was a crowd of women from the neighbouring hamlet of Blaru, hoping to be allowed to join the harvest. Almost all the men in Blaru had been killed during the conflicts following the political events of 1965-66 and their land expropriated by their victorious opponents. Every harvest these women came en masse to the fields of Bangsal and in the past, they had been given work; Pak Solo himself had allowed some of them to participate. But this year he was thinking of buying a Honda motorbike costing 299,000 rupiahs ... and had given clear instructions to Pak Salim to keep outsiders out of the field. Salim didn't appreciate this role at all, but as Pak Solo's contractor ... he was responsible for the harvest and ... had no choice but to jealously prevent them stepping into the field ... All that was left to the pathetic outsiders was to glean any small paddy stalks left by the harvesters" (ibid: 244f).

The impact of Agricultural Involution

In this summary I have tried to show that almost no element in the Geertzian view of Javanese agrarian change is supported by available evidence. Geertz may have been surprised during the past 15 years to

see so much critical energy aimed at a work so far from the beaten track of Geertzian anthropology, so sketchily researched and so admittedly speculative. In one way we might conclude that the impact of AI has been an entirely healthy one, in stimulating so much subsequent research to provide empirical correction and gradually to build up a more accurate picture of Javanese rural society and its history; the advancement of bold, provocative new hypotheses and their subsequent refutation is indeed one of the important ways in which scientific progress is made. On the other hand, as readers of this summary will have noticed, there has been a tendency for many subsequent authors to cast their findings in purely reactive terms: if Geertz has not become a straw man AI at least has become a rather tired punch-bag, an easy target for criticism which often goes no further than pointing to something wrong in the Geertzian picture, without proposing alternative views of Java's agrarian transition in its place; researchers might have more usefully applied theoretical advances made in the study of other agrarian transitions, rather than simply taking another bash at Geertz.

Finally, many more people in Indonesia and in the West have read AI or assimilated its views than will ever read the careful corrective work of subsequent researchers. We may see this, for example, in many authors' comments on tendencies to differentiation during the "Green Revolution" of the 1970s, who interpret them merely in terms of a "break-down in involution and shared poverty" (Collier et al. 1974; Palmer 1977; Strout 1974; Temple 1976), implying as the Alexanders have noted "that such consequences are products of a transformation in Javanese values and directing attention away from the structural changes in the Indonesian economy" (1982: 2). Such interpretations also ignore the long history of tension and conflict between opposing classes of landed and landless and their current political resolution in favour of the landed, who were "the most important allies of the military in the 1965-66 period when the New Order was establishing itself", and are now "a strategic base of support for the New Order state" which has provided "the basis for the consolidation and development of a landlord/kulak class through provision of rural credit and infrastructure in conjunction with programmes introducing high-yielding varieties, insecticides and fertilizers into agricultural production" (Robison 1982: 57f). It has also been remarked that applications of the Geertzian thesis "have taken on an important ideological function in current debates concerning Indonesian economic development, to provide

'scientific' justification for the view that the major barrier to 'modernization' is the culturally based, obstructive values of the peasantry, and that the way to overcome them is by education and greater expertise" (Alexander & Alexander 1982: 2). While correct, this last point should not be blown out of proportion; the policies of the New Order government do not rely on sociological justifications, and as Wertheim has reminded us in another debate on the role of American sociologists on Indonesia (Wertheim 1973; cf. Utrecht 1973), we should not "overrate the danger of imperialist software".

Note. Discussions over the years with Paul Alexander, Chris Baks Jan Breman, Peter Carey, Alec Gordon, Frans Hüsken and Willem Wolters have helped to clarify some of the ideas in this paper. Translations from foreign-language publications are my own.

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