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COMMUNITY CONSTRUCTIONS: A STUDY IN FICTIONAL
NARRATIVES OF SOUTH ASIAN IMMIGRANT WRITERS

ATTITUDE OF THE TEA-GARDEN LABOURERS OF SOUTHERN
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IMPLANTATION AND SERUM LEVEL OF
ESTRADIOL-17 β AND PROGESTERONE IN ALBINO RAT

ENVIRONMENTAL ACCOUNTS AND AUDIT (EAA)

DEIXIS IN TANI LANGUAGES



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SOURCES OF GROWTH IN THE ARUNACHAL ECONOMY

N. C. Roy

Abstract

This paper is an attempt to quantify the relative contribution of different factors shaping the growth trajectory of the Arunachal Economy during 1970-2003. The economic growth is conceptualized in terms of a set of seven functional relations in which the inflow of central funds to the State appears as the basic exogenous variable. It is the inflow of central funds, which entails a parallel inflow of physical inputs and labour, and thus acts as the instrument in the development of infrastructural facilities, the preconditions for the accumulation of physical and human capital in the State. The seven equations are used to estimate the values of seven endogenous variables: relative wage, migration of labour in Arunachal Pradesh, the establishment of educational institutions, the spread of education, improvement in agricultural practice, capital formation and income. The empirical testing shows a good measure of robustness of the conceptual framework.

Though the search for identification of the sources of economic growth is as old as economics, the initial efforts had to remain satisfied, in the absence of data, with the qualitative description and the specification of the functional forms relating the different factors involved in the process of growth. It was only after the second World War that the availability of data on national income entailed many efforts to quantify the contributions to growth emanating from different sources. The outcome of these efforts is the growth of a vast literature, which is commonly known as the growth-accounting (Abramovitz, 1993; Solow, 2000). The seminal work on growth accounting came from Solow who based his accounting on the neo-classical model formulated by him earlier (Solow, 1956, 1957). Solow's estimation, based on the U.S. data for the period 1909-49, showed that the capital per man-hour contributed a meagre 12.5 per cent of growth and the rest came from other sources. These 'other' sources remained for some time

unidentified and this gave rise to speculations as to whether the huge amount of unaccounted contribution could be attributed to human capital or technology or total factor productivity. Denison's subsequent works included a good number of variables apart from capital and labour, and it was found that the area of unidentified sources had shrunk significantly (Denison 1995). Growth accounting is formulated to quantify the relative contributions to growth emanating from various factors such as physical and human capital, technology, innovations, etc., and the standard unit of analysis is a country. At the national level the growth-contributing factors are the ultimate sources originating indigenously. However, what is ultimate for a national economy may not be so for a sub-national or State economy. In a federal system, the Central Government may effect the transfer of resources horizontally in order to reduce the inter-state economic disparities. In the presence of the centrally-effected resource transfer, a State with a low income and a very low rate of savings may find its rate of accumulation relatively high. Moreover, the free flow of factors especially labour among the States may sever the relationship between the natural growth of population in a state and the growth of its labour force, which may, to a large extent, be affected by migration. Given this situation, it may not be illuminating to just relate the growth of income to the accumulation of capital, expansion of labour force, etc. In order to complete the task the sources of growth of capital and labour should be highlighted. Keeping these specificities in view, efforts are made to prepare a conceptual framework of growth for the Arunachal economy. However, the model has a fair measure of generality, which makes it suitable for application to other special category hilly states heavily dependent on the Central funds.

In Arunachal Pradesh, it was the inflow of Central funds after independence, which stirred its traditional static economy into the dynamic world of growth. The Central funds mainly in the form of grants were instrumental in monetizing the economy hitherto practising barter and in instilling the forces of commercialization in production and exchange. This tended to bring about, of course slowly, a shift of motive of production, from subsistence to profit resulting in raising the capital-intensity of production and changing the technological configuration of the economy. The creation of different infrastructural facilities induced the migration of skilled, semi-skilled and even un-skilled labourers into this State from other parts of the country. So the growth-initiating factors were shaped by the Centrally-effected resource transfer and in subsequent years the economic growth was sustained by the inflow of funds from the Centre. In this paper, however, the inflow of funds from the Centre is assumed to be exogenous. The rest of the paper is divided into three sections. In the first section a conceptual framework is constructed. The second section provides the empirical findings. The conclusion is given in the third section.

Section I

The exogenously determined inflow of funds induced the growth of a proto labour market, initially populated mainly by the migrants from other States of the country. In the traditional

economy of the State there was no wage labour. There was the institution of social mobilisation of labour based on mutualism, a system which entails mutual exchanges of labour involving no wage payment. The development activities created labour demand which raised the wage rate in the State above what obtained in other parts of the country. This is captured in the function:

$$W_a/W = F_1(G, L_i) \dots \dots \dots (1)$$

Where W_a is the wage rate in Arunachal Pradesh and W is the national wage rate, more appropriately, the wage rate in the areas from which migrant labourers came to the State. G is the measure of central funds flowing into the State. L_i is the local labour force, more properly wage labour. W_a/W is positively related to G and its relation to L_i is negative. As the local labour force grows, the wage differential between Arunachal Pradesh and other parts of the country should decrease.

The initial development works of the Government were manned largely by the inflow of the migrant labour (L_m) which is related to W_a/W :

$$L_m = F_2(W_a/W) \dots \dots \dots (2)$$

The relation of L_m to W_a/W is positive – a rise in W_a/W in Arunachal Pradesh leads to an inflow of workers from other States of the country. The relation between G and L_m is not direct; G affects L_m through the medium of W_a/W . A part of L_m constitutes the skilled manpower such as teachers, technicians, etc. A subset of L_m , of course, consists of the unskilled labour.

The inflow of funds is used to finance the construction of infrastructural facilities: roads, transport system, hospitals, schools, etc. The important infrastructural facility which spear-headed the process of human capital formation in the State was the establishment of schools. The function relating the educational institutions (S) to their determinants is

$$S = F_3(G, L_m) \dots \dots \dots (3)$$

S is hypothesized to have a positive relationship with both G and L_m . So far as L_m is concerned, a mutual causation seems to be plausible. The demand for teachers was created by the establishment of schools. That is, $L_m = h(G, S)$ can be specified on a sound logic. The schools could be opened, on the other hand, because the migrant teachers were available. The Central funds enabled both the establishment of schools and financing their running. So multicollinearity between G and L_m is a possibility.

The outcome of the establishment of the schools is the spread of education (E) captured

in the relation:

$$E = F_4(S, YP) \dots \dots \dots (4)$$

Where YP is the per capita State income. Both S and YP are related positively to E.

The migration of labour from other states along with the spread of education led to the changes in the agricultural practices. The technology of agriculture tended to change, albeit at a slow pace, with the extension of permanent cultivation resulting in the relative decline in the importance of *jhum* cultivation. The next function relates permanent cultivation to the migration of labour and the growth of human capital in agriculture (H):

$$P_L = F_5(H, Lm) \dots \dots \dots (5)$$

It is the inflow of grants (G) and the agricultural modernisation as captured in the extension of permanent cultivation (P_L) which determined the accumulation of capital (K) in the State:

$$K = F_6(G, P_L) \dots \dots \dots (6)$$

The total labour force (L) in the State consists of the migrant workers (Lm) and local workers (Li):

$$L = Lm + Li \dots \dots \dots (7)$$

Lastly, the production function for the State is set as

$$Q = F_7(K, L, T) \dots \dots \dots (8)$$

Where Q is the State's domestic output and T is technology.

The model establishes a chain-like relation. With seven equations and one definition (equation no. 7) it determines the time-paths of seven endogenous variables, W_a/W , Lm, S, E, P_L , K and Q. Exogenous in the model are the national income, inflow from the Centre, population of both the State and the country and the wage rate in other states. Of course, the migrant component of the labour force (Lm) is determined in the model. Since the local component of the labour force (Li) is exogenous in the model, the determination of the aggregate labour force remains outside its scope.

Section II

Forms of Inflow from the Centre

Inflow of funds from the Centre which placed the Arunachal economy on the growth-

path took various forms. All these can be classified into three broad categories: (a) the Central grants-in-aid, shares of Union taxes and loans which flow into the consolidated fund of the State, (b) Central Government's direct expenditure in the State, and (c) the expenditure of the autonomous bodies under the Central Government. As very few offices of the Central Government or of the Centrally sponsored institutions are present in the State, the expenditure on direct Central account or on account of autonomous institutions of the Centre is relatively small. In a strategically located State with a long international border, there is substantial military presence involving a good amount of Central expenditure but accounting for it is indeed a highly complicated task. So we focus only on the Central funds flowing to the consolidated fund of the State. Table I shows the composition of the Central funds flowing to the State and the relative importance of these funds in the total receipts of the Government.

The relative importance of three components varie over a wide band during 1987 – 2003. In 1987-88, the State's share of the Union taxes constituted 25.2 per cent of the Central funds flowing to the Government of Arunachal Pradesh. The relative importance of this component remained, with a few exceptions, above 20 per cent in the 1990's but declined to 11.5 per cent of the total inflow in 2002-03. The grants as the proportion of the total inflow from the Centre have always remained high. During 1987-88 the grants formed 67.9 per cent of the Central funds. By 2002-03, the share of this component in total inflow was as high as 82.2 per cent. The share of Central loans in the inflow is relatively unimportant varying from 6.2 per cent in 1994-95 to 12.1 percent in 1989-90.

Table 1 : Composition of Inflow in Arunachal Pradesh from the Centre

Year	Percentage of the inflow				Inflow as % of R*
	Share of tax	Grant	Loan	Inflow	
1987-88	25.18	67.87	6.95	100	90.73
1989-90	17.76	70.11	12.13	100	87.50
1990-91	22.72	66.85	10.43	100	85.87
1994-95	23.00	70.75	6.25	100	79.77
2002-03	11.52	82.17	6.31	100	75.71

* R is the total receipt of the Government of Arunachal Pradesh

Note: Estimated on the basis of data from different years' budgets of the Government of Arunachal Pradesh.

As shown in table 1, the State Government's dependence upon the Central resources is quite high. In 1987-88 as high as 90.7 per cent of the Arunachal Government's receipt came from the Central Government. In the course of the next 15 years the relative importance of the inflow from the Centre declined to some extent. In 2002-03 the Central Funds constituted

75.7 per cent of the total receipt of the Arunachal Government.

Time-Shape of the Inflow

The inflow of funds from the Centre is path-dependent with a significant auto-regressive structure. More specifically, the current year's inflow (G_t) shows a strong relationship with the previous year's inflow (G_{t-1}) as provided in equation (9).

$$G_t = 1190.08 + 1.01 G_{t-1} \dots\dots\dots(9)$$

(0.8) (25.1)

$R^2 = 0.95$ $N = 33$

The figures in parentheses are t-values and N is the number of observations, spanning the period 1970-2003. The intercept in equation (9) is insignificant but the coefficient of G_{t-1} is highly significant. Its value in the neighbourhood of unity and the high value of R^2 indicate that the inflows of the two consecutive years are closely related. The fitness improves if the inflows are transformed into their logarithms, as shown in the estimated equation (10).

$$\log G_t = 0.27 + 0.98 \log G_{t-1} \dots\dots\dots(10)$$

$R^2 = 0.97$ $N = 33$

As before, the intercept is insignificant, and the coefficient of $\log G_{t-1}$ is highly significant. The coefficient of $\log G_{t-1}$ gives a simple interpretation. It being a measure of elasticity implies that a one-per cent change in current year's inflow will entail a 0.98 per cent change in the next year's inflow. By raising the number of lags, we can have a better picture of the auto-regressive structure in the estimated equation (11).

$$G_t = 3032.00 + 0.98 G_{t-1} - 0.52 (G_{t-2} - G_{t-3}) \dots\dots\dots(11)$$

(2.1) (27.2) (3.2)

$R^2 = 0.97$ $N = 30$

The intercept and the coefficients are significant at 5 per cent level, and so this specification is acceptable. The current year's grant affects the grants in subsequent years in two ways: one is through its level and the other is through its change. The level effect is positive and the change effect is negative

The current year's level effect upon the next year's level is not, of course, full; it is 98 per cent. Its effect upon the 2nd year's level will be $(0.98)^2$, upon the 3rd year's $(0.98)^3$, and so on. The effect is transmitted through a geometric progression, its effect after t years is $(.98)^t$, and $t > 0$. The current year's level effect upon the 10th year's level will be $(0.98)^{10} = 0.8171$ or 81.71 per cent. So the level effect declines rather very slowly. Its rate of decline, the first derivative of $(0.98)^t$ with respect to t is $(0.98)^t * \log(0.98)$ which can be reduced to $-0.0202 (0.98)^t$, -0.0202 being the natural logarithm of 0.98.

The change effect transmits itself through a lag. A rise in the current year's grant has no change effect upon the next year's level of grant. It will have negative effect upon the level of second year's grant. As a part of the level of the second year's grant, it will have effect upon the third year's and so on. If the current year's change is X , then in the second year, the effect is $-0.52 X$, in the third year, the effect is $-0.98 * 0.52 X$, and in the n th year, the effect will be $-(0.98)^{n-2} * 0.52 X$ and $n \geq 2$. If X is positive, all its chain-like effects will be negative. So an expansion has a negative, and a contraction a positive effect upon the subsequent years' levels of grants.

Monetisation and the Emergence of Wage Labour

The development activities in the State monetised the barter economies of different tribal communities in two ways: (a) local workers and suppliers of other inputs received payments in cash, and (b) the migrant people mainly workers spent part of their income on locally produced goods. In both ways cash went to the hands of the local people. Gradually the extraction of resources especially forest resources was started and those were sold outside the State, which also acted as an important channel of inflow of currency and accelerated the process of the monetisation of the different tribal economies and their integration into what is now the Arunachal economy. In the whole process of monetisation and emergence of market, especially the labour market, the Government expenditure played the primary role. The behaviour of the relative wage rate ($W_a * 100 / W$), W_a being the wage rate in Arunachal Pradesh and W in the plains of Assam / West Bengal, the areas from which the majority of the migrant workers of this State came, is captured in the following equation:

$$100 * (W_a/W) = 1117.84 - 85.18 \log li + 5.10 \log G \dots\dots\dots(12 a)$$

(7.4) (5.9) (5.10)

$R^2 = 0.91$ $N = 33$

In (12 a), 'li' is the size of local workers. There is some auto-correlation whose value at 0.85 gives a D.W. value of 0.30. Using Cochrane-Orcutt method, the following estimates are obtained:

$$100 * (W_a/W) = 891.09 - 63.94 \log li + 1.60 \log G \dots\dots\dots(12 b)$$

(5.4) (4.4) (0.8)

$R^2 = 0.49$ D.W. = 1.58

Extraction of auto-correlation renders the coefficient of $\log G$ insignificant but $\log li$ remains significant.

Migration of Workers

The effect of the inflow-generated wage-differential entailed the migration of workers from other parts of the country. The estimated relation is :

$$\Delta \log Lm = 0.344 + 0.0032 (W_a/W * 100) \dots \dots \dots (13)$$

(6.4) (7.4)

$R^2 = 0.62$ $N = 32$

Here Lm is the estimated number of (inter-state) migrant workers in Arunachal Pradesh. The coefficient of (W_a/W) is significant at 1 per cent level.

Establishment of Educational Institutions

The inflow of Central funds was used to create the infrastructural facilities in this State. The segment of infrastructure which played the most basic role in the socio-economic changes in the State is the educational facilities. In the estimation, the educational institutions are proxied by the number of pre-primary and primary schools (S). The estimated equation is:

$$\log S = -2.29 + 0.88 \log G + 4.27 \Delta \log Lm \dots \dots \dots (14)$$

(3.6) (15.24) (3.3)

$R^2 = 0.94$ $N = 32$

All parameters of (14) are significant at 1 per cent level. G , the inflow from the Centre and Lm , the migrant manpower from other parts of the country which are arguments in equation (14) are related, but their relation is not direct. G raised the wage rate in Arunachal Pradesh above what existed elsewhere and it is this higher wage rate which acted as the pull factor for migration of workers of various types of skill.

Spread of Education

With the expansion of educational facilities, literacy in the State started growing. With hardly any literary tradition, the State found its newly-founded educational institutions attracting the students even from remote areas. The demand for education came from a number of sources. The establishment of direct administration and the expansion of activities in the secondary sector created job opportunities for the educated local people. The demand-side factors are proxied by per capita Net State Domestic Product (Y_p). Measured by literacy rate (E), the spread of education in the State is empirically related to the schooling facilities (S) and per capita income in the following way:

$$\log E = 5.81 + 0.75 \log S + 0.47 \log Y_p \dots \dots \dots (15)$$

(25.3) (7.9) (5.9)

$R^2 = 0.98$ $N = 33$

All the parameters in equation (15) are significant. This is neither a supply nor a demand function; it is a 'mongrel' containing both the demand and supply factors.

Improvement in Agricultural Practice

The major change which took place in the agricultural practice in the State is the steady expansion of the permanent cultivation and the relative decline in the low productive and technologically stagnant *jhum*-production. Permanent cultivation which can accommodate new technologies, both bio-chemical and mechanical, has opened new possibilities in the Arunachal economy. In the estimation, human capital (H) is measured by cumulative learning and experience in agriculture. There are many ways of measuring learning achieved in any particular activity. The most illustrated and widely-used methods in the measurement of learning are Verdoorn's cumulative output and Arrow's learning-by-doing (Verdoorn 1956; Arrow 1962). Arrow took cumulative gross investment as the measure of learning. As a measure of learning Arrow's method seems to be more sophisticated than Verdoorn's in view of the fact that investment activity generates learning more than any other part of income. However, the non-availability of data on investment in the Arunachal agriculture stands in the way of adopting Arrow's elegant approach. So Verdoorn's cumulative output method of learning is used. The cumulation of value added is done from 1970-71, the year of beginning of domestic product accounting in the State. So the cumulation is highly truncated. The estimated equation is:

$$\log PL = 7.72 + 0.28 \log H + 0.77 \Delta \log Lm \dots \dots \dots (16)$$

(5.6) (2.6) (0.13)

$R^2 = 0.35$ $N = 32$

In equation (16) the coefficient of $\log H$ is significant but that of $(\Delta \log Lm)$ is not. The overall explanatory power of the specification is also low, as shown by R^2 carrying a value of only 0.35. The main reason for a low fitness of (16) seems to be the crude nature of both the arguments.

Capital Accumulation

The growth of permanent cultivation, the spread of banking facilities, and the deepening of administration along with the inflow of funds from the Centre are hypothesised to promote the capital accumulation. No estimate of the growth of capital in the State has been made till today. In the absence of data, an attempt is made to estimate the quantity of capital and its growth over time. In the estimation of capital, the Government's capital expenditure is taken into account. In the 1950s and 1960s the Government's capital expenditure was high. No continuous time series is, however, available. So information of a discontinuous time series is taken into account to estimate the quantity of capital for the year 1969-70. The amount is five times the estimated Net State Domestic Product (NSDP) of that year. For the subsequent years, the period for which NSDP data are available, the value of net investment is derived

from the net value added in some selected sectors as follows:

$$\text{Investment} = 0.9 * C + 0.8 * M + 0.7 * (MQ) + 0.75 * (OS) + 0.8 * (THR) \dots\dots(17)$$

Where C is net value added in construction; M is net value added in manufacturing; MQ is net value added in mining and quarrying; OS is net value added in other services and THR is net value added in trade, hotels and restaurants. The value of net investment estimated for 1970-71 is added to the value of capital estimated for 1969-70. A yearly depreciation of 4 per cent is used to derive the current year's value of capital from the previous year's. The estimated equation is as follows:

$$\log K = 0.54 + 0.031 (PA) + 1.15 \log G - 0.055 \log (PL) \dots\dots\dots(18)$$

(0.1) (14.8) (3.7) (0.9)

$R^2 = 0.96$ $N = 33$

In equation (18), K is the estimated value of capital, (PA) is the percentage of NSDP contributed by public administration, banking and insurance, and (PL) is the permanent land (net sown area in hectares). The intercept is not significant nor is the coefficient of (PL), the variable, which is the measure of modernisation of agriculture in the State. Rather surprisingly, the coefficient of (PL) has a non-positive value. This is unexpected. It seems that the process of agricultural modernisation has not served the purpose of accumulation of capital; the relationship between them has not been complementary. Instead of boosting capital accumulation, the extension of permanent cultivation seems to have rather compressed it. The reason is the rising value of plain land in the State. The establishment of individual property rights in land and its emergence as an income-earning asset has rendered it a substitute for capital. Many people with the investable surplus have tended to purchase land or invest in the improvement of community-owned land which, in due course, became their property.

Estimation of Production Function

The estimated production function is as follows:

$$\log Y = -3.91 + 0.62 \log K + 0.46 \log L + 0.16 \log T \dots\dots\dots(19)$$

(1.2) (6.8) (1.6) (3.8)

$R^2 = 0.98$ D.W. = 1.6 $N = 33$

Here Y is the NSDP at constant prices of 1993-94, K is capital, L is labour and T is the measure of technology. (The derivation of T is described in the end note). Equation (19) is estimated by using the Cochrane-Orcutt method in order to remove the problem of autocorrelation. In equation (19) the significance level of the intercept is 25.78 per cent and that of the coefficient of L is 11.16 per cent. This indicates that the total factor productivity in the State has not grown much, a situation, which is rather unusual. Of course, the answer may lie

in the significant value of the coefficient of T (technology) – the growth in efficiency arising from the accumulation of human capital, the rising economies of scale brought about by the sectoral distribution of workers, etc. might be absorbed in the coefficient of T. The coefficient of capital may also share in this absorption.

The returns-to-scale of the estimated production function is 1.24. This implies that a one per cent increase in all inputs – K, L, and T – raises the output by 1.24 per cent. The elasticity of output with respect to capital is significantly higher than that of output with respect to labour. This shows that in Arunachal Pradesh, capital has a high productivity. Freed from log, the production function appears as

$$Y = e^{-3.91} K^{0.62} L^{0.46} T^{0.16}$$

$$= 0.02 K^{0.62} L^{0.46} T^{0.16}$$

Evaluated at mean values of K, L and T (arithmetic mean for the period 1970-2003) the value of Y is

$$Y = 0.02 (161449)^{0.62} (314971)^{0.46} (23884)^{0.16}$$

$$= 57257 \text{ (Rs in lakh)}$$

The mean value of observed Y (NSDP) for 1970-2003 is Rs. 50023 lakh. The estimated production (or in the language of marginal productivity theory of distribution, the income distributed) is 14.46 per cent higher than the mean output. It should be in fact 24.00 per cent higher. The difference may be due to the rounding errors. The marginal productivity of capital evaluated at its mean value is Rs. 21,990, that of labour is Rs. 8368 and that of technology Rs. 38,492, that is one lakh Rupees of investment (at constant prices of 1993-94) yields a return of Rs. 21,990 and the rate of return is then 21.99 per cent. The rate of return to technology turns out to be 38.49 per cent. A person year earns a return (wages) of Rs. 8368 at constant prices of 1993-94, an amount which is 49.62 per cent higher than the per capita income during 1986-87, the median year of the period for which the mean value of labour is calculated. Since per capita income was rising, the marginal product of labour would be higher than its average product (average per capita income), but a difference of 49.62 per cent is too high to be believed.

Sources of Growth

The sources discussed below should be called immediate, because the original impulses cannot be found in them. These sources emerged with the inflow of Central funds as analysed before. The relative importance of these immediate sources can be highlighted by the quantification of the contributions made by different inputs of the production function, namely capital, labour and technology. The contributions of these inputs are shown in table 2. Capital made the highest contribution of all, amounting to 52.51 per cent. The next contributor is technology responsible for 40.78 per cent of the growth of NSDP. The growth contribution of

labour is 8.94 per cent. Total factor productivity had a negative contribution of 2.23 per cent. This terminology, the total factor productivity does not appear to be much appropriate here. In the growth literature, the negative total factor productivity is perhaps unknown. In Arunachal Pradesh it may be a measure of various distortions ranging from the problems of politically-motivated allocation of resources to those of instability induced by insurgence and militancy. In the absence of adequate data on these factors it is not possible to press this point home.

Table 2 : Relative Contributions of Capital, Labour and Technology to Growth in Arunachal Pradesh: 1970-71 to 2002-03

Inputs	Elasticity	Rate of Growth (%)	Absolute Contributions (%)	Relative Contributions (%)
Capital	0.62	6.07	3.76	52.51
Labour	0.46	1.40	0.64	8.94
Technology	0.16	18.26	2.92	40.78
Total Factor Productivity	-	-	-0.16	-2.23
Total	-	-	7.16	100.00

Note: Dash means not applicable. The sum of absolute contributions by capital, labour and technology is 7.32 per cent but NSDP grew at the rate of 7.16 per cent per annum. The difference, -0.16, is the (negative) contribution by total factor productivity. The relative contributions are percentage of absolute contributions with their sum elevated to 100.

Section III

The conceptual framework constructed and tested in this paper is highly aggregative. A better picture could come if instead of the state-level production function, the sector-wise production functions would have been estimated. The Central funds have played the instrumental role in the growth of the economy, but all growth cannot be attributed to this factor. The labour force as well as human capital in the State has increased, capital formation and technological changes have taken place. In all of these changes the Central funds have made some contributions. The paper captures successfully some of these contributions.

One notable finding of this paper is the substitution relation between physical capital and permanently-cultivated land. It means that the part of the inflow of funds which has been used to augment the permanently cultivated land has not contributed back to the growth of physical capital through raising agricultural productivity, rural income and savings. A sound policy requires stress on expanding the technological horizon by investing more in manufacturing and modernization of agriculture. A high productivity of capital in the state means that the intensity of capital should be raised in the economy, particularly in agriculture and manufacturing.

Note

Estimation of Technical Progress

In Arunachal Pradesh the technical change has not gone through a continuous process; rather a series of saltations or jumps has taken place. There was no bullock cart nor horse cart in the days before the independence. The age of steam-engines passed by; then suddenly came, in the post-independence period, the internal-combustion engines, and motorised vehicles. In agriculture the *jhum* fields never saw a wooden plough; in the 1960s came in this State power tillers and then tractors. The bullock driven ploughs became common in the plains of the State. Compared with other parts of the country, the level of technology in production is not high in Arunachal Pradesh but compared with the levels prevailing half a century ago, the current position is indeed very high in this State. The spread of technological change has been quite uneven. The *jhum* cultivation still depends on the traditional technology of production and much of industrial production uses simple technology. Given the discontinuous nature of technological change, the quantification of each year's technological content of production is a problem. This problem of discontinuity is by-passed by a simple approximation. The cumulative manufacturing production is taken to be a proxy for the technological progress in the State. Again the cumulation of output is done since 1970-71.

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COMMUNITY CONSTRUCTIONS: A STUDY IN FICTIONAL NARRATIVES OF SOUTH ASIAN IMMIGRANT WRITERS

N. Nagaraju

Abstract

In the expanding and enabling vocabulary of postcolonial theory, community has emerged as an important category of analysis. The changes in community structure and perception in the wake of colonial interventions have been best captured in fiction, thus making itself socially relevant. An attempt is made in this article to study the community constructions in the fictional texts of Amitav Ghosh, Rohinton Mistry and Michael Ondaatje. Though different in their approaches, they nonetheless show the same empathy.

Community has emerged as an important category of analysis in understanding, among other things, the complex structures of colonial legacy. The study of the workings of changing nature of community, its contours and contents has become such a necessity as community has now situated itself across disciplines and their boundaries. Literary theory, like those of history and sociology, has begun to apply this category to understand some of the recent writings in the postcolonial societies. Literatures written in India and south Asia show an increasing engagement with the varied workings and manifestations of communities. They are narrations, at times even celebrations, of communitarian modes of living and hence look so authentic, offering rich possibilities of interpretation. While the authenticity could be attributed to lived modes of experience, interpretations, apart from those of interrogating the structures of alien modes of rule and power, the focus clearly is on the unfailing long serving resources of community. Emphasizing community as part of our understanding decolonization, Sugatha Bose, comments on the new modes of writing history:

“Our understanding of decolonization on South Asia was depended by analysis of the interplay between the national, communal and regional levels and arenas of politics based on an approach that didn't divorce the study of communitarian narratives from process of state formation” (Bose, 1998, :9)

So the unfolding process, for reasons of continuity, can be traced back to the colonial attempt to transform the society or the communities at the more regional or local level. The regime necessarily would attempt to appropriate all initiatives leaving the community to 'exist as a geographical, anthropologic and to some extent as economic entity...' (Pandey, 1990 : 110).

The local societies, rooted through ages, were surely affected by the imposing structures. But, instead of yielding to the needs of colonialism, they began to respond and organize themselves in unexpected ways. They threw up many 'historical statements' (ibid), which include myths, folk tales, genealogies and histories of caste, region and nation. All these statements helped the local communities not only to define themselves, but also project their image to others. These communities earlier were 'fuzzy' (Kaviraj, 1998, : 4); they did not have accurate determined boundaries or concrete image of themselves. But all that had changed with the advent of colonial rule, which introduced enumeration and mapping locales (ibid).

But these community responses and their initial process of identity formation could not be attempted either to be understood or described. They, hence, could neither be part of history, written, as it was then under the positivist influence, nor included in any of the orientalist accounts. They were 'displaced' into another realm. As Kaviraj would say, they disappeared or were hidden from history. Having found place in the emerging consciousness these facts surfaced in fiction written in and about the times. So, to recover the specificities and subjective conditions of the time the fictional accounts or narratives have to be studied in a manner complementing history. Kaviraj elaborates:

Novels are a continuation of history, uttering what history could not.. Novels had a deep internal relation to historical work, for they helped spell the same ideas, only in a different manner or style... as much as serious history sought to do, a self-respecting relation with the community's past (ibid : 111).

Such an enabling view, while enriching history and the ways of writing it, helps in placing some of the fictional attempts from the early nineteenth century in their proper context. More important, it also establishes a kind of continuity to the rich and varied fictional narratives of South Asian writers staying at home or migrated. Extending the principle of such relation of fictional consciousness to writing societies and history, an attempt is made to analyze the fiction of Amitav Ghosh, Rohinton Mistry and Michael Ondaatje. Their fiction manifests deep sense of communitarian history and invariably constructs communities, juxtaposing them in comparable conditions so as to throw light on the constructed nature and changes in perception. Three texts, *The Shadow lines*, *Such A Long Journey* and *Running in the Family*, respectively, will be analyzed from such a perspective.

The Shadow Lines

Amitav Ghosh, draws on the sources of traditional beliefs and popular consciousness for the sketches of the community life. He, rather differently from Mistry and unlike Ondaatje, depicts a community with a sense of its roots. Usually the sketches include a group of people who, rooted in a village or a region, are displaced for reasons neither local nor logical. Many of his characters, speaking through this displacement, keep referring to a lost world or a losing effort to build a new world. Ghosh's fiction, while building his critique of the forces of displacement, manifests a deep sense of history and the need for a cultural continuity in the life of a community. Be it the community of Lalpukur in Bengal (Ghosh, 1987 : 5) or that of Dhaka after partition, the characters clamor for continuity. If some of them try to find missing links of their lives, others try to cling to their community roots, much as forces of disruption and displacement threaten them. If the traditional settlers of Lalpukur, bewildered by the introduction of extremist reason, reject the Pasteur school of reason (Ibid : 7) and its founder and reassert their own forms of living, the grandmother elsewhere, used to seeing the history of a united Bengal, is equally bewildered by partition. For her the bonds of her society are too strong to see any meaning in such a diminishing event as the partition.

Ghosh in *The Shadow Lines* creates a set of characters and a traditional household richly woven with community belief patterns. While the grandmother at the head of the house, with her wrinkled forehead and fingers, represents the richness of past, continuity and the resource of traditional wisdom, the grandchildren fall into two neat groups. One group is represented by the narrator himself who grows with his grandmother and hence inherits her legacy and the traditional resource of wisdom. He also has the advantage of growing with Tridib, an uncle who is both an archeologist and leader of 'adda', a space in Bengal society rich in Community character. Tridib teaches him the great lessons of using 'imagination with precision' and 'inventing' a place before he comes to see it. Hence, for him, 'past seemed concurrent with its present' (Ghosh, 1988 : 31). On the other hand there is Ila who lives 'intensely in the present'. Brought up away from home and her numerous relatives, she does not see the difference between places. For her Cairo or Colombo are no different because she thinks the two schools in these two cities are more or less the same. Though she moved from place to place and internationally, 'she has never traveled at all'. She is locked in a present 'which was like an airlock in a canal shut away from the tidewaters of the past, (ibid : 30). Inevitably she leads a lonely life 'walking alone in a drizzle under that cold gray sky' (ibid : 76) in a country to which she never can belong.

Amitav Ghosh weaving several motifs into the character of the grandmother conveys the gradual settling of layers of belief and belonging in a house and, by extension, in a community. The grandmother, describing the house she has lived in at Dhaka tells:

It was a very odd house. It had evolved slowly, growing like a honeycomb, with every generation of Boses adding layers and extensions until it was like a huge, lop-sided step-pyramid inhabited by so many branches of the family. (Ibid : 121).

She looks at everything with such a sense of past. If every generation, she implies, adds a layer to the house, the nation too grows with layers being formed by settled lives of people. She asks Ila not to settle in England because that country has come up after centuries of living, sacrifice and bloodshed by the English people; Ila can never be part of it. She thinks similarly about India and refuses to acknowledge the right of the English to rule her country. And partition to her is just baffling. She thinks partition cannot cause difference to the people living on both sides. She says:

But if there aren't any trenches or anything, how are people to know? I mean, where's the difference then? And if there is no difference both sides will be the same: it'll be just like it used to be before, when we used to catch a train in Dhaka and get off in Calcutta the next day without anybody stopping us. What was it all for then-Partition and all the killing and everything-if there isn't something in between? (Ibid : 181)

Ghosh, through the utterances of the grandmother builds a critique of the colonial rule and the rigidities it has brought upon the community life patterns. The grandmother still carries the strength of her life and wisdom to withstand such rigidities. Determined boundaries, Ghosh would imply all along in his fiction, played havoc with the settled communities in South Asia. Their 'fuzzy' sense of themselves and their boundaries would never allow or admit any rigid exclusion.

Such A Long Journey

Mistry's notions of the parsi community hinge on the character of Gustad Noble, his family and few other such families settled in the Khodadad building. Few figures like Dinshawji, Peerbhoy Paanwalla, Dr. Paymaster and the Bank manager Mandon from other parts of Bombay come into the descriptions. There, possibly, are two angles which to look at these descriptions. First, Mistry's focus is as much on community as on the journey or the mindscape of Gustad Noble. The narrative, which moves back to Gustad's grandfather and decline in family business and then forward to Gustad's life in his family, Bank and the city, suggests Mistry's preoccupation with the character. He then gives us the markers of the community as a network of relations around the Nobles, particularly Gustad. If Mistry's narrative reads immensely sad, it is because of Gustad Noble's realization, after a series of tribulations and other such experiences, that courage and calmness could be gathered from the faith into which he is born. The dilemmas of the community too add to the gravity of ambience. If Gustad's initial arrogance based on his physical strength, gives way through a series of difficult situations to a mature realization, his

community's initial elitist and exclusionist attitudes gives way to a resigned acceptance of the expanding notion of common life. Gustad's family loses its foothold in business and becomes bankrupt. After the disruption it causes in his family and education, he almost builds his career and his family from the not so significant job of a bank clerk. His colleague and close friend, Dinshawji, childless and ailing, too is equally ordinary. Miss Kutpitia, whose life stopped after the death of her brother and nephew, is a lonely old woman with nobody but her superstitions to cling to. Major Bilimoria, the retired, cynical army man, disappears only to be brought back dead for funeral rites at the tower of silence. Mr. Ratadi, confused and cavalier, takes his dog and his problems, to Dustoorji Baria. Then there is Tehmul *lungraa*, crippled and retarded, a child in man's body. These characters, though individually significant, form vignettes of a community caught in its own dilemmas.

Mistry problematizes these dilemmas through the character of Gustad Noble. His acceptance of certain ways of the Parsi community is reflected in his friendship with Dinshawaji, Bilimoria and the inspector who, though not great believers themselves nevertheless try to live and perform the community customs. Gustad's hostility towards Miss Kutpitia and Mr. Ratadi again is reflective of his attitude to superstitions, which Miss Kupitia keeps rubbing into Dilnavaz's mind, and miracles, which Mr. Rabadi seeks through Dustoorji Baria. Gustad and his family 'gave up on miracles' long back. Further to the problematization is the rapid change that is taking place around. He observes, "over the years, as the neighborhood underwent its peculiar transmogrification ... displaced by builders, speculators or government planners" (Mistry, 1991: 156). He is agitated that such rapid change has encroached the community settlements.

What holds out hope between such hostility and anxiety is his relationship with the pavement artist and the accidental meeting with Malcolm. The pavement artist portrays gods, prophets and saints of different religions on the same pavement. He tells:

I always like to mix them up, include a variety in my drawings. Makes me feel I am doing something to promote tolerance and understanding in the world (Ibid : 182).

This, while fascinating Gustad, helps him reconsider his hostility and rigidity. He then brings the artist to the khodadad building to paint pictures on the wall. The wall surrounding the building, which used to stink of urine and other wastes suddenly starts emitting fragrance. People, walking by, begin to put incense sticks for gods and saints on the wall.

On top of such a satisfying experience is the encounter with Malcolm who takes him to Mount Mary. With their shared experience of childhood it does not take much time for him to convince Gustad of the possibility of a spiritual experience. He reflects, 'may be Dada Ormuzd is telling me something' (ibid : 222). With the death of Dinshawji, a constant companion, this

conviction translates into a deeply felt need; he realizes the power of prayer. Participating in the funeral rites of his departed friend he feels:

The prayer filled the dark room slowly. Slowly the prayer sound was the dark room. ... All his life he had uttered by rote this dead language, comprehending not one of them while mouthing his prayers. But tonight, in Dustoorji's soft and, gentle music, the words were alive; tonight he came closer than he ever had to understanding the ancient meanings (ibid : 247-248).

These ancient meanings bring solace to Gustad and his family. Sohrab, his son, returns and his family recovers from some of its difficulties. Mistry, while charting the 'chanced, unplanned, solitary' (ibid) journey of Gustad Noble, seems to suggest, though not necessarily with the same emphasis, the need to overcome dilemmas by reconstructing the community needs to withstand or counter the pace of change. The delimiting space of the community within which initiatives arise is marked by its response to the local political outfits on the one hand and the expressed solidarity in the Bangladesh war and the outrage at the loss of life on the other.

Running in the Family

Michael Ondaatje writes that *Running in the Family*, while a communal act in the sense of being imagined with many people, is a portrait, a 'Gesture'. In this portrait what one gets to read are the descriptions of Ceylon and the immediate members of the Ondaatje family. As a prelude to Ceylon, he describes Asia as@ gasp from a dying mouth. An ancient word that had to be whispered would never be used as a battle cry. The word sprawled. It had none of the clipped sound of Europe, America, Canada. The vowels took over, slept on the map with the S. I was running to Asia and everything would change (Ondaatje, 1984 : 22).

Such a description with its dark undertones and comparisons with the western countries would continue to run through the text. When he describes his motherland he would start with the many oppressive conquests it was subjected to. In dark humour he calls Ceylon "the wife of many marriages". Ceylon, which has many 'mythic shapes' gradually, becomes 'Amoebae, a rectangle' and 'pendant off the ear of India' (ibid : 63), gains 'eventual accuracy' after colonial encounters. The Island, which 'seduced all of Europe', 'pretended to reflect each European power till newer ships arrived and spilled their nationalities, some of whom stayed and intermarried (ibid : 64). He then traces his name Ondaatje, 'a parody of the ruling language', to one such intermarriage.

Ondaatje evokes the dark images of the land portrayed by Europeans. They saw this Island not just as a paradise, but a paradise to be 'sacked'. 'Every conceivable thing was

collected and shipped back to Europe (Ibid : 81). Those Europeans or travelers, who came with no commercial motive, found it quite dark. Neruda wrote some of his 'claustrophobic pieces' in Ceylon and D.H. Lawrence describes Ceylon as 'a negation of what we ourselves stand for and are' (ibid : 78). So Ceylonese, Ondaatje would imply, were left with the ravaged remains of the sacked paradise. Ceylon was virtually bifurcated into cities and inlands or the jungle. While cities were spaces for people, displaced from communitarian modes of life and used to colonial structures of governance and debilitating habits (gambling for one) (ibid). The inlands, while keeping 'the intricate arts and customs and religious ceremonies' (ibid), almost moved into the jungle, cut away from and losing sense of their countrymen.

Ondaatje in his nuanced evocation of childhood and figures in and around his family could only give the ravaged picture of the community. No significant description could be found about a village or activities of the community. No rootedness, not to speak of any mythic or historic character, is to be found in the narrative. All that the reader comes across are some figures that embody the ravaged psyche of the communities like the Tamil Christian or Burgher community to which the Ondaatje belongs. The author portrays with great sensitivity the character of his father from his initial instability and aimlessness, through his dipsomania and 'torn state' to his final end. The portrayal takes the tragic-comic route. He lands up in England to take up exams for Cambridge. While he never got to study at Cambridge, it is left to his parents to come to England and find that out. They also find that he is engaged to his sister's best friend, Phyllis; but this engagement too comes to nothing as Mervyns Ondaatje, after two weeks of his landing in Ceylon, announces that he is engaged to Gratien. This engagement and the subsequent marriage last till the birth of three children. His alcoholic bouts, eccentricities and inability to relate to any work or profession, be it Ceylon light infantry, the tea gardens or the poultry farm, are little too much for the woman with the burden of bringing up the children. His only relative success is his establishing the Ceylon cactus and Succulent Society. Into the jungle, he runs tormented and torn through various stages till his premature death.

The portrayal of the figure Lalla, the grandmother brings to the fore many aspects of the Ceylon Christian community, specially the women of the community. Lalla is a woman of great energy and enthusiasm with tremendous zest for life. Ondaatje suggestively writes about Lalla's claim 'to have been born out doors abruptly' (ibid : 117). The abruptness of her birth is followed by no information about her growing up. Courtship and disappointment, marriage and widowhood all follow in quick succession. Then she is left to drift from passion to passion and person to person. Palm Lodge, the house she got after her marriage, too keeps changing before it disintegrates. People move in and out of her life with a bewildering speed. The only consistent thing in her action is her love for alcohol and card-games. "She was the most casual and irresponsible of chaperones; being far too busy with her own life" (ibid).

Lalla, like many of the author's relatives is tormented. From children to garden, to science, and lyrical socialism she has moved all her life. She could not be even a mother which 'seemed to be only one muscle in her chameleon nature which had too many other things to reflect' (ibid : 124). Lalla, finally searching 'for the great death', gets it while drifting in the great floods which ravaged Nuwara Eliya.

Conclusion

Varied in focus as the terms of Community descriptions of these three writers are, they only show the diverse ways Communities have responded to the colonial interventions. While the first two fictional texts could capture the subjective conditions with the richness of 'remembered details', Ondaatje's memorable recollection of some of the family figures and cultural invasions of Ceylon at various points of time suggest a felt lack. While Ghosh describes the community territorially to convey a sense of the past, Mistry constructs his image of Parsi Community through the workings of the family. Ondaatje, on the other hand, portrays the affected family forms and images of ravaged psyche to convey the colonized and transformed side of the community. His approach to the institution of family is hence significantly different from those of Ghosh and Mistry. Coming as they do from three different societies, they rather indicate through their narratives, the difference in resources available to them as writers.

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ATTITUDE OF THE TEA-GARDEN LABOURERS OF SOUTHERN ASSAM TOWARDS FORMAL EDUCATION: A MICRO SURVEY

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Abstract

In this paper, an attempt has been made to investigate the attitudinal pattern of the tea-garden labourers of southern Assam towards formal education across three successive generations. Authors have extensively used relevant statistical techniques and applied test of significance to conclude objectively the attitude of male and female tea-garden labourers towards formal education, juxtaposing mean attitude scores of different generations against one another.

North East India lags behind compared to other parts of the nation in terms of agricultural and industrial development. So far education is concerned the system which is not properly tied with the real life of the people and therefore unattractive. As a result, literacy rate is not up to the mark. Again due to the unstable economic condition, people of this region are unable to get proper education which pulls them into the various cycle of poverty. A sizeable percentage of them is also poor because they are illiterate.

Development of agriculture and industry requires proper application of scientific and modern knowledge. The industries scattered in North East India, demand skill-oriented labor. As the people, working in agriculture are mostly uneducated, therefore they are deprived of using technology in the field of agriculture and agriculture-based industries. It is worth noting in this context that since independence, industrial development, throughout north eastern India did not emerge due to adverse geographical condition the only industry which gives maximum return (in terms of capital resources) to the north-east region is the tea industry.

In terms of education, economy and physical facilities tea-garden labourers (hence forth 'labourers' only) are most exploited and oppressed group. The opportunity, provided to the

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labour in connection with education, economy, and physical facilities by different government and non-government agencies, are too scanty. On the other hand, the wages provided to them is comparatively less in relation to the production and working hours.

Human Development Report (HDR) and other impartial international reports (IRDR) identified 'North-Eastern Region', specially Southern Assam, as 'extremely less developed' in terms of industry and agriculture (Mazumder, 1988. As per Indian Rural Development Report, 1999, the poverty ratio in Barak valley ranges from 36-45% which means-very high and social development is only 0.01-0.3% which is also very low. It shows that because the poverty ratio is very high so their standard of living is low and poor socio-economic condition. A glance perusal of the social-development index reveals that the region is lagging behind not only in terms of economy but also in connection with social set-up. The basic cause of this social-underdevelopment keeps its root with the system of education prevailing and available for the people living in North-East (ibid : 66).

Education is always considered as an index of development for both an individual or for a group. Assam in specific and the entire North-Eastern Region in general is comparatively less developed than the other regions of the country. A major sector of agri-industry in North-East is based on the plantation of tea on sizeable proportion of cultivable land. The substantial size of agricultural labourers based on tea-industry belong to backward section of population in terms of their social, economic and educational aspects. It is obvious that Central Government has paid attention in this region in connection with the communication, medical facilities, transportation, etc., but that is not sufficient for enhancement of production and development of social life.

Considering education as a pre-condition of development, attempt is made to explore the attitude of the labourers from either sex, towards education, belonging to successive three generations, in Southern Assam. Education is the key for overall development and to unlock the door of success. Development of a nation is closely related with the development of educational system. Education is expected to fulfill the needs and expiration of people of a nation. Therefore, the aim of education is to prepare a sound philosophy in accordance with the lifestyle of the people. When people of a nation are able to contribute their share to the society in varied ways (viz, in terms of economy, polity, socio-cultural aspects etc.) then only the all round development is possible. No study has yet been carried out stressing the educational needs of the labour-class in the only and only major industry in north-eastern India. Irrespective of the availability of huge number of tribal communities in north-east, it appears that the life situation of these labours, working environment in tea gardens is most pathetic. The history of tea gardens records the stories of oppression over the labourers by their employers during the British realm. Even after independence, they are facing problem in varied ways. Though the brutal oppression has been minimized but century long deprivation some how created a culture of silence among them which is reflected even in their lifestyle. Nobody bothers about their

development-sometimes not even themselves. However, some changes are expected in the new generation as education is stressed upon as an instrument of change and development.

Migration –The Factor

To know the causes of migration we have to look into the historical perspectives of tea gardens. When British came to India they brought the idea of tea plantation, that has started in China. British took tea-seeds from China and started plantation in NEFA with the help of some skilled labourers brought from China. But Chinese labourers did not stay for a long time here and quit NEFA within a decade. So there was need to have some efficient labourers to look after the garden. In the meantime in the western part of India there was famine for three years and people were in search of food. The British took the advantage of this situation and collected the needy people from these areas by showing the brighter aspects of life. As a result, several people from so many places across the country came to Assam and engaged as tea-garden labourers and settled in Assam. Thus, they migrated to Assam and the then NEFA, almost 100 years ago.

In Barak Valley (Southern part of Assam), they are mainly agricultural labourers who came during British colonial period either by force or for the dream of better livelihood. During the time of survey the investigators found that people used to write their surnames as *Dhobi*, *Bhar*, *Patra*, etc. It is interesting to note that all the labourers having surnames *Dhobi* are migrated from Ghajipur district of Bihar and *Patra* migrated from Bankura district.

Research Questions

To initiate the study in proper direction, following research questions has been raised:

1. What is the attitude of the tea-garden labourers from different generations towards education?
2. Does there exist any significant difference among the tea-garden laboruers from different generations, so far their attitude towards education is concerned?
3. What is the trend of attitudinal changes towards education that occurred across the generations among tea garden labourers?

Objectives

Keeping in view the research questions following objectives are framed :

1. To study the attitude of the first generation tea garden labourers towards education.

2. To study the attitude of the second-generation tea garden labourers towards education.
3. To study the attitude of the third generation tea-garden labourers towards education.
4. To study whether there exists any significant difference between the attitudes of the tea-garden labourers from different generations and sex-groups.
5. To study whether any significant changes of attitude occurred across the generations among the tea garden labourers or not.

Hypotheses

The following hypotheses have been framed for the present investigation.

1. Tea-garden labourers belonging to first generation possess favourable attitude towards education.
2. Tea-garden labourers belonging to second generation possess favourable attitude towards education.
3. Tea-garden labourers belonging to third generation possess favourable attitude towards education.
4. There exists no significant difference of Attitude between the labourers from first and second generations.
5. There exists significant difference of attitude between the labourers from second and third generations.
6. There exists significant difference of attitude between the labourers from first and third generations.
7. No significant changes of attitude occurred across the generations among the tea-garden labourers.
8. Labourers exhibit no significant differences in connection with their attitude towards education; so far their gender is concerned.

Scope and Delimitations

The scope of study has been limited to the tea-garden labourers working in the Barak Valley of southern Assam. Only those respondents were taken into consideration that happen to be a member of a labour family having three (3) successive alive generations. The respondent group from each generation includes as many as 70 respondents 210 (70x3) including equal

number of male and female respondents from each generation. Selection of the sample from different sex groups was carried out independently.

Methodology of the Study

As many as 146 tea gardens are situated in the southern Assam. These tea gardens are spread over three districts viz- Chachar, Karimganj and Hailakandi. Population for the present study comprises the labourers, working in these tea gardens, irrespective of their ages.

The purposive random sampling technique was adopted for selecting the tea gardens from the area i.e. Barak Valley. It would have been better to follow stratified random sampling technique, due to several constraints; a purposive random sampling was adopted. The investigator sampled out the tea gardens keeping in view their proximity from the Assam University, Silchar and availability of labourers across the generations. Another factor was the adequacy of labourers working in such gardens

After selecting the gardens from Barak valley, stratified random sampling technique was followed to identify the respondent labour families from each garden. Those labour families were considered which had living members of three successive generations. Following the approach, seventy families were identified. These families were split un-uniformly in three tea garden, viz. Silcoorie tea-estate, Rosekandy tea-estate and Derby tea estate. Subsequently, investigators picked up three members, one from each generation, in each family. Thus, ultimately 210 respondents were selected, including 70 respondents from each generation.

Definition of Key Terms

Attitude

Attitude is a complex psychological attribute. It is a dispositional readiness to respond to certain situations, persons, or objects in a consistent manner, which has been learned and has become one's typical mode of response. An attitude has a well-defined object, either for or against. It may be overt and covert.

Tea-Garden Labourer

For the present study, the terminology 'tea-garden labourer' refers to those who are working in tea gardens as labourer. Labourer working force migrated from the rural agrarian settled in Assam. The basic mode of earning of these groups of people is directly related with tea-industry.

Three Generations

Three generations mean three different groups of labourer differentiated on the basis of their off springs. These three generations are related to the tea gardens in which grand father/

mother, father/mother, and grand sons/daughters are available.

First Generation

'First generation' in the study means the first of the three successive generations survived. Therefore, the labourers belonging to the first generation included elderly grand father/grand mother in the family, who earned their bread and maintained their families primarily as a labourer.

Second Generation

The second generation included those who are engaged as labourers and earned their primarily from tea garden along as their father/mother and son/daughters i.e. sandwich generation basing on age factor, investigator took into consideration those individuals as second generation whose age was more than 25 years.

Third Generation

The third generation labourers are either working in the garden or factory casually or permanently, and contributing a little bit of earning to their family or their own along with parents and grand parents. Those who are falling below 25 years and are unmarried are considered as third generation labourers.

Tools and Techniques

Tools used included Roy's attitude scale (2002) (Parallel Forms for males and females) developed by summated rating method. Both the forms incorporate thirty-two (32) items. The tool was a two-point attitude scale. The investigator administered the tool over each and every respondent. Sometimes, there were the problems of comprehension, which were analysed to pull the attitude of the respondents.

Data and Analysis

Data obtained through the scale was absolutely quantitative in nature. Simple percentage, measures of central tendencies and 't-tests' are the statistical techniques used for analyzing the data.

Analysis of Data

Total Group

It has been observed from the data that the mean attitude score ($M=50.269046$) of the labourers is favourable in the scale continuum. This reveals that the respondent group ($N=210$) possess positive attitude towards education. It was further observed that in this group, majority (65.238%) of the respondents possess favourable attitude, almost 30% negative attitude, followed by rests (4.726%) a neutral attitude towards education.

The scenario for the male group (N=105) also pertains to a positive mean attitude score (49.23333), which reveals that the male labourers, possess favourable attitude towards education. Among the male, 60.95% and 31.29% and 7.62% respondents possess favourable,

In case of the female group (N=105), the mean attitude score (M=51.30476) comes on the positive side of the attitude scale. Majority of the female respondents (69.542%) possess favorable attitude, a hand full number (28.571%) negative attitude followed by only marginal portion (1.905%) neutral attitude towards education.

Table 1 : Statistics at a Glance: Total Group of Male and Female Respondents

Groups	N	M	Σx	Σx^2	σ
Total Group	210	50.269046	10556	548178	9.1320589
Male Group	105	49.233333	5169	256583	4.4414974
Female Group	105	51.304760	5387	291595	12.038143

It is evident from the table that the attitude of respondents differs with gender. The female group of respondents possess comparatively more favourable attitude towards education as compared to male group.

Table 2 : Juxtaposition of the Mean Attitude Scores of Male and Female Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ed}	t	Interpretation
Male: Total	105	49.233333	5169	256583	4.4414974	208	1.2836951	7.8456535	Significant at 0.01 Level of confidence
Female: total	105	51.30476	5387	291595	2.038143				

D=10.071427

Table -2 reveals that there exist significant differences in attitude between the male and female group of respondents and the difference is significant at 0.01 level of confidence.

Table 3 : Juxtaposition of the Mean Attitude Scores of Gender Groups belonging to First Generation

First Generation	N	M	Σx	Σx^2	σ	df	S_{ed}	t	Interpretation
Male	35	48.2	1687	82073	4.6586264	68	2.9602455	1.3222842	Not Significant
Female	35	44.285714	1550	78618	16.882064				

D= 3.914286

A juxtaposition of the attitude of the gender-groups, belonging to the first generation,

reveals that among the male respondents, 60.00% possess favourable attitude, followed by 34.286% and 5.714% negative and neutral attitude, respectively. On the other hand, among the female respondents, 34.286%, 60.00% and 5.714% possess positive, negative and neutral attitude, respectively. Therefore, it is evident from the obtained data that in terms of percentage, from the very generation group, while majority of the males possess favourable attitude, majority of the females have negative attitude towards education. This has caused a difference over the mean attitude score of the two gender-groups. While the mean attitude score of the male group is marginally favorable, their counter sex group possesses a negative mean attitude score. However, there exists no significant difference between these two groups as evident from the table no.3.

It is worth-noting that 82.857% of the respondents from first generation, as they reported, can neither read, nor write. The only script familiar to the rest of them from this generation is Hindi. The local language used in the southern Assam is Sheleety- a dialect of Bengali, which they cannot read. Even after staying in the southern Assam for an extended span of time, they failed to cope up with the local language due to lack of interaction with the local people and locational isolation that was aggravated by some sort of closed shell social pattern.

Table 4 : Juxtaposition of the Mean Attitude Scores of Gender Groups belonging to Second Generation

Second Generation	N	M	Σx	Σx^2	σ	df	S_{ed}	t	Interpretation
Male	35	51.18	1791	32107	3.4980137	68	1.240099	0.0161277	Not significant at any standard level.
Female	35	51.20	1792	93206	6.4489146				

D = 0.02

A juxtaposition of the attitude of the gender-groups, belonging to second generation, reveals that among the male respondents, 71.43% possess favourable attitude, followed by 17.145 and 11.43% respondents. 74.286% possess positive attitude and rest 25.714% possess negative attitude. Therefore, it may be said that while only a quarter of the female respondents from this generation possess negative attitude and about three-fourth majority possess a favourable attitude towards education. The mean attitude scores of these two groups are almost uniform (i.e. 51.18 and 51.20) and therefore the test does not signify the differences between these two groups.

Though 88.571% of the respondents from the second generation possess favourable attitude towards education, none of them can read or write. It was further observed that in total, 8.57% of the respondents from second generation can read and write and most of them possess unfavourable attitude towards education. The rest (91.43%) of the respondents from this generation can neither read, nor write any script. The literate group of them is familiar with both Bengali and Hindi scripts.

Table 5 : Juxtaposition of the Mean Attitude Scores of Gender Groups belonging to Third Generation

Third Generation	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
Male	35	48.32	1691	82403	4.421425	68	0.889295	11.3669449	Not significant at 0.01 Level of confidence
Female	35	58.482571	2045	119771	2.8514206				

D=10.108571

The table no.5 presents the data belonging to the third generation. It was observed that from the male group of respondent that a little more than half of the group (51.429%) possess favourable where as 42.857% possess negative, followed by rest (5.174%) indifferent attitude towards education.

So far the mean attitude score of these two groups are concerned, it is observed from the table no.5 that the male group possess slightly favourable attitude where as female group possess strongly favourable attitude towards education. The mean difference is quite high (i.e. 10.108571) and is significant at 0.011 level of confidence.

In total, a sizable proportion of the respondents (i.e. 42.7%) from this generation possess the skill of reading and writing. As reported by the, they acquired the skill from formal schooling, some times back. All of them possess favourable attitude towards education. In a close interaction, they reported that they dropped -out from formal schooling due to financial constraints.

Table 6 : Juxtaposition of the Mean Attitude Scores of the First and Second Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation	70	46.242857	3237	160691	12.5373	138	1.6217111	3.0505698	significant at 0.01 Level of confidence
Second Generation	70	51.19	3583	185313	5.1877162				

D=4.947143

Apart from the gender groups, the mean attitude scores of generation groups was also taken into consideration. It was observed that while the first generation group possess a negative mean attitude score 46.242857, the second-generation possess a mean score 51.19- significant at 0.01 level of confidence.

Further, analysis reveals that from the first generation 47.143%, 47.143% and 5.714% respondents possess positive, negative and neutral attitude, respectively. The same in case of the respondents from the second generation is 72.857%, 21.429% and 5.714% in the same order.

Juxtaposition reveals that comparatively more respondents from the second generation possess favourable attitude, where as those who possess neutral attitude are equal in number from both the groups.

Table 7 : Juxtaposition of the Mean Attitude Scores of Second & Third Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
Second Generation	70	51.19	3583	185313	5.1877162	138	0.9731993	2.2444374	significant at 0.05 Level of confidence
Third Generation	70	53.374285	3736	202174	6.2758107				

D= 2.184285

Table no.7 reveals that both the generation groups, second and third, possess positive mean attitude score-51.19 and 53.374285. However, the third generation possesses comparatively more favourable attitude. There exists significant difference of attitude between the two groups.

It was also observed that among the respondents from the third generation, 75.7145% possess positive attitude, followed by 21.429% negative attitude while rests possess neutral attitude.

Juxtaposition reveals that comparatively more respondents from third generation (75.714% against 72.857% from second generation) possess favourable attitude.

Table 8 : Juxtaposition of the Mean Attitude Scores of First and Third Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation	70	46.242857	3237	160691	12.5373	138	1.67575	4.2556676	significant at 0.01 Level of confidence
Third Generation	70	53.374285	3736	202174	6.2758107				

D= 7.131435

A comparison between the first and third generation categorically reveals that while the mean attitude scored of first generation is negative (46.242857), the same for the third generation is substantially positive (53.3774285). Result of the t-test, as observed from table no.8, reveals that the two generation groups differ significantly so far their attitude towards education is concerned.

Data in this regard further reveals that while many more respondents from third generation possess positive attitude (75.714% against 47.143% from first generation), more respondents from first generation (47.143% against 21.429% from third generation) hold negative attitude.

Table 9 : Juxtaposition of the Mean Attitude Scores of First and Second Male Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation Male	35	48.2	1687	82073	4.6586264	68	0.9847246	2.9344793	significant at 0.01 Level of confidence
Second Generation Male	35	51.18	1791	92107	3.4980137				

D=2.98

The mean attitude score of the male labourers, belonging to first generation and second generation is 48.2 and 51.18 respectively and both the mean attitude score of the generation groups are greater than that of the midpoint of the scale. The 't' value of the particular two groups is 2.9344793, as observed from the table no.9, which is significant at 0.01 levels. That is why it may be interpreted that though the two groups possess positive attitude however the second-generation group possess much more favourable attitude as compared to their counter generation.

Juxtaposition further reveals that 60.00% and 71.43%, 34.286% and 17.14%; and 5.714% and 11.43% of the respondents from first and second generation-male-group possess positive, negative and neutral attitude, respectively this indicates that more respondents from second generation possess favourable attitude towards education.

Table 10 : Juxtaposition of the Mean Attitude Scores of Second and Third Male Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
Second Generation Male	35	51.18	1791	92107	3.4980137	68	0.9529667	3.0011541	significant at 0.01 Level of confidence
Third Generation Male	35	48.32	1691	82403	4.4214251				

D=2.86

Data as presented in the table no. 10 reveals that the mean attitude score of the third generation male respondents is marginally positive (48.32) while the same in case of the second generation is highly positive (51.18). In addition, it is observed that the mean difference between the two groups is significant at 0.01 level of confidence.

In an average, from the third generation, 51.429%, 42.857% and 5.714% of the respondents possess positive, negative and neutral attitude, respectively, towards education, which reveals that comparatively more respondents from second generation possess favourable attitude towards education, compared to their counter generation group.

Table 11: Juxtaposition of the Mean Attitude Scores of First and Third Male Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation Male	35	48.2	1687	82073	4.6586264	68	1.0856439	0.1105334	Not significant at standard level.
Third Generation Male	35	48.32	1691	82403	4.4214251				

D = 0.12

The generation groups among the male, the first and the third, possess marginally favourable attitude towards education and t-test between these group does not signify any differences between these two groups, so far their mean attitude scores are concerned.

Juxtaposition reveals that comparatively more respondents from the first generation possess favourable attitude.

Table 12 : Juxtaposition of the Mean Attitude Scores of First and Second Male Generation Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation Male	35	44.285714	1550	78618	16.882064	68	3.0547039	2.2634881	significant at 0.01 Level of confidence
Third Generation Male	35	51.20	1792	93206	6.4489146				

D=6.914286

The mean attitude score of the female labourers, belonging to first and second generation is 44.285714 and 51.20, respectively and therefore it is clear that the respondents belonging to second generation possess favourable attitude where as their counter respondents from first generation possess negative attitude towards education. The 't' value of the particular two groups is 2.9344793, as observed from the table no.12, which is significant at 0.01 level of confidence.

Juxtaposition further reveals that 34.286% and 74.286% and 60.00% and 25.714%, of the respondents from first and second generation-female-group possess positive and negative attitude, respectively. This indicates that more respondents from second generation possess favourable attitude towards education, if compared with the first generation group.

Table 13 : Juxtaposition of the Mean Attitude Scores of Second and Third Female Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation Male	35	51.20	1792	93206	6.4489146	68	1.1918664	6.0649171	significant at 0.01 Level of confidence
Third Generation Male	35	58.428571	2045	119771	2.8514206				

D=6.914286

Data reveals that while from the third generation, cent percent of the respondents possess favourable attitude, it is only 74.286% from the second generation. Almost a quarter of the respondents from the second generation possess negative attitude. So far the mean attitude scores, of the two groups are concerned, both the groups possess a favourable attitude, however the third generation group possess significantly more favourable attitude, as revealed from t-test.

Table 14 : Juxtaposition of the Mean Attitude Scores of First and Third Female Groups

Groups	N	M	Σx	Σx^2	σ	df	S_{ED}	t	Interpretation
First Generation Male	35	44.285714	1550	78618	16.882064	68	2.8940069	4.8869465	significant at 0.01 Level of confidence
Third Generation Male	35	58.428571	2045	119771	2.8514206				
D = 14.142857									

In retrospect of table no.12 and 13 we may derive to table no-14, which compares the attitude of the female respondents, belonging to first and third generation. While the female group belonging to first generation possess a neutral attitude towards education as evident from their mean attitude score, their counter respondent group belonging to third generation possess highly favourable attitude which is reflected by their mean attitude score (i.e. 58.4285710; t-test between these two groups reveal highly significant difference (at 0.01 level of confidence) of attitude between these two groups.

Table 15 : Composite Attitude Score of First, Second and Third Generation Male Respondents

Male	N	M	Σx	Σx^2	σ
Attitude score of first generation	35	48.20	1687	82073	4.6586264
Attitude score of second generation	35	51.18	1791	92107	3.4980137
Attitude score of third generation	35	48.32	1691	82403	2.8514206
Attitude score of the total group	105	49.23333	2565583	256583	4.4414974

A peculiar trend of change in attitude prevails among the male labourers across generations while the middle aged group of respondents from second generation hold significantly favourable attitude towards education, the rest two groups viz., first and third generations show almost similar type of attitude, with fractional difference. It may be due to the fact that while on one hand ignorance about benefits of education results to such facts for first generation the third generation labourers, on the other hand, also possess similar attitude due to unattractive system of education that prevails. Looking into the social fabric of the respondents belonging to third generation it may be noted that due to the easy-job-scope in the gardens as 'child labourer'. They felt more attraction towards occupation than that of education during their school days. A close interaction with the respondents reveals that they

are engaged to work in gardens by their parents with a view to contribute to their monthly family income; this also results to less allocation towards formal education because it happens so that schools situated in the garden or in proximity suffers from lack of students. As a result, school authority hardly finds the relevance to run such schools.

Table 16 : Composite Attitude Score of First, Second and Third Generation Female Respondents

Male	N	M	Σx	Σx^2	σ
Attitude score of first generation	35	44.285714	1550	78618	16.882064
Attitude score of second generation	35	51.20	1792	93206	6.4489146
Attitude score of third generation	35	58.428571	2045	119771	2.8514206
Attitude score of the total group	105	51.30476	5387	291595	12.038143

A continuous trend of change in attitude prevails among the female tea garden labourers across generations. While the young group of respondents from third generation hold significantly favourable attitude towards education. The second-generation group show comparatively less favourable attitude. On the contrary the first generation group possess a neutral attitude. This trend advocates that attitude among the female respondents changed across the generation and that too, towards a favourable direction. It may be due to the fact that in due course of time, they realized the need and importance of education. Unfortunately, the participation of the female labourers from first generation, in formal education, is not so high, irrespective of their highly favorable attitude towards formal education. This is due to well known socio-economic factors.

Major Findings

While cumulated, irrespective of generations, the entire group, as well as the gender groups (male and female) show the mean attitude scores 50.269046, 49.23333 and 51.304760, respectively, which reveals that all the three groups possess favourable attitude towards education, so far mean attitude scores are concerned.

Though both the gender groups possess favourable attitude, female group has comparatively more favourable attitude towards education, t-test reveals that there exist significant differences of attitude between these two groups.

The first generation male group of respondents possess marginally favourable attitude while their counter sex group possess negative attitude towards education. Difference of attitude between these two groups is not significant.

Both the male and female group of respondents, belonging to second generation possess favourable attitude towards education and no significant difference of attitude prevails among them.

From the third generation while the male group of respondents possess slightly favourable attitude, the female group possess highly favourable attitude towards education. This reveals that there exists significant difference of attitude among the gender groups belonging to third generation.

Cross generation comparison reveals that a significant difference prevails among the respondent groups belonging to first generation and second generation. While the respondents belonging to first generation possess a negative attitude, the second-generation group possess favourable attitude towards education.

A cross generation comparison between second and third generation reveals that both the generation groups possess favourable attitude, though the respondents from third generation possess comparatively more favorable attitude and this difference in attitude is significant at 0.05 level of confidence.

Highly significant difference of attitude prevails between the first and third generation group. While the first generation possess negative attitude towards education, for the third generation, it is highly positive.

A highly significant difference of attitude prevails between the male respondents belonging to first and second generation. First generation male group possess negative attitude towards education whereas their counter group possess favourable attitude.

A similar comparison between the male respondent groups belonging to second and third generation reveals that there exists significant difference between the two groups. Male respondents from second generation possess favourable attitude towards education whereas their counter group from third generation possess negative attitude.

A similar comparison between the male respondents belonging to first and third generation does not signify any difference and both the groups possess marginally favourable attitude.

A highly significant difference of attitude prevails between the female group of respondents belonging to first and second generation. These groups differ in terms of the direction of attitude towards education. While the first generation possesses negative attitude, the second-generation favourable

Comparing the attitude of the female respondents belonging to second and third generation a highly significant difference is observed. Though both the groups possess favourable attitude, the female respondents belonging to third generation possess comparatively much more favourable attitude.

A significant difference of attitude prevails between the female respondents belonging to first and third generation. On one hand the respondents from first generation possess negative

attitude, the respondents from third generation exhibit highly favourable attitude towards education.

The middle aged group of respondents from second generation male respondents hold significantly favourable attitude towards education, the rest two generations viz., first and third show almost similar type of attitude, with fractional difference.

A continuous trend of change in attitude prevails among the female tea garden labourers across generations. While the young group of respondents from third generation hold significantly favourable attitude towards education, the second-generation group show comparatively less favourable attitude. On the contrary the first generation group possess a neutral attitude.

Other Findings

The labourers especially in southern Assam do not have adequate educational institutions. Due to this reason, labourers are compelled to take their wards to the work field. Though there is scarcity of educational institutions mass media may viz. T.V. influence them immensely towards education.

In the modern society, education is must. It is education, which could bring a marvelous change in the social strata and help individual to realize their existence and succeed further. It determines the norms and values of a nation. From this standpoint, it may be concluded that people should pay attention towards education for the development of our nation and provide a minimum education to everybody so that they can meet their challenges more efficiently and effectively. Southern Assam is a hilly area where communication is a major problem that is responsible for its backwardness.

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ASPECTS OF BIRTH RELATED PRACTICES AMONG THE KHAMPTI AND THE MIJU MISHMI OF ARUNACHAL PRADESH

Dipak Kumar Adak

Abstract

The present paper examines certain aspects of the practices that are related to birth found among the Khamti and the Miju Mishmi of Arunachal Pradesh. Those tribes differ from each other both culturally and occupationally. The paper deals with factors like medical check-up, immunization, place of delivery and birth -attendant.

Introduction

The 21st century offers a bright vision of better health for all. It holds the prospect not merely of longer life with less disability and disease. As the new millennium approaches, the global population has never had a healthier outlook. The future of human health in the 21st century depends a great deal on commitment to investing in the health of women in the world today. Their health largely determines the health of their children, who are the adults of tomorrow (WHO, 1998). According to WHO (1991), at least one-half million women worldwide die every year from complications related to pregnancy and child birth and 99 per cent of these deaths occur in developing countries. India alone loses more than 1, 00,000 women every year in this pursuit.

The theme of birth related practices offers a vast area of research. Micro level studies on this aspect however, is very limited among the tribal populations in our country (Basu et al., 1990; Prema and Thomas, 1992; Pandey and Tiwari, 1993; Pandey et al. 1996 and 1997) particularly in the North-Eastern region (Adak, 1997). More so no one has undertaken any such study among any tribal population of Arunachal Pradesh to the best of author's knowledge. The present study is an endeavour to deal with some aspects of the birth related practices among the two culturally and occupationally different tribes namely the

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Khampti and the Miju Mishmi of Arunachal Pradesh.

The Khampti

The Khampti are believed to have migrated from the Shan states of Burma (Dutta, 1989), who are Buddhist by religion. They have their own Dialect affiliated to the Siamese Burman family of language. The Khampti traditionally are cultivators, but now-a-days they are mainly engaged in business in timber .

The Miju Mishmi

Out of three main groups of the Mishmi, the Digaru and Miju Mishmi live in Lohit district. The other group namely, the Idu Mishmi are in Dibang Valley district of Arunachal Pradesh. The Miju Mishmi speak a dialect, which belongs to the Tibeto-Burman branch of the Sino-Tibetan family of language. Agriculture is their main occupation. They have their own animistic religious faith. The Khampti and Miju Mishmi are of predominantly Mongoloid derivation and they are the scheduled tribes of Arunachal Pradesh.

The Data Base

This paper is the outcome of a study carried out in Lohit district of Arunachal Pradesh by the author (Adak, 1994), during his junior short-term fellowship in I.S.C.D., Guwahati, Assam. Data of the present study were collected from the families of two Khampti and three Miju Mishmi villages. The Khampti villages are situated in Chowkham administrative circle, whereas the Miju Mishmi villages are in Hawai administrative circle of Lohit district, Arunachal Pradesh. The selected Khampti villages are: (i) Chowkham and (ii) Momong and the Miju Mishmi villages are: (i) Changung, (ii) Walla and (iii) Watong.

Methodology

For the present study data were collected from those Khampti and Miju Mishmi mothers who experienced at least one live birth during the last five years (i.e. from 1989 to 1993). And the cases of last births were only considered. The reason for considering the last live births is that complete information regarding that particular delivery is available. But if I consider the earlier births we have to depend mainly on recall method in which there are strong possibilities of recall lapses. So, for the sake of accuracy of data I have restricted my observations only on last five births. For this purpose 32 Miju Mishmi and 30 Khampti mothers were specially interviewed. A small sample of mothers was deliberately taken to control the quality of data because of the difficulty in reaching the villages. The survey was conducted during the month of February and March, 1994.

Results

A record on conception and fertility has been given in Table 1 for the Khampti and Miju Mishmi. It appears that the Miju Mishmi exhibit considerably higher percentage of death

before the age of 1 year and within 1-4 years. As a result in the category of early childhood deaths (0-4 years) we find the higher percentage of deaths in the Miju Mishmi (18.41) than that of the Khampti (13.35). The percentage of deaths within 5-14 years is slightly higher among the Miju Mishmi (4.66) as compared to the Khampti (3.27). When the binomial test of equality of proportion is performed it is seen that there is no significant difference between the Miju Mishmi and Khampti in respect of infant (0-1 year), toddler (1-4 years) and early childhood (0-4 years) mortality. However, in respect of early childhood mortality the difference is found to be nearer to the significant level (Table 2).

Table 1 : Record of Conception and Fertility

Total number of mothers	Miju Mishmi (n=115)		Khampti (n=115)	
Total number of conception	449		412	
	No.	%	No.	%
Live Birth	429	95.54	397	96.36
Died within 1 year	49	11.42	35	8.82
Died within 1-4 years	30	6.99	18	4.53
Died within 0-4 years	79	18.41	53	13.35
Died within 5-14 years	20	4.66	13	3.27
Died within 0-14 years	99	23.08	66	16.62
Still alive	330	76.92	331	83.37

Source : Based on field survey and personal calculations.

Table 2 : Binomial Test of Quality of Proportion on Infant, Toddler and Early Childhood Mortality

Population	Infant Mortality			Toddler Mortality			Early Childhood Mortality		
	T ₁	T ₂	Inference	T ₁	T ₂	Inference	T ₁	T ₂	Inference
Miju Mishmi Vs Khampti	0.0260	0.0209	Not Significant	0.0246	0.0162	Not Significant	0.0506	0.0254	Not Significant

Source : Based on field survey and personal calculations.

Note : T₁ for Miju Mishmi

T₂ for Khampti.

In order to understand the birth related practices altogether four factors have been dealt for the Khampti and Miju Mishmi population groups. These are:

- regular medical check-up of mother during pregnancy;
- immunization of expectant mother during pregnancy;
- place of deliver and
- birth attendant.

Regular Medical Check-up of Mother During Pregnancy

It is well established that the dangers of pregnancy and child birth can be reduced drastically by going to the nearest health worker for regular medical check-up during pregnancy. Many of the dangers of pregnancy and child birth can be avoided if the mother-to-be goes to a health centre as she believes she is pregnant (UNICEF, 1993). As seen in Table 3 considerably higher present of Khampti mothers (33.33) availed regular medical check-up during pregnancy than that of the Miju Mishmi (18.75). However, when the binomial test of equality of proportion is performed no significant difference is noticed between these groups (Table 3) in this respect.

Immunization of Expectant Mother During Pregnancy

UNICEF (1993) report suggests that many mothers give birth in unhygienic conditions. This puts both mother and child at risk from tetanus, a major killer of the newborn. Mothers can protect themselves- and their newborn babies too-against tetanus by making sure that they are immunized during pregnancy. All women of childbearing age should be immunized against tetanus, and every woman who becomes pregnant should make sure that she is immunized. The estimated results (Table 3) revealed that a higher percentage of Khampti women (33.33) received two doses of anti -tetanus vaccine than the Miju Mishmi (18.75) during their pregnancy. Like the medical check-up of mother in this case also there exists no significant difference between these groups (Table 3).

Place of Delivery

It has been mentioned in the District Census Handbook of Lohit (1981) that according to the Digaru and Miju Mishmi custom a parturient woman cannot deliver inside her dwelling house. They erect a small temporary shed near their house before the expected time of delivery. And no male person is allowed to that shed except the females. Immediately after delivery, the mother is to come back home along with the newly born baby and remain in her own bed room for eleven days in case of a male child and for ten days in case of a female child during these days certain restrictions are followed in which the mother never goes out and does not work even inside the house. On the last day, an offering is made in which a fowl is sacrificed for the well being of the mother and child.

A similar trend is prevalent in the Miju Mishmi till today. But during fieldwork, while interviewing the mothers, the author met some educated mothers who preferred delivery in health centre instead of home. It is found that their number is comparatively lower than the mothers who opted for home delivery (Table 3). The Khampti in turn show more number of deliveries in health centre than that of the Miju Mishmi. It may be well assumed that medical care must be much better in health centre than at home. However, when the binomial test of equality of proportion is performed it is seen that there is significant difference between two population groups (Table 3).

Table 3 : Distribution of Respondents by Birth Related Practices

Factors	Khampti (n=30)	Miju Mishmi (n = 32)	Binomial test of equality of proportion (Khampti Vs Miju Mishmi)		
			T ₁	T ₂	Inference
1. Regular medical check up for mother during pregnancy : a) Yes b) No	10 (33.33) 20 (66.67)	6 (18.75) 26 (81.25)	0.1458	0.1111	Not significant
2. Immunization of expectant mother during pregnancy : a) Completed b) Incompleted or not taken	10 (33.33) 20 (66.67)	6 (18.75) 26 (81.25)	0.1458	0.1111	Not significant
3. Place of delivery : a) Home b) Health Centre	13 (43.33) 17 (56.67)	25 (78.13) 7 (21.87)	0.3478	0.1238	Significant
4. Birth attendant : a) Traditional Dai b) Health worker	10 (33.33) 20 (66.67)	25 (78.13) 7 (21.87)	0.4479	0.1260	Significant

Source : Based on field study and personal calculation.

Birth attendant

Most of the deliveries in the developing countries take place at home. Whoever is available and has some experience in conducting a delivery perform the role of a qualified birth attendant. In the absence of medicines and sterilized knife they are bound to use a kitchen knife or blade and any powder that is available for cutting and dressing the umbilical cord. As a result, this domiciliary delivery produces tetanus, which claims the lives of many infants in the developing countries (Simmons et al., 1979; Mahadevan et.al., 1986). Wrong handling of delivery by quacks or non-experienced person also causes birth injury and infections. It is evident from Table 3 that the number of deliveries attended by the health worker is considerably higher among the Khampti (66.67%) than that of the Miju Mishmi (21.87%). The estimated results revealed that there exists significant difference between the Khampti and Miju Mishmi in this respect (Table 3).

Discussion

Taking into consideration all these four factors it is found that health care practices in relation to birth is certainly better among the Khampti women than that of the Miju Mishmi. The Khampti women largely depend on regular medical check-up during pregnancy and a good number of them have received two doses of anti-tetanus vaccine. Side by side, they have mostly opted for delivery at health centre and medical personnel have attended a large number of deliveries among them. In this connection it can also be pointed out that the Khampti

mothers are more educated than the Miju Mishmi (Adak, 1994). Infant mortality, an indicator of health status and well being of children is also found to be higher among the Miju Mishmi than that of the Khampti. These reflect a better consciousness of health among the Khampti than their counterpart.

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EFFECT OF COMPOSITE ROOT EXTRACT ON IMPLANTATION AND SERUM LEVEL OF ESTRADIOL-17 β AND PROGESTERONE IN ALBINO RAT

H. N. Sarma*, P Chakravorty, J. C. Goswami, H.C. Mahanta

Abstract

The present study investigated the effect of ethanolic crude extract of roots of five different plants in composite form referred to here as composite root extract (CRE), on implantation and serum level of estradiol-17 α and progesterone in albino rat. The result showed that oral administration of the CRE for a specific period retarded the implantation process and the degree of this effect was dose-dependent. Percentage of pregnancy decreased with increasing dose, accompanied by total absence of implantation site, and also resorption of implantation sites, resulting in decreased number of litters. At the same time, the level of estradiol-17 α and progesterone in serum decreased significantly compared to that of the control females. However, a basal level of both hormones was maintained in all the groups of females treated with various doses.

Key Words : Anti-implantation, Composite root extract, Estradiol-17 β , Progesterone

Introduction

The use of herbs to control fertility among women has been practiced for centuries in Assam (Bentley and Trimen, 1981). The State having tropical rain forest is a natural repository for innumerable medicinal and aromatic plants, which have been traditionally used by the indigenous people both for reversible or permanent sterility and also for abortion of unwanted pregnancy. However, such preparations have been used in composite form using more than one plant at a time. Dried powder of the herbs are prepared in the form of small tablets (locally known as "Boree"), taken orally by women in the morning during the first seven days of menstrual cycle. The scientific investigation on efficacy of composite plants on fertility control is available. It has been reported that *Piper longum* fruit alone revealed only marginally antifertility activity in rats; however, when mixed with *Embelia ribes*, it inhibited pregnancy in

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80% of rats (Kholkute et al., 1978).

In this paper an attempt was made for in vivo testing of anti-implantation efficacy of composite root extract (CRE) and its effect on estradiol-17 α and progesterone profile during the period of CRE administration.

Materials and Methods

Collection and Extraction of Plant Materials

Roots of *Plumbago rosea* Linn, *Borassus flabellifer* Linn, *Carica papaya* (male) Linn, *Dolichos lablab* Linn, and *Shorea robusta* Gaertn were collected and their taxonomic status ascertained (Kirtikar and Basu, 1935). Each collection was chopped into small pieces, air dried and ground to 60 mesh powder. Powdered materials were soaked separately in ethanol for 72 hours and then filtered. The same process was repeated three to four times and then the residue was discarded. The filtrate of each plant material was combined and concentrated under vacuum at $30 \pm 1^\circ\text{C}$. The materials were stored at 4°C for use when needed. The extracts were combined in 1:1 ratio. The CRE was dissolved in ethanol and coprecipitated with polyvinylpyrrolidone [PVP] (mol.wt. 10,000, Sigma Chemicals, St. Louis, USA) in a ratio of CRE:PVP 1:1 by weight as described elsewhere (Ratnasooriya et al, 1994). The solvent was removed from the CRE:PVP co precipitate under vacuum at $30^\circ \pm 1^\circ\text{C}$. The resulting solvent-free mixture was dissolved in distilled water.

Test Animal and Bioassay

Male and female albino rats of proven fertility maintained under uniform husbandry conditions, having natural photoperiod, humidity and $21^\circ \pm 1^\circ\text{C}$ temperature were used in the present study. Females showing regular estrous cycles were selected by observing vaginal smears for two consecutive cycles. The extract PVP mixture at doses of 500 mg/Kg/day, 700 mg/kg/day and 1000 mg/kg/day was administered for 12 days to the female rats by intragastric catheter at 08.00 hr – 09.00 hr starting from the onset of proestrus. The control females received PVP 1000 mg/kg/day in the similar way.

Administration of CRE was withdrawn on day 13, and females were allowed to mate in a ratio of 2:1 (female:male). Positive mating was verified on the basis of the presence of sperm in the vaginal smears on the following morning and designated as day 1 of gestation.

On day 11 of the proposed gestation, the rats were autopsied to record the number of pregnant rats, total number of implantation sites in the left and right horns of the uterus and the number of corpora lutea in the ovary.

Fertility rate was calculated using the following formula:

$$\text{Fertility rate} = \frac{\text{Number of litters}}{\text{Number of total mated females}}$$

Radioimmunoassay

Radioimmunoassay of the hormones, estradiol-17 α and progesterone, was done in both control and CRE treated rats at the end of the treatment. Samples were collected at every four hours starting from the onset of proestrus phase (0hr) followed by estrus, metestrus, until the termination of diestrus phase (the entire period of the cycle spans a total of 96 hours). The collected blood samples were centrifuged at 4°C , and the serum samples were stored at -20°C until analysis. Standard RIA kits were obtained from Diagnostic System Laboratories., Texas, USA. Six estradiol standards (0.07 – 11 nmol/L) in estradiol-free serum and estradiol reagent containing <5 μCi (185K Bq) of ^{125}I -labelled estradiol was used for the estradiol-17 α assay. Precipitated rabbit antiestradiol serum was used for separation of free and bound antigens. Six lyophilized standard progesterone (^{125}I -reagent containing <5 μCi (185 KBq) samples were used for progesterone assay. Separation of free and bound antigens was achieved by goat antirabbit gamma-globulin followed by centrifugation.

Statistical Analysis

The mean values ($\pm\text{SE}$) of different groups of CRE treated rats were compared with that of the control/PVP-treated rats. The data were statistically analysed using the ANOVA. The P values less than 0.05 ($P < 0.05$) was considered as significant.

Results

The effect of the CRE is presented in Table 1. CRE prevented pregnancy when administered orally continuously for 12 days from the day of onset of proestrus in albino rat. The minimum effective dose was found to be 1000mg/kg/day. The other doses reduced the implantation site but failed to induce 100% sterility. The other two doses, i.e. 500 mg/kg/day and 700 mg/kg/day, decreased the number of pregnant females as well as the number of implants at both right and left horn of the uterus. While some of the CRE-treated females failed to become pregnant, resorption of implantation site had taken place in others. The control/PVP-treated females showed 100% pregnancy, a fertility rate without implant resorption. The CRE treatment with 500 mg/kg day decreased the pregnancy significantly to 61.5% and the fertility rate to 3.07. Further decrease of pregnancy and fertility rate were observed with treatment at 700 mg/kg. Administration of the extract at a dose of 1000 mg/kg proved to be the most effective, where all the females of the group failed to have implantation.

Table 1 : Effects of composite root extract on implantation, administered from day 1-12 of pre-mating period

Treatment (Day/rat) (n=12)	Number of rats having				Pregnant rat (%)	No. of Corpora Lutea	No. of Implan- tation Site	No. of Viable Implant	No. of Implant resorp- tion	Fertility rate
	Implan- tation site	Fail to Implant	Resorp- tion of implant	Giving birth Live pups						
PVP 1000mg	12	0	0	12	100	10.4±1.3	7.68±1.3	7.68±1.3	0	7.75
CRE 500 mg	12	0	5	7	61.5*	9.1±2.1	6.9±1.8	5.0±1.0	1.9±0.2	3.07*
CRE 700 mg	8	4	3	5	41.5*	9.0±2.6	4.2±2.5	3.8±1.5	0.4±1.0	1.91*
CRE 1000mg	0	12	0	0	0*	8.4±1.89	0	0	0	0*

Note : (Values are mean ± SE.) n=sample size. P < 0.05 vs PVP 1000mg/kg/day
(* values are statistically significant)

The profile of estradiol-17 α in both control and CRE treated rats is presented in Figure 1. The level of the hormone decreased in all four phases of the estrous cycle in the treated rats compared to that of the controls. In the treated group, the maximum titer of estradiol-17 α was observed at the 500 mg dose and the lowest level in the 1000 mg dose.

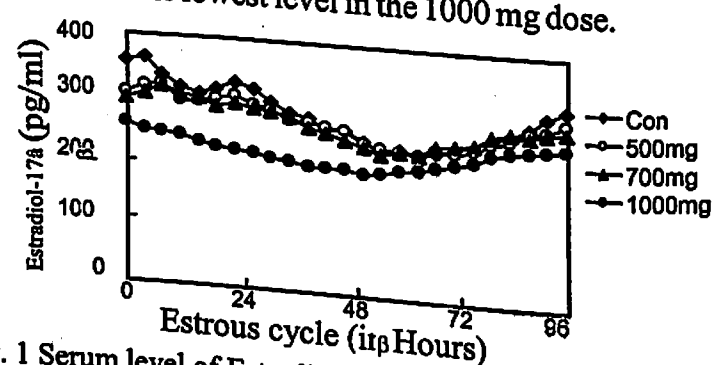


Fig. 1 Serum level of Estradiol -17 α in control and CRE treated female rats. Three different doses of the CRE, 500mg/kg 700 mg/ kg and 1000mg/Kg body weight was calculated during different phases of the estrous cycle starting from the beginning of proestrus (0 hr) to the end of diestrus (96hrs). Values are mean ±SE.

The pattern of progesterone synthesis in CRE-treated females was similar to that of the PVP-treated control (Fig. 2). However, the level of the hormone was directly proportional to the dose administered. In treated rats, serum progesterone level decreased as compared to the controls. The titer of the hormone was maximum with 500 mg followed by 700 mg and 1000 mg dose.

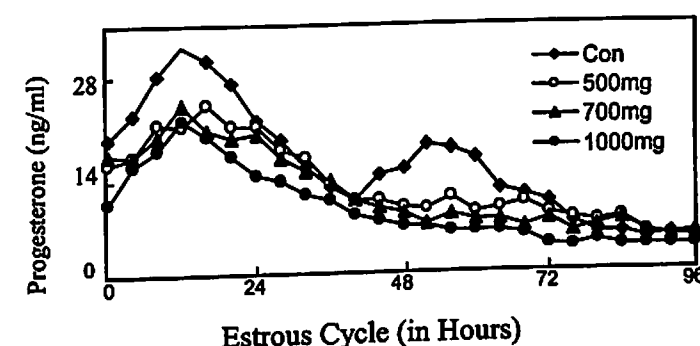


Fig. 2 Serum level of Progesterone in control and CRE treated female rats. Three different doses of the CRE, 500mg/kg 700 mg/ kg and 1000mg/Kg body weight was calculated during different phases of the estrous cycle starting from the beginning of proestrus (0 hr) to the end of diestrus (96hrs). Values are mean ±SE.

Discussion

The purpose of the present investigation was in vivo testing of a traditional herbal preparation to evaluate the anti-implantation efficacy in albino rat. On the basis of first hand information, crude composite root extract have been administered to adult female albino rat to determine the threshold dose for inducing sterility. At the same time, serum level of estradiol-17 α and progesterone were determined, since these two steroid principals have been considered as the primary requirement for female reproductive processes including follicle maturation, ovulation, endometrial maturation as well as nidation.

The results of the present investigation indicated that with the increasing dose of CRE administered, the percent of pregnant females, fertility rate, presence of implantation site and number of viable implant decreases correspondingly. It was speculated that, the reduced fertility is due to effect of the CRE on growth of graffian follicle of the rat. The CRE induces retarded growth of the follicle and thus malformation of endometrial epithelium (Sarma and Mahanta, 2000). The earlier observation from this laboratory reported that aside from the impact of CRE on ovary, administration of 1000 mg/Kg resulted in desquamation of endometrial surface epithelium, infiltration of large numbers of polymorphs into the endometrial stroma and loss of microvilli forming microridges during the estrus phase (Sarma and Mahanta, 2000). The infiltrated leucocytes and leucocyte products may do damage of blastocysts resulting in death of the fetus (Corfman and Segal, 1968). Structural alterations of the endometrial surface epithelium, especially the microvilli may involve in the functional retardation of sperms and zygote leading to infertility (Fadel et al., 1976). Resorption of implantation indicated that though the oocytes were fertilized followed by successive nidation, the blastocysts may suffer from lack of proper nutrient as well as

hormonal deficiency resulting in death of the fetus. It has been reported that successful blastocyst development requires cytokines and growth factors (Haimovicia and Anderson, 1993) and adhesion molecules (Denker, 1993) produced by the developing blastocyst or by the uterine epithelium around the site of implantation. It can be speculated that due to impact of CRE, the endometrium and/or the developing blastocysts fail to synthesize these molecules, causing resorption of implants. A biochemical study showed that oral administration of the CRE decreased the level of glycogen and protein in uterine tissue in albino rat (Sarma and Mahanta, 2001). While protein is required for building material, glycogen serves as a source of nourishment for the developing blastocysts (Demer et al., 1972).

The serum level of gonadal steroids estradiol-17 α and progesterone varies at different phases of estrous cycle in albino rats (Butcher et al., 1974). Variation in the steroid level in different phases of the estrous cycle is accompanied by follicle maturation in ovary, formation and maintenance of corpora lutea, and endometrial maturation in uterus. Both hormones act synergistically upon the uterine endometrium to prepare it for nidation (Psychoyos, 1973), though progesterone normally act on an estrogen-primed uterus (Finn and Porter, 1975). Decreased level of estradiol-17 α and progesterone in CRE treated rat indicate that CRE has a direct effect on ovarian follicles, hindering the synthesis and secretion of steroid hormones. It has been observed that the number of corpora lutea in CRE treated rat ovaries is less than that of the control rats. Decreased steroid levels might be due to lesser number of graffian follicles or due to disparity of sub cellular organelles of follicular cells caused by CRE. Implantation depends upon different factors, like releasing of healthy oocyte from ovary, fertilization as well as proper nidatory preparation of the endometrium. Moreover, elevation of serum estrogen levels (Gidley-Baired et al., 1986) or suppression of estrogen (Archaravichien et al., 1992) can induce fetal death. In the present investigation, it could be speculated that the increased demand for progesterone, which is essential for gestation (Zarrow et al., 1964), has not been met in CRE-treated rat. Progesterone insufficiency could cause inadequate secretory differentiation of the endometrium resulting in infertility (Gravinis et al., 1984). However, it has been observed that though administration of CRE decreased the level of both estradiol-17 α and progesterone, no effect on the basal level of these two steroids was found. In essence, it can be concluded that the ethanolic crude composite root extract of five plants mentioned above could inhibit the implantation in albino rat affecting both the ovary and uterus.

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ENVIRONMENTAL ACCOUNTS AND AUDIT (EAA)

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Abstract

Recent years have seen rising concern for environmental degradation, taking place mainly due to the cutthroat competition of corporate houses. Environmental accounts and audit (EAA) are significant in this respect. Environmental account is to evaluate quantitatively the natural resources stock, the degree of environmental degradation, environmental cost and benefit of corporate decisions and performance of corporation in discharging environmental responsibilities. Environmental audit is to examine compliance of corporations about environmental law and performance of corporation in conserving nature. Both environmental accounts and audit are still in primitive stage in our country. Mutual exchange of views among various business houses may promote the acceptance of environmental accounts and audit in extensive scale.

Introduction

In the era of globalization, corporate houses compete for maximum and efficient utilization of resources at their control. The cutthroat competition accelerates the cost and sustainability of business becomes complex issue for every corporation. The competition among corporations in industrial field makes terrible threat to environmental degradation, which is taking place mainly in the form of pollution of various types viz. air, sound, water, soil, erosion deforestation, etc. that has become a worldwide phenomenon. It adversely affects human health, reduces economic productivity and leads to loss of various amenities.

The developing countries like India are facing the twin problems of protecting the environment and promoting rapid economic development. A positive linkage between environmental protection and economic development is seriously wanted. Environmental accounts and audit becomes significant in this regard. Environment account is monetary and quantitative evaluation of natural resource stock and performance of corporations in discharging

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their responsibility related to environmental protection and maintenance of eco-order. Environmental audit is, another way to associate corporate management in providing information about the compliance of the legal norms and overall performance of corporation in protecting the environment. The information of audit may not be quantitative always like environmental account. Environmental audit is not external audit like financial audit of an institution/project. Environmental audit and environmental accounts are like the two sides of one coin, Environmental accounts serve the purpose in broad spectrum. Environmental accounts provide monetary evaluation of natural stock of various resources. It is the tool of investment decision of corporation to interpret environmental impact of the decision. It seeks to assess the cost and benefit of environmental action. In West, stakeholder gives desired importance on ecological impact of corporations' developmental projects/activities. Therefore, value of share is affected by the environmental performance and financial performance of business firm.

Categorization of Environmental Accounts

Environmental accounting can be understood from two broad perspectives, i.e., National Environmental Accounting and Corporate Environment Accounting.

National Environmental Account (NEA)

It focuses on natural resources stock, and environmental cost. NEA can be defined as physical and monetary accounts of environmental assets and the cost of their depletion and degradation.

Corporate Environmental Accounting

This is a tool to inform the public of relevant facts compiled in accordance with the environmental accounting. For this purpose, the cost and effect (in quantity and monetary value) of its environmental conservation activities are used. The corporate environmental accounting relates to the environmental action of corporation, which includes:

- i. Segment environmental accounting and
- ii. Co -balance environmental accounting.

Segment environmental accounting is an internal environmental accounting tool of a corporation to select an investment activity or a project related to environmental conservation from among all processes of operations and to evaluate environmental effects for a certain period of time. The effect of investment on environmental conservation is calculated based on the concept of Return on Investment (ROI). The calculation result is used internally for decision making in sustainable environmental management (Chauhan, 2004 : 2).

Manufacturing firms use eco-balancing environmental accounting. The manufacturing

firms attempt to increase production gradually in all production lines. They should have awareness about the impact of every production unit on environment. Eco-balance environmental accounting is a tool for them to quantify environmental effect and cost of activity centres. It provides an internal support system for sustainable environmental management. Corporate environment accounting involves both financial and management accounting. The financial record of the corporation exhibits the expenditure incurred for avoiding pollution and conservation of environment.

The management accounting environmental aspect seeks to identify environmental cost and benefits of different courses of actions and to choose the best one.

In brief, we can say environmental accounting is comprised of following three techniques (Kar et al, 2004 : 3)

Table 1 : Techniques of Environmental Accounts

Sl. No.	Types of Environmental Accounting	Focus	Audience
1	Financial Accounting	Firm	External
2	Managerial Accounting	Firm/Division/Product Line	Internal
3	National Accounting	Nation	External

Scope of Environmental Accounting

The scope of environmental accounting is very wide, that includes relevant environmental facts at corporate, national and International level. The following aspects are common in environmental accounting :

1. From internal point of view, the corporate management attempts to minimize the losses incurred to the environment. It involves the evaluation of investment on environment saving device and its subsequent effect.
2. From external point of view, all losses and damages to environment are to be quantified appropriately. It mainly includes :
 - a) Degradation and destruction like soil erosion, loss of bio-diversity, air pollution, water pollution, sound pollution, problem of solid waste, coastal and marine pollution.
 - b) Depletion of non-renewable natural resources. It includes losses emerged due to over exploitation of non-renewable natural resources like mineral water, natural gas etc.
 - c) Deforestation and land uses.

The aforesaid accounting is not easy that can be measured in terms of monetary value. The alternative idea for quantification of losses and damages is in process of development and refinement. For example, to quantify the deforestation, sq. meter area of land used, per ha./sq. km may be considered. Likewise solid waste produced by a particular factory can be expressed in applicable unit parameter. Further, it is also convenient to quantify how much carbon gas passes through chimney of the factory in air. In order to assess sound pollution, degree of noise made by the factory can be measured in decibels.

Need of Environmental Accounting

The necessity of environmental accounting is usually interpreted at two levels i.e., national and corporate level.

Need at National Level

The Government has the responsibility to protect the environment to safeguard the health and lives of its citizens. Environmental accounting can be of help in this regard as mentioned below :

- For implementing the environmental law, quantitative information can be provided to implementing authority about the degree of environmental loss and damage.
- It provides cost information for purification of concerned environmental elements.
- To exchange the view at international level for global environmental interests environmental accounting provides concrete information.
- Environmental accounts may create public awareness by providing quantitative facts of environmental degradation.

Under the conventional accounts two aspects have been neglected namely (i) The new scarcities of natural resources that threaten the sustained productivity of economy and (ii) The degradation of environmental quality and its consequences on human health and social well beings. The environmental accounting helps the government to show the type of action, cost and efforts that have been done at national level. Besides, it also helps one to know the impact of industrialization and public activities on environment.

Need at Corporate Level

To discharge the responsibility of maintaining environment and to know environmental cost and benefit of every industrial decision, corporations are required to consider environmental accounting. The necessity of environmental accounting in this regard can be stated as below.

- Meeting of regulatory requirement.
- Determination of expenditure for cleaning up the pollution and removing discharge hazardous materials into air, water and soil.
- Disclosing to the investors both potential and current the amount of investment in EAA and nature of the preventive measures taken by the management.

- Choosing the way of developmental project to avoid environmental damages.
- Promoting the environmental programmes undertaken by a company.
- To promote material and operational efficiency of the project so as to meet challenges of global competitive environment.
- To adopt prudent steps to control costs of material and the cost of waste management.

Category of Environmental Audit

To determine the compliance of environmental norms and environmental performance, the audit can be undertaken according to following procedures.

Technical review

The EAA involves the systematic collection of information about the existing status and potential impacts of the organizations on the ambient environment that seeks compliance with pollution control and waste management legislation.

Management review

It examines management policy procedures and programmes to know whether it complies with the environmental legislation or not. It does not examine the business operation and its impact on surrounding environment.

Due diligence review

Under this process, cost of implementing pollution and site remedial actions are examined. The liability of the corporation against present and existing environmental legislation is reviewed at the time of merger and acquisition and in long range planning (Pandey, 1999 : 385)

Scope of Environmental Audit

The scope of the environmental audit depends on the information that is required by management to know the environmental performance. A full environmental audit covers the following aspects :

- Compliance with environmental regulation.
- Implementation of company's environmental policies and procedures.
- Good environmental management practices and
- Past activities of concerned Authorities of the project.

In providing the information to determine an organization's environmental performance, it is expected to cover not only waste stream from plants but also wider management and operational issues.

The Need of Environmental Audit

A properly implanted environmental audit plan provides a range of benefits for an organization.

- It is required to measure environmental performance of an organization.
- Environmental audit associates the managers to know their responsibilities.
- It raises awareness of the importance of professional environment management through the organization.
- As one of the internal audit report, it supports a system of external audit. Management feels sure that what is included in the report is an accurate record.
- It accommodates future planning for products, processes, inputs and financial investment to initiate mitigative measures for pollution control.
- It allows senior manager to feel secure that all the environmental aspect of their business are being professionally managed and the possibility of environmental incidents is reduced to the minimum.

Environmental Auditor

Environmental audit should be objective and the environmental auditor should be free from all sort of political and management pressure. Many big companies appoint the staff of audit team from different department of the company to make judicious assessment and checking & the environmental quality. But the line of distinct responsibility for audit cannot be expected under this process.

Some companies follow to engage external consultant with internal audit team to have an accurate environmental audit. In every case, impartiality and competency of the auditor are pivotal.

Environmental Accounts and Audit in India

Government of India discloses the economic performance of the nation, national economic growth and the economic counter part of social welfare in Annual National Accounting. Besides that, the government provides information about expenditure on pollution control, brief note action taken against polluters by Central Pollution Control Board, regulation of rules laid down for environmental safety and social security etc. The guidelines for environmental protection are also published in this report but no separate environmental accounting exists till today.

A very few corporations publish environmental information as per requirements envisaged in instruction issued by the Ministry of Environment and Forests. Generally, information provided by them is as flows :

- What type of devices installed for pollution control
- Steps taken for energy conservation.

- Steps taken for raw material conservation.
- Steps taken for waste water and production process waste.
- Steps taken for improvement of quality of product and services, process of production, etc.

The concept of environmental audit is also recent one for trade and industry in India. Efforts were made to see the practicability of expediting environmental audit programmes, before it could be mandatory. This process finally resulted in the issuing of a gazette notification on 13th March, 1992 through which submission of environmental audit report has been made mandatory. The industries are now required to submit their environmental audit report to the concerned state pollution control board on or before 15th day of May, every year.

Limitation of Environmental Accounts and Audit

For environmental accounts and audit, no universally accepted system has developed. Due to un-organized endeavour on the part of corporate houses, environmental accounts and audit are not free from serious limitation.

- There is no standard method for environmental accounts and audit.
- Comparison between two corporation or countries on the basis of environmental audit and account is not possible.
- Information for environmental accounts are not readily available. Many a times, it is found very difficult to quantify environmental cost and benefits.
- Many big corporations do not adequately track to the use of energy and materials or the cost of inefficient materials used, waste management and related issues. They therefore, significantly underestimate the cost of poor environmental performance of their organization.
- Many a times, the internal environmental cost is revealed in environmental accounts and audit. Social cost totally ignored by many.
- It is not easy to draw conclusion from environmental accounts and audit.
- Environmental accounts cannot work independently. It can be integrated with national accounting at national level and with financial accounting at corporate level.
- The user of information contained in environmental accounting needs adequate knowledge about the process of environmental accounting.

Suggestive Measures

- To promote environment audit and accounts, existing various Acts related to environment should be clearly studied.

- The various laws related to environment should be properly analyzed.
- Short term and long-term environmental budgets are required to prepare for both capital and revenue nature.
- Causes of various type of pollution should be listed out by every business firm and show what type of action has been taken for its control.
- A separate statement should be prepared showing investment in various equipments of pollution control along with its benefits to the sustainability of environment.
- Statement of revenue expenditure for pollution control as well as value added to environment must be made.
- EAA should be part of management accounting and managerial practices of the firm/project.
- Environmental responsibility centre should be developed to detect defaulter manager.
- An organized collective effort is required to promote the use of Environmental Accounts and Audit.

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DEIXIS IN TANI LANGUAGES

P. T. Abraham

Abstract

The structure of deixis in Tani languages/dialects has certain salient characteristics. The present paper is an attempt to analyze the pronominal system and the expressions of demonstrative relations in those languages/dialects. The syntactic role played by the deictic words as determiner also is examined.

Tani languages spoken in Arunachal Pradesh, which is grouped as North Assam group of languages in earlier studies, is an important sub-group of Tibeto- Burman stock of languages(Grierson, 1966 : 5). Adi, Apatani, Galo, Hill Miri, Nyishi and Tagin are the major speech forms that belong to this sub – group. The present paper analyses the linguistic coding of deixis in Tani languages/dialects, which is one of the salient characteristics of those languages/dialects.

Deixis means the location and identification of persons, objects, events, processes and activities being talked about or referred to, in relation to the temporal context created and sustained by the action of utterance and the participation in it, typically of a single speaker and at least one addressee (Lyons, 1968). Deictic elements are coded in diversified ways in different languages to express demonstrative relations of the speaker and the addressee in the contest of utterance. For instance, in English, those are manifested by personal relations such as *I, you, he/she/it*, etc.; demonstrative pronouns such as *this, that*, etc. and adverbs of place such as *here, there*, etc. and adverbs of time such as *now, then, today*, and so on. A description of adverbs of time in Tani languages is given in Abraham (2004) and hence it is not included in the purview of this study.

In Tani languages/dialects, personal relations are distinguished for three persons, namely; first, second and third persons. The first person is the one who speaks at the

time of utterance and second person is the one who hears at the time of utterance. The third person is a non-participant. A three way distinction, namely; singular, dual and plural (more than two), is maintained in number in the pronominal system of those languages/dialects. The pronouns in those languages/dialects are listed in the tables 1, 2 and 3 given below:

Table 1 : First Person Pronouns

	Singular	Dual	More than two
Adi	ngo	ngonyi	ngolu
Apatani	ngo	nginyi	ngunu
Galo	ngo	ngunyi	ngulu
			ngunu
Hill Miri	ngo	ngunyi	ngulu
Nyishi	ngo	ngunyi	ngule
			ngulu
			ngul
			ngunu
Tagin	ngo	ngunyi	ngunu

Table 2 : Second Person Pronouns

	Singular	Dual	More than two
Adi	no	nonyi	nolu
Apatani	no	ntnyi	nunu
Galo	no	nunyi	nulu
			nunu
Hill Miri	no	nunyi	nulu
Nyishi	no	nunyi	nule/nul
			nunu
			nunu
Tagin	no	nunyi	nunu

Table 3 : Third Person Pronouns

	Singular	Dual	More than two
Adi	bt	bunyi	bulu
Apatani	mo	monyi	molu
Galo	bi	bunyi	bulu
	mi	munyi	mulu
Hill Miri	bi	bunyi	bulu
Nyishi	mi	munyi	mulu

Contd.

Table 3 : Third Person Pronouns

	<i>mí</i>	<i>munye</i>	<i>mule</i>
	<i>bí</i>	<i>bunyi</i>	<i>bulu</i>
Tagin	<i>bi</i>	<i>bunye</i>	<i>bule</i>
		<i>binyi</i>	<i>binu</i>

In addition to the third person pronouns, there are a set of referring expressions in those languages/dialects. The referring expressions in Adi, Galo, Hill Miri, Nyishi and Tagin languages/dialects distinguish three different positions on a continuum both on the horizontal distance and vertical distance. The positions on horizontal and vertical distance are as follows :

- what is near to the speaker;
- what is on the same plane and an intermediate distance from the speaker;
- what is on the same plane and far from the speaker.
- what is above the plane of the speaker
- what is below the plane of the speaker

Further two more positions on the basis of medial and distal locations are also distinguished on the vertical plane as defined below:

- what is above the plane of the speaker and far from him/her
- what is below the plane of the speaker and far from him/her

The structure of the deictic system in Tani languages/dialects is schematically shown in diagram -1 given below:

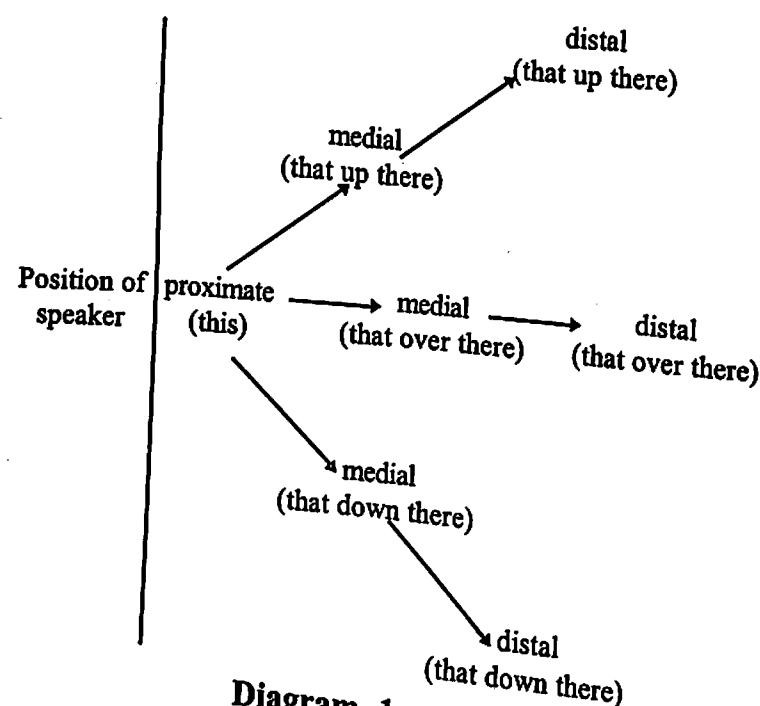


Diagram -1

The set of referring expressions in those languages/dialects are given in tables 5, 6 and 7 below:

Table 5 : Horizontal Deictic Words

	Proximate (This)	Medial (That over there)	Distal (That over there)
Adi	<i>si</i>	<i>de</i>	<i>dé</i>
Apatani	<i>si</i>	<i>insi</i>	<i>intosi</i>
Galo	<i>si</i>	<i>aə</i>	<i>aé</i>
Hill Miri	<i>si</i>	<i>alo</i>	<i>aló</i>
Nyishi	<i>si</i>	<i>alo</i>	<i>aló</i>
Tagin	<i>si</i>	<i>ə</i>	<i>é</i>

Table 6 : Vertical Deictic Words (Above the plane of the Speaker)

	Proximate (This)	Medial (That above there)	Distal (That above there)
Adi	<i>si</i>	<i>tí</i>	<i>tí</i>
Apatani	<i>si</i>	<i>ayodaka</i>	<i>ayódaka</i>
Galo	<i>si</i>	<i>tə</i>	<i>té</i>
Hill Miri	<i>si</i>	<i>te</i>	<i>té</i>
Nyishi	<i>si</i>	<i>te</i>	<i>té</i>
Tagin	<i>si</i>	<i>tə</i>	<i>té</i>

Table 7 : Vertical Deictic Words (Below the plane of the Speaker)

	Proximate (This)	Medial (That below there)	Distal (That below there)
Adi	<i>si</i>	<i>be</i>	<i>bé</i>
Apatani	<i>si</i>	<i>akangdaka</i>	<i>akángdaka</i>
Galo	<i>si</i>	<i>bə</i>	<i>bé</i>
Hill Miri	<i>si</i>	<i>be</i>	<i>bé</i>
Nyishi	<i>si</i>	<i>be</i>	<i>bé</i>
Tagin	<i>si</i>	<i>bə</i>	<i>bé</i>

Apatani, though closely related to other languages/dialects of Tani sub-group, maintains certain differences in the structure of its deictic system. It does not have specific referring expressions to distinguish positions on vertical distance as found in Adi, Galo, Hill Miri, Nyishi and Tagin languages/dialects. Instead, as shown in the tables 5, 6 and 7, derived expressions *insi* 'medial-that over there' *intosi* 'distal-that over there' *ayodaka* 'medial-that above there' *ayódaka* 'distal-that above there' are used in Apatani to refer to such positions.

The use of referring expressions in Tani languages/dialects is illustrated below :

Adi	<i>si ai dung.</i>	'This is good.'
	<i>ə ai dung.</i>	'That over there is good.'
	<i>tɪ ai dung.</i>	'That up there is good.'
	<i>bɪ ai dung.</i>	'That down there is good.'
Apatani		
Galo	<i>si aya do.</i>	'This is good.'
	<i>insi aya do'</i>	'That over there is good.'
Hill Miri	<i>sɪgɪ al nago.</i>	'This is good.'
	<i>i ə al nago.</i>	'That up there is good.'
Nyishi	<i>si al do/pa.</i>	'This is good.'
	<i>bə al ə pa/do.</i>	'That down there is good.'
Tagin	<i>si al do/pa.</i>	'This is good.'
	<i>alo al do/pa.</i>	'That over there is good.'
	<i>si alə pa.</i>	'This is good.'
	<i>bə alə pa.</i>	'That down there is good.'

It is interesting to note that adverb of places in Tani languages/dialects are formed by adding the locative marker - *o* to the deictic words given in tables 5, 6 and 7 above. Due to the morphophonemic changes, the locative marker is fused together with the deictic words resulting in the derivation of a set of lexical items as adverbs. The adverbs of places in these languages/dialects are listed in the tables 8, 9 and 10 given in below:

Table 8 : Adverbs of Place- Horizontal

	Proximate	Medial	Distal
Adi	<i>so</i>	<i>delo</i>	<i>deló</i>
Apatani	<i>so</i>	<i>inso</i>	<i>intoso</i>
Galo	<i>so</i>	<i>alo</i>	<i>aló</i>
Hill Miri	<i>so</i>	<i>alo</i>	<i>aló</i>
Nyishi	<i>so</i>	<i>alo</i>	<i>aló</i>
Tagin	<i>so</i>	<i>əlo</i>	<i>əló</i>

Table 9 : Adverbs of Place-Vertical above the plane of the Speaker

	Proximate	Medial	Distal
Adi	<i>so</i>	<i>təlo</i>	<i>télo</i>
Apatani	<i>so</i>	<i>ayo</i>	
Galo	<i>so</i>	<i>təlo</i>	<i>télo</i>
Hill Miri	<i>so</i>	<i>tolo/telo</i>	<i>tólo/télo</i>
Nyishi	<i>so</i>	<i>tolo/telo</i>	<i>tólo/télo</i>
Tagin	<i>so</i>	<i>təlo</i>	<i>télo</i>

Table 10 : Adverbs of Place -Vertical below plane of the Speaker

	Proximate	Medial	Distal
Adi	<i>so</i>	<i>bəlo</i>	<i>bélo</i>
Apatani	<i>so</i>	<i>akang</i>	
Galo	<i>so</i>	<i>bəlo</i>	<i>bélo</i>
Hill Miri	<i>so</i>	<i>bolo/belo</i>	<i>bólo/bélo</i>
Nyishi	<i>so</i>	<i>bolo/belo</i>	<i>bólo/bélo</i>
Tagin	<i>so</i>	<i>bəlo</i>	<i>bélo</i>

Deictic Noun Phrase

A characteristic feature found in the syntactic structure of Tani languages/dialects is that nouns in those languages/dialects are marked for deixis and those syntactic strategy is comparable to definiteness that is marked in English. This is accomplished through the deictic words that follow the head nouns in noun phrases. In other words, the deictic words, that follow the nouns in those languages/dialects, play a syntactic role similar to that of articles in English. It may be noted here that the articles and demonstratives are categorized as belonging to determiner in English. As a consequence of the syntactic strategy, the head noun being enclosed between two almost identical deictic words characterizes noun phrases in those languages/dialects. Certain variations are found in their form when they are used as determiner. Examples given below illustrate the type of noun phrases consisting of deictic words:

Adi.

si iki si anti na ko.
si anyi si ai dung.
si takam si ai dung.

'This dog is small.'
 'These two are good.'
 'All these two are good.'

Apatani

sika aki si ji do.
inka anyi hɪ aya do.
ayo daka aki hɪ aya do.

'This dog is black.'
 'Those two are good.'
 'That dog above there is good.'

Galo

<i>sigi iki sig do'nya nago.</i>	'This dog is small.'
<i>sigi anyi sig al nago.</i>	'These two are good.'
<i>sigi nyi anyi sig al nago.</i>	'These two men are good.'
<i>a ə iki ə yaka nago.</i>	'That (medial-horizontal) dog is black.'
<i>t ə iki t ə yaka nago.</i>	'That (medial-vertical) dog above there is black.'
<i>bə iki bə yaka nago.</i>	'That (medial-vertical) dog below there is black.'
<i>bə buppi bə kopak.</i>	'All those below there are plantains.'

Nyishi

<i>so iki si kayabo do.</i>	'This dog is black'
<i>ho iki e kagudo.</i>	'That dog is barking.'
<i>so anyi si ale do.</i>	'These two are good.'
<i>tolo mīl eng tétakare.</i>	'Those (distal-vertical) up there are stars.'

Tagin

<i>si iki si al pa.</i>	'This dog is good.'
<i>si ami si keyapa.</i>	'This cat is black.'

The deictic word *si* is used as determiner across all these languages/dialects to mark proximity. However in Galo *sig/hig* is used instead of *si*. Similarly *e/ə* is used as determiner across all these languages/dialects to mark non-proximity. In Apatani non-proximity is marked by *hi* and in Galo by *a ə*. The deictic words *tī*, *te* and *tə* are used as determiner respectively in Adi, Nyishi and Galo/Hillmiri/Tagin to mark a position above the plane with reference to the position of the speaker. Also *bī*, *be* and *b ə* are used respectively in Adi, Nyishi and Galo/Hillmiri/Tagin to denote a position below the plane with reference to the position of the speaker. The differences noticed can be deemed as phonological variations of the one and the same term. A detailed analysis will bring to light the nature of these phonological variations.

When the numeral adjective, that follows the noun, is present in a noun phrase, the deictic word follows the adjective as illustrated below :

Adi	<i>si iki anyi si ai dung.</i>	'These two dogs are good.'
Apatani	<i>sika myu anyi si aya do.</i>	'These two men are good.'
Galo	<i>higi nyi anyi hig al nago.</i>	'These two men are good.'
Nyishi	<i>so nam namyi si al pa/do.</i>	'These two houses are good.'

Another characteristic found in the use of determiners is that when case markers occur with deictic noun phrases, they are added to the deictic words in the nouns as exemplified below:

Adi

<i>ngo ə esoəm kato.</i>	'I saw that <i>mithun</i> over there.'
<i>ngo tī eso tīm kato.</i>	'I saw that <i>mithun</i> up there.'
<i>ngo bī eso bīm kato.</i>	'I saw that <i>mithun</i> down there.'

Apatani

<i>ngo sika ami si mi labine.</i>	'I brought this cat.'
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Galo

<i>ngo aə eso a ə m kato.</i>	'I saw that <i>mithun</i> over there.'
<i>ngo t ə iki t ə m kato.</i>	'I saw that dog up there.'
<i>ngo bə iki b ə m kato.</i>	'I saw that dog down there.'

Nyishi

<i>ngo alo ikhi em kapana.</i>	'I saw that dog.'
<i>ngo so ikhi s ə m huktumpa.</i>	'I caught this dog.'

Tagin

<i>ngo bolo iki bem kato.</i>	'I saw that dog down there.'
<i>ngo tolo iki tem kato.</i>	'I saw that dog up there.'
<i>ngo ə lo iki ə m kato.</i>	'I saw that dog over there.'

When the case marker is added to the determiners in those languages/dialects, it is fused with the determiners and manifested as a single lexical item. In the illustrations given above, when the accusative marker *-m* (*-mi* in Apatani) is added to the determiners *si/ə/aə; te/t ə/tī; be/bī/bə*, the marker is fused with determiners resulting in the derivation of the terms like *sə m/simi/em/ə m/aə m, tem/tə m/tīm, bem/bīm/bə m*.

The forgoing analysis brings to light the structure of the deixis, i.e., the marking of spatial relations in Tani languages/dialects, which is a characteristic feature of those languages/dialects. An exhaustive analysis will help to gain more insights into the syntactic role of those deictic words.

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TRANSITION IN SOCIO-ECONOMIC LIFE OF THE GALO OF ARUNACHAL PRADESH

Gomo Karbak

Abstract

In response to external forces, villages of Arunachal Pradesh in contemporary India are undergoing changes in quick pace. The state, which was entirely rural, as recorded in 1961 Census, has 17 urban centers as per 2001 Census, in addition to many administrative headquarters at district, sub-division and circle levels. Moreover, one may note the practice of conversion to non-traditional faiths. Evidently, the people and their culture is passing through a transitional phase, considering the rapidity at which new forces like rationalised administration, improved means of communication, education, democratic institutions and procedures entered into the life of tribal people. It would not be too long for many aspects of the diverse culture to disappear or to take a new form altogether.

Introduction

The Galo of Arunachal Pradesh inhabits from Sido valley in the east up to the Subansiri river in the west. To their south is the Lakhimpur district of Assam and on the north-east the Siyom river forms the dividing line between Minyong and the Galo inhabited areas. However, two Galo villages viz. Paya and Kambu are found on the left bank of the Siyom River. To the north, the area extends upto the Bori, Pailibo, Ramo and Tagin areas. In short, the area occupies the whole of the south-western portion of the Siang river basin.

Social Life

Clans

Galo people are divided into several groups and sub-clans as per their place of inhabitation. Each sub-clan consists of a number of families, which may be considered as the smallest unit in their society. From the south to the north, different clans inhabiting in the area,

may be listed as Ruti-yeko, Risi-Rimen, Tai-Mara, Chibo- Lare, Paktu- Lodu, Bogum, Tator-Tani and Donyi- Maro. They are mostly found in the 12 circles of West Siang district viz. Aalo, Basar, Bagra, Darak, Gensi, Kamba, Kaying, Kangku, Liromoba, Likhali, Tirbin and Yomcha. Besides, They are also found in Dumporijo and Baririjo of Upper Subansiri and Nari and Koyu circles of East Siang district.

Table 1: Different clans and sub-clans and their place of inhabitation

Sl. No.	Major Clans	Circle	Sub - clan
1.	Chibo	Basar, Kamba	Basar, Riba, Rina, Riram, Rike, Karbi, Geyi, Karbak, Ering.
2.	Paktu	Aalo	Losi-Lollen, Loyi, Loya, Eshi Memo- Angu, Doji, Bagra, Kamsi, Ngomdir, Rame, Kancho, Etc, Edo, Amo.
3.	Lodu-Lobom	Kamba, Darak	Lodu- Potom, Poyom, Rakshap, Tato, Tali, Pasam, Param, Busi, Lobom- Kato, Nomuk, Karga, Kamgo, Noshi, Pakam, Kamduk.
4.	Karka	Tirbin, Liromoba	Yomcha Yomgam, Nyoni, Gamlin, Gamkak, Gadi, Lombi, Echi.
5.	Kari	Nikte	Rime
6.	Leego	Basar	Bam, Sido-Meyi
7.	Lendo	Tirbin, Gensi	Doke, Nguso, Ngulom, Nyodu
8.	Nyoi	Garu	Jirdo, Karlo, Gamm, Liimu
9.	Kaki-Kado	Koyu, Nari	Kigi, Lingo, Dabi
10.	Ayo	Kamba	Kamki
11.	Ruti-Yeko	Kangku	Giino
12.	Tai	Likhali	Talpodia
13.	Mara	Liromoba	Ginno, Gibo
14.	Donyi-Maró	Daporijo	Ngongo, Ngomle, Royli, Ropuk
15.	Kara	Gensi	Kena, Nyokir, Rallen, Aschi, Ayi

Contd.

Table 1: Different clans and sub-clans and their place of inhabitation

Sl. No.	Major Clans	Circle	Sub - clan
16.	Topo	Dumpurijo	Aane, Aali, Marde, Paksok, Pagmen, Aami, Ete, Nirin, Rio Nalo, Nyoduk, Paza, Yudik
17.	Eschi	Tirbin, Liromaba	Nyoka, Nallo, Bage, Gibo.
18.	Bogum-Paktum	Aalo, Gensi, Likhballi	Lingo, Kambo, Bomnyo, Kamcham, Sora, Bui, Nada, Dini, Dirchi, Miro, Bomjen, Libo, Tachi, Bomdo, Jambo, Pabo.
19.	Karga-Kara	Baririjo, Daporiji	Hai, Riba, Halder, Donyi, Rui, Game, Naji, Rupok, Taji.

In fact, the society is based on the clan organization. The clan or exogamous sect among the society is known as *Ali*. Each clan and sub-clans normally trace their descent from one common ancestor. However, there are some clans that don't have common ancestors, but claim their descent directly from *Abotani*, the common ancestor of the whole tribe. The origin of the sub-clans owes to several factors like growth of population, migration, etc. due to which big clans get split into several co-lateral lines and give rise to sub-clans. For instance, the Paktu clan has many sub-clans which spread in a large area of valleys of the Siyom and the Sipu basins. There are some smaller clans, which have not yet, split-up and therefore, they do not have sub-clans. The clans and the sub-clans of the tribe are thus based on the genealogy. For instance, the three sub-clans viz. the Lollen, Loya, and Loyi of the Paktu clan originated from the three grandsons of *Ato-ancestor* than any object of the nature or to the animal kingdom. The clans are thus, generally not totemically named. (Nyori, 1993 : 204).

The influence of the clan division is felt in the social life of the tribe. In all their clan affairs, every family feels its duty to support the fellow clan members. Alignment of the members of a village is always based on their clans and sub-clans, more particularly when there are some sort of misunderstanding or quarrel between the members of the different clans and sub-clans and partisanship arranges itself according to clan when the disputants belong to different clans. In such a situation the clan spirit prevails over the patriotism.

It is a normal practice among the tribe to ask one another to which clans he or she belongs to. This is usually done to determine one's relation or attitude with other person. Such information is ascertained particularly when someone has to go for marriage proposal. Thus, clans in Galo society significantly regulate matrimonial relations. In other functions

also the clan loyalty brings them together with a feeling of kith and kin.

Besides, the division of tribe into clans and sub-clans, the society has some social divisions of its own. They are divided into the '*Nyiji*' and the '*Nyira*' which is said to have originated from some incidents rather than basing on common ancestors. Thus, Bogum group of the Galo are named as '*Nyiji*' while, other clans of same area are '*Nyiras*'.

Till very recently, the social division of the tribe had been so rigid that members of society were normally not allowed to have matrimonial relations between them. Presently, such restrictions have been relaxed; however, the influence of such division may be still felt in the social life of the tribe.

Religious Belief

The religious beliefs and practices of this tribe are more closely related to its surrounding nature. They believe in the existence of numerous '*Wooyu*' deities (benevolent as well as malevolent spirits). They believe in faith of Donyi-Poloism. Donyi (sun) is considered female whereas Polo (moon) as male. They believe that both Donyi and Polo watch the every action of human being on the earth and energize the variety functionings of the universe. They use to urge that the blessings of their God can be felt in the form of sunshine, wind, rain, etc. Generally they do not offer any special sacrifice to their God and worshipping is not considered as daily religious practice among these people.

In the recent past, a few changes have come in the religious practices among the tribe. In olden days, the people feared all the mysteries of nature such as formation of fogs, occurrence of the storm, flood, some peculiar call of birds and animals, meeting of uncommon birds, snakes and animals. Many a times, their days were spoiled while narrating and listening unpleasant dreams. They found themselves very weak and small before the nature. But now a days, with the advent of modern education, scientific and technical knowledge, they have learnt many secrets of the nature and gradually pushing away many of their beliefs. Taboos and religious restrictions have been relaxed in many cases (Riba, 2003 : 38).

The priests with magical power are rarely seen today. The art of making '*diph*' (ritual images of bamboo and leaves) is gradually being forgotten. Earlier, they used to perform rituals even for minor ailments but now they prefer to consult experts in ethno-medicine and medical practitioners.

Since 1960, many persons of the society have embraced and adopted Christianity as evidenced by many new and old Churches. The saddest part of the conversion is that many of them are completely innocent about the gospel of the Jesus, rather has taken asylum to escape from the expensive rituals, sacrifices and taboos of their own religion. Many of them

are not able to differentiate culture from that of religion. In many cases people are retaining costly traditional items such as *Tadok*, *Ame-bati*, *Jera*, *Nyida-aare* (beads, brass plate, silk clothes and many other marriage gifts) while throwing away *Hobo-Re'u* (Mithun skulls), horn and teeth of animal, etc., which were collected by their forefathers (Riba, 2003 : 39).

Festival

Festivals are the mirrors of people's culture and most of them are closely connected with their occupation. Their dominant rituals are, therefore, mostly linked to agriculture, thanking God for a bumper crop or praying for a golden harvest. Animal sacrifices in the festivals are most common.

These people worship sun and moon as god and their religious rituals largely coincide with agriculture. The major festival observed by the Galo tribe is Mopin which is observed on 5th of April in every year.

Marriage System

Marriage is an institution that has evolved since time immemorial. It has been prevailing in the society since the origin of the community. It is difficult to trace the sharp point of time when the marriage as a system had actually started. 'Origin is always obscure' (Maciver, 1995, : 25).

The society follows more elaborate system of marriage in which huge quantity of *Opo* (local beer), *Adin* (meat), *Ngoyi* or *Mene* (fish) is required. Most of their marriages are arranged one in nature. The selection of the bride is sometimes influenced by the mother of the bridegroom, because she prefers to bring a daughter-in-law from her parent's clan or village and thereby she tries to maintain and strengthen bond of relationship.

The negotiated marriage system is known as *Nyida-tanam*. Once a boy and his parents have decided to establish relationship with a particular girl, the first act is to send a negotiator (later on he becomes the middleman known as *Lampo* or *Gindo*) to the house of that girl. In some areas the divination of eggs and chicken liver is also done. If the *Lampo* finds that the parents of the girl is favourable to the proposal, after a few days the boy with his father and a few relatives visit the girl's parents with *Adin* (meat) and *Opo*. The boy's party places the proposal indirectly to the girl's parents. If they like the proposal, they would accept the meat and *Opo*. Before the boy's party returns, the matter is settled; the agreement is sealed with a joint feast. By this time, the quantity of items to be exchanged is also fixed. Then the father of the groom is given an old valuable dish or bowl (*Barke* as *Yabur-Ame*) and the groom is given gifts such as *Dumjen* of beads. This engagement is known as *Nyida* or *Nyame-takanam* or *Yoksi-Talo Tinam*.

This is followed by a period of occasional presents of meat and local beer by the groom to the parents-in-law through the *Lampo*. At the same time, the exchange of items get started. The mode of exchange may differ from individual to individual. The rich parents may pay the entire items at one time. But the poor parents may pay in a number of installments. Thus, the boy and the girl are considered engaged but they should not meet till the actual nuptial (*Agam-Layap*) is performed which is compulsory to recognize the girl as daughter-in-law. During this period, in some areas, the mother of the girl would visit the house of the boy to have a first hand information, which is called as *Peba-Kasa* (Karbak, 2004). The parents of the boy also soon after return the visit to fix the date or other particulars of marriage ceremony (*nyame-Ingenam*). By that time *Nyame-Murnam* (a gift as token is given to the bride) function is also performed. After this, on fixed date, the girl comes to the boy's house led by her parents and other villagers, which is called as *Nyida-Ingenam*. At that night the girl will be recognized as daughter-in-law by killing one cock or a hen with ritual performance by the priest.

Monogamy and polygamy both are common in the society but polygamy is more popular among the rich people. It exists for various reasons, economic, death of brother, love affairs, and desires for a male child and the barrenness of the first wife. In this system, the eldest wife has a position superior to their co-wives and it is she who holds the reign of the family affairs. For subsequent marriages, the opinion of the first wife is always sought and after the marriage all wives live together under the same roof.

Dowry system does not exist in any form in the society. But what exist is widely mistaken as bride price. The groom or his parents send the items that usually consist of cow, mithun and local beer etc. and in return the bride parents send traditional items of high traditional value. The items therefore, can't be considered as bride price; because this is not only the items given to the girl's parents and these items don't suffer from the stigma of exchange between the items and the girl (Behera, 2003 : 3). Girl's parents reciprocate these items in the later stage in terms of traditional items.

Songs and Dances

The tribals are lively people who enhance their liveliness with their own songs and dances. While working in the field, cooking, carrying loads etc. one would hear melancholy murmuring from the lips of the people. In Galo society folk songs are called *Nitom*. Some of the famous *Nitoms* are *Ja jin a ja*, *Aabi kari oi gam*, *Bechu aji ja ngo*, etc. The folk songs are related to their history, mythology and the description of victory, joys and sorrows of their great forefathers, *Abotani*; about the sweet memories of their married off daughters to distant villages; relatives and friends who are no more on this earth, the calls of birds, movements of animals, new leafing and flowering of different trees are used to personify the different qualities of human being. Terms and songs are the words, which signify various moral and traditional values of the past.

There are two types of dances, the religious dances and Ponu. The religious dances are *Popir nunam*, *Nyida nunam*, *Nyida parik nam*, *Nyoho honam*, *Pajuk nam*, *Nyoga nunam*, *Nyigre honam*, etc. *Ponu* is a recent phenomenon, which Galos might have derived from the neighbouring Minyong tribe.

Undergoing Changes

The tune of folk songs have not been affected much by the modern ones. The modern songs in the society started in early the 1960s. Singers like Sri Duri Taipodia of Likhali and Sri Tumi Bagra of Aalo started modern songs (Riba, 2003 : 55).

At present, in every village there are a number of cultural groups of different ages. Earlier single dance was not known to them, but today, even the latest form of dances are also seen in the most interior village. On occasion like marriage and visit of VIPs to the village, different groups present varieties of songs and dances. Even the ladies of fifty years and above present their items to the best of their ability.

Their traditional songs are broadcasted from All India Radio and dances are telecasted through Doordarshan. Cassettes on modern Galo songs are also available in the market. Even few feature film like, '*Ane Ge Nyode*', has also been produced. There is a department of songs and Drama at Aalo, which aims at to promote such social and cultural activities.

Traditional Village Council

The traditional village council of the Galo has been very strong and the villages often acted like sovereign bodies deciding all their internal social matters. Basically, the village council performs three types of functions viz. judicial, administrative and developmental activities. The functions of the village councils of all tribes of Arunachal Pradesh are more or less the same. However, functions of the village councils of some tribes are different from the others (Modi, 2002 : 41). The character and social policy of the tribes were different and this was responsible for variation in the role and function from tribe to tribe. Hence, chieftaincy system are found among Noctes, Wanchos, Tangsa, Singpho and Khamtis and the theocratic types of village council are noticed among almost all the Buddhist tribes such as Monpas and Sherdukpen, while the democratic ones are found among Adi, Galo, Apatani, Hill Miri, Monpa, etc.

The village council of the community is called as *Keba*. The *Keba* as an institution has evolved since time immemorial. But there is no historical evidence as to when and what point of time in the history it came into existence. The village council of the Galo is of hierarchal form. In the apex *Bogum-Boka Keba*, which is organized at district level either to settle larger disputes at inter-tribe or clan-wise level. It may be for developmental activity of the area also. *Bane Keba* is at more than one village level. It may be to discuss certain

developmental activities at larger level or any disputes which could not be solved at *Dolu Keba* (village level) are brought to here. At the, *Dolu Keba*, which is confined to village level only.

Leadership under Keba

The salient feature, which makes the *Keba* a democratic institution, is the process of its leadership selection. The *Gamship* is not a hereditary institution, though the son of a *Gam* stands a better chance of becoming a *Gam*. A consensus selection of man as a *Gam* depends on the worth of the man himself. To get oneself selected, one should be a *Keba* expert. The *Keba* expert is one who is well versed in the tribe's mythology, customary laws and traditional history of the tribe. Another term used to *Keba Abo* in the past is *Nyikok*, a man who can speak in dominating tone like the leader cock in the herds of fowls. Such a man is the consensus *Gam*.

Decision Making Process under Keba

The decision in the *Keba* is made by member consensus. *Keba* formulates the plans and policies according to public opinion. Thus, it is a form of self-government based on people's participation, free debate, consultation and consensus. The decision of the *Keba* is never based on majority votes in the cases where there is scope for injustice meted out on to minority.

Status of Women in Keba

Every society accords social status to women members as per its own perspective. The status and role of women in the Galo society is also governed by their own norms and values with respect to interaction within the family and the family roles of men and women. Although women generally do not participate in *Keba*, it is not a social taboo. They are sometimes seen distributing *Opo* or edibles among the deliberating members of the *Keba*. But women do not normally participate in the *Keba* in the capacity of members. Nevertheless, in present day the women have also been assigned *Gamship* those who are *Keba* expert. Besides, an aggrieved woman comes to the *Keba* to voice her grievances or when a woman feels it necessary, she does not hesitate to make her voice and her opinion felt in the *Keba*.

Impact of Panchayati Raj

Introduction of the panchayati Raj system in Arunachal Pradesh as early as 1969 was a great venture towards bringing the people of State in the mainstream of the democratic life in the country. The main objective of the Panchayat Raj in Arunachal Pradesh was for the rural development and to give it a distinct political identity, thereby to develop a new political culture, involving the participation of its people in a truly national life. It was aimed at decentralized form of administration giving greater opportunities to rural folk to study their problems and to

find solution by themselves. But it has been evident that great changes had come in the system of traditional village council after the inception of Panchayati Raj institution. With the introduction of Panchayati Raj system, a new breed of leadership has emerged. These leaders tend to assumed the role of village elders and undermine the age-old institution. Despite the fact that the role of Panchayat bodies is quite different from the role of the village elders, yet there is a tendency among them to meddle village politics. This has created a sense of mutual skepticism distrust and defiance among the villagers. They tend to view every decision of the *Keba* on political lines, which has not only created a rift but also a vertical division in the society otherwise, so homogeneous and cohesive village hierarchy. Besides, the selection of *Gamship* is also not done on the basis of *Keba* expert but on the line of party politics. This is rather a very unwanted, drift towards degeneration of *Keba*.

Role of Women

The women of this tribe occupy an important position in the society. Though within the family many of the works of the men are different from that of the women, there is no segregation, nor any seclusion of women observed. The control of the family rested with the father; however, the position of the mother is not subordinate in the society. She has no small role to play in running the family. Majority of the domestic affairs are in her hands. She looks after children, weaves clothes for the family, and passes the art of weaving into her daughter. She brews *Opo* (local beer) for her husband and friends, feeds pig and poultry. She doles out the daily requirement of grains from the family granary and keeps its key with her, dries paddy and husk it, cooks food, portions it out for the members of her family and guests and feeds their children. She fetches water from the pipes, helps her husband in chopping wood in the jungle for fuels and carries it all the way home, collects leaf vegetables from the jungle, catches fish from the stream (*tasum-kunam*) and cook curries for the family.

Besides, women of the Galo take an important part in the cultivation of agriculture field, such as clearing jungle with male members, sowing the paddy field, transplanting paddy, weeding and harvesting the crops. The elder girl of the family assists their mother in pounding and husking rice, weaving, chopping wood as well as in odd jobs around the house.

Economically, the majority of women are much conscious than the male members. Beginning from the housewife to the young generations they understand the importance and values of money and know how to earn their daily livelihood and they run their entire family affairs. The young generations of today's women of the Galo are engaging in business establishment and other good numbers of shopkeepers. In local market areas, all local items either; edible or meat, vegetables etc. are locally sold by themselves. Though they have suffered financial hardship, they could be able to cope with their entire family members. Some of them are able to send their children in missionary schools and other reputed private institutions of State and region. Simultaneously, they pursue variety of business and understand

the importance of the education of their children. No doubt there are some restrictions on married women in the society, but the position of women is not that worse among the Galo. The women have opportunity to gain ascendancy over their husband by their tact, efficiency and intelligence and to get their decision accepted by all. Even in '*Keba*' there is no restriction for women in making her voice heard and her opinion felt. Women have their own domains where no man may intrude. Such tactful and dutiful women are loved and listened by all members of the community and even recognize her as '*Gam*' (village council). So the inhuman treatments to women are not tolerated in the society. In any marriage ceremony, the position of mother is above the father.

Thus, the women play vital role in the family quietly rendering a great service and indirectly helping in removing poverty, fulfilling her duties and play great role in keeping the family in harmony.

Economic Life

The economic life of people in any particular region normally depends on its climatic condition, topographical features, soil as well as their ingenuity to devise means to improve it. The people adjust themselves to environment and as a result, a particular way of life is evolved. The area in which the Galo inhabit is characterized with hilly and rugged terrain, for which reason they have been struggling with the nature for their survival and out of which emerged their way of life.

The traditional economy of these people was primarily based on food gathering, hunting, fishing and jhum or shifting cultivation and a small amount of trade by barter. Now a day, however, they have also taken-up wet cultivation, horticulture, trade and business, government employment, industries and other professions.

Agriculture is the main stay of the economy of the people. Hunting, fishing, collection of wilds fruits, vegetables, roots, nuts, honey, etc. always substitute their agricultural products. In olden days *Modi-Rike* or *Tumpe-Rike* (jhum field), was the only known form of agriculture. But today, all the suitable land of the inhabited parts has been brought either into Wet Rice Cultivation (WRC) or Terraced Rice Cultivation (TRC). Almost all the villages are having traces of the permanent type of expanse and proportion to the reported area is meagre. They call the permanent type of cultivation as *Isi-Rike*, which means wet field. On accessible and gentle slopes one may come accros many scattered fruit gardens.

Till today, the people of this region greatly depend on jhuming. Perhaps, it is the only possible occupation of the tribal in such topographic set-up. In developed areas, physical

constraints are considered no more a hurdle if the social amenities are adequately available. In these areas, besides, topographic limitations, social amenities are also not favorable. It is devoid of good network of transport and communication, credit and financial institutions and market facilities. On paper, almost all the villages have the provision of inter village roads, but many of them are not even fit to be called as foot track. Some of those are left either incomplete or not properly maintained.

Lured by prospects of fruit garden, many farmers have converted their jhum land into fruit gardens of pineapple, orange, pears, bananas, etc. Many tea gardens have also been opened but with meagre workers employed. As a consequence, gardens remain like barren land. It is due to the fact that the authority concern is not taking initiative steps to provide marketing facilities. The farmers are not able to sell their products due to lack of better and cheap means of transport and marketing facilities.

Infrastructure and Social Amenities

Drinking Water Facilities

Till independence (1947) people had to fetch water for domestic consumption from spring and streams. Common water collection point called *Kombo* was brought to village by joining split bamboos. Now a days, Rural Works Department is providing drinking water facilities to the villages under various government sponsored schemes. As a result most of the villages are covered under water supply facility, while some remote villages are still not provided with drinking water facility. Though the drinking water facilities have been installed in many villages but maintenance and repair or replacement of the damaged pipe are seldom done by concerned staff. Thus, in many villages despite the provision of potable water, people still continue to collect water from the natural resources.

Medical Facility

Despite progress made in development of medical facilities, its acute dearth still persists in the area. It is to this fact, traditional system of curing diseases through rituals and sacrifices still continues. All the villages have the provision of one medic center with essential medicines for treatment of minor ailments. The circle headquarters are provided with health sub-centres, dispensary or health units along with at least one medical officer. In addition to these, there are five Community Health Centres located at Likhabali, Bagra, Mechuka, Rungong and Yomcha and nine Primary Health Centres viz. two centres each in Bagra and Tirbin and one each in Liromoba, Darak, Kaying, Payum and Gensi. One well-equipped District Hospital is located at Aalo. All these health centres are facing problems of insufficiency of medicine and related medical equipments. Very often, even for minor illness, patients are referred either to Assam Medical College Dibrugarh or R.K. Mission Hospital, Itanagar. Thus, the people of this district are facing a lot of difficulties for treatment of minor diseases.

Electricity

Although the area is endowed with high potentiality of perennial water, it could hardly be harnessed to generate electricity. In many villages electric post have been erected for many years with scant availability of power supply. In the district, three micro-hydel projects are functioning at Ichi, Pagi and Kombo while two more are under construction at Sessi Likar of Kamba circle, Ligo of Liromoba circle. Solar power units have been installed in some of the villages such as Gensi and Piri villages of Basar and Tirbin circles, respectively. Besides, one Arunachal Pradesh Energy Development Agency is also functioning at Basar and 38 numbers of bio-gas plant, 20 numbers of solar lanterns, 20 SPV domestic lighting systems and 2 solar distillation plants have been installed during the year 2002 (Statistical handbook, 2002). Despite, all these there is acute shortest of electricity in the area and people face difficulties in daily chores of life including students. Execution and installment of more micro-hydel projects could make available plenty of water that may be used for terrace cultivation. While carrying out such projects utmost care has to be taken to control soil erosion and landslides.

Credit Facilities

The Department of Rural Works renders finance as well as equipments through banks and credit facilities for agricultural development specially to develop new wet field, means of irrigation, flood control measures, etc. The department of agriculture and horticulture, through its extension wing use to provide high yielding varieties of seeds, fertilizers and insecticides, fencing wires, tools and demonstration. The cooperative society like LAMPS (Large Sized Agriculture Multi-Purpose Cooperative) extends variety facilities such as long and short-term loans to needy farmers in form of financial help, better seeds, agricultural equipments etc. Besides, there are 16 branches of Cooperative Apex Bank and 29 branches of Rural Bank that arrange credit facilities to farmers with minimum rates of interest. As there are 15 branches of State Bank of India, which provide credit for variety works and loan for domestic purposes. In addition to these, there are 283 fair price shops from where needy rural people used to get the rice and essential items through Ration Cards issued to them (Statistical handbook, 2002). Although the Department of Rural Work is trying hard to improve the living condition of the poor people, facilities provided by the department do not reach to the interior villages.

Conclusion

The study of some aspects of the socio-economic life of the Galo of West Siang district reveals that the people of area lead a life of hardship and difficulties. A few developmental works have been taken up during post independence period (1947). After the Chinese Aggression (1962) some important physical infrastructure and developmental activities started to take place. Presently, there are two urban settlements i.e. Aalo and Basar and six sub-urban settlements namely, Likabali, Basar, Mechuka, Yomcha, Rungong and Liromoba. These places are provided with the basic infrastructure for modern man. Such facilities are gradually coming up in circle headquarters like Tirbin, Liromoba, Dari, Gensi, Yomcha, Darak, Mechuka,

Kamba, Kaying and Rumgong. These facilities are gradually making way into interior and remotely located villages. Advent of transport and communication, increase in literacy and education, non-primary occupations, have played significant role in diffusion of innovations and assimilation of modern ideas even in the far-flung areas. Radio, tape recorder, watches, photographs, film poster, musical instruments, etc. have reached into the entire study area. Villages provided with electricity have access to programmed telecast from Doordarshan, cable Television. These have encouraged many persons to open and run video halls as it have become quite remunerative.

The villages, which are connected by roads, enjoy better transportation than the rests. Likhabali is connected with Basar and Aalo, Basar with Tirbin, Aalo with Tato via Kaying, Aalo with Rumgong and Kombo by metalled roads and Aalo to Mechukha by Airways. Tato to Mechuka, Monigong to Tadadege, Mechuka to Tongkarla, Tangkarla to Yarchung are the places that are connected by jeepable roads. In Darak, Kamba, Yomcha, Lirmoba, Kaying, Tirbin, Gensi, Mechuka, Monigong and Bagra circles more than half of the villages are still not connected by village link road. Besides, there are many villages which are approved by the Government for village link road on official documents are not yet completed and hence not fit even for foot track. Aalo to Likhabali, Aalo to Tato and Aalo to Rumgong roads are adversely affected by landslides and hinder communication especially from July to September. Thus, due to lack of adequate and cheap means of transportation, Galo people are facing variety of problems that restrain speedy and rapid transition in their socio-economic life.

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ETHNOZOOLOGY OF THE NYISHI AND ITS IMPACT ON BIODIVERSITY IN ARUNACHAL PRADESH : INDIA

G. S. Solanki*, Pavitra Chutia and O. P. Singh

Abstract

The paper deals with the ethnozoology of the Nyishi of Arunachal Pradesh. There are 18 animal species including birds, reptiles, and the mammals, utilized by the Nyishi as protein supplement in their diet, in preparation of traditional medicine and during different socio-cultural as well as magical religious occasions. The use values of all the animal categories were calculated. The highest total use value found in tiger was (0.37), followed by Himalayan black bear (0.32). Tiger and bear are found to have equal use value (0.20) in therapeutic activities of Nyishi tribe. Rate of disappearance in mammals was found to be highest, (426 animals per year). The ungulates and non-human primates are the highly affected categories among mammals occurring in the area. These cultural practices are linked to loss of biodiversity in the region.

Key words: Ethnozoology, The Nyishi, use value, use pattern, biodiversity.

Introduction

Ethnozoology is a discipline that deals with the animals and their uses through the indigenous system. Martin (1995) defines it as 'the local knowledge and use of animals'. The human activities out-strip all other in the complexity due to its variety of socio-cultural and religious behaviours in different human populations across the world (Gadgil, 1987). The relationship between the animals and man is known at the very outset of human civilization of the world. Indigenous and traditional people have unique cultures that are closely integrated with local natural environment. Indigenous communities know the diversity and ecology of the species that exist in their ecosystem. This knowledge

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varies significantly with gender, age, and status within the communities. Arunachal Pradesh is geographically the largest state that has large ethnic diversity, having 26 major tribes and 112 sub-tribes (Solanki, 2002), in the North-eastern region. The Nyishi is the most populous tribe, the second largest tribal group of Arunachal Pradesh, which constitutes, more than 22% of the tribal population of the state (Census, 1991).

North-eastern region of India is one of the twenty-five biogeographically distinctive "hotspots" of the world, having rich biodiversity and rare and endemic flora and fauna (Myers et al., 2000). Biodiversity has many values, both material and non-material. Material values have both direct uses and ecosystem services. The direct use of biotic resources meets human needs for food, feed, fiber, shelter and medicine. The importance and value of ecosystem services in providing our life support system are increasingly being recognized. Wildlife provides significant amounts of calories for rural communities as well as essential protein and fats (Bennet et al., 2000, and Townsend, 2000) and is used by man for its subsistence in different parts of the world (Bigalke, 1973; Eltringham 1984; Bodmer; 1994; Cullen Jr. et al, 2000; Pattiselanno, 2002, 2003). Asia's wildlife including India is being sold on a massive scale through out the region for food, medicine and pet, and population of many species are declining fast or facing gradual local extinction.

The different ethnic groups in Arunachal Pradesh show diversity in uses of faunal component of natural ecosystem. The faunal use pattern by the indigenous peoples in Arunachal Pradesh is little known and documented. Few primitive studies on ethnozoology of tribes of North-eastern region including Arunachal Pradesh have been done (Borang, 1996; Harit, 2001, 2002; Solanki et al., 2004 a and b; Solanki and Chutia, 2004 and 2005; Chutia and Solanki, 2005). Present study deals with the use of animal and animal products as food item, in therapeutic and in different socio-cultural as well as magical religious activities of the Nyishi and its impact on biodiversity of Arunachal Pradesh.

Materials and Methods

Study on Ethnozoological information and loss of animal categories, and faunal diversity was undertaken in Nyishi dominated areas viz., Papum Pare, East Kameng, Lower Subansiri, Kurung Kumey districts of Arunachal Pradesh. The information about the number of villages inhabited by the Nyishi the approachability and other feasibility in the villages were identified from respective district headquarters. Out of the suitable villages, 10-15% villages were identified and surveyed for this study during 2002-2004. The information collected through the survey was extrapolated for the entire Nyishi community. Out of the identified villages, 80% were purely rural in nature (not much influenced by modern development) and rest 20% was of mixed type, semi-urban as well as urban.

The information about the animal categories and their use for various socio-cultural, magical religious and therapeutic activities by the Nyishi people were collected on through Questionnaire developed for this study and compiled for development of tables. Rate of disappearance of the animal categories per year was also calculated. Data on zootherapeutics were obtained through open-ended interviews carried out with informants, both male and female. These included local healers, herbalists, midwives and elders, farmers and other residents of the area, who were interviewed for :

- Their prior knowledge about remedial practices based on animal products,
- Use of animal products in their healing practices and
- Animals' categories prescribed for and how the medicines were administered.

The information were also collected about species being used in zootherapy, the type of raw materials used, and modes of preparation, celebration and administration of the folk-medicine, as well as the diseases for which the folk medicines are prescribed. Field work was guided by an emic approach because it was aimed to record people's utilitarian knowledge of faunal resources. This kind of approach of ethno-biologists records the native people's knowledge (Posey, 1996). The different animal categories are used for different purposes on different occasion. The use-value of each animal was calculated on modifying the formula given by Phillips and Gentry (1993):

$$UV = (\sum RM \times C)/N$$

Where, UV=type of use value, RM=the total number of raw materials extracted from individual animals, C=the number of times which a particular animal has been cited, and N=the total number informants.

Results

There were 18 animal species including two bird species, two reptiles and fourteen mammalian species which were recorded to be used by the Nyishi for the activities viz., therapeutic, socio-cultural, and religious one in present study. Use values of each animal species in the activities and the total use value (TUV) of the species is mentioned in the table 1. The body parts of different animal species utilized for different purposes by the Nyishi tribe are given in table 2. The larger cats namely *Panthera tigris*, and *P. pardas* and bears are primarily killed for bones to be used as traditional medicine, skin, toes and teeth as ornamental items for decoration; and meat as protein supplements in their food. We found in the study that tiger, leopard, Himalayan black bear, sloth bear, primates, mithun and hornbills are the most variedly used animals. However, the total use value (TUV) of tiger, Himalayan black bear, hornbill and leopard was calculated at 0.37, 0.32, 0.24 and 0.23, respectively which

indicates extensive use of the these animal categories (table 1). Some species with TUV, ranging from 0.20 - 0.22 were found to be important resources for cultural and religious activities. Non-human primates dominate this category of animals. Other species were found to have lower TUV but had its important place in some of the activities mentioned in the table.

Table 1 : Use value and total use value (TUV) of different animals

Sl. No.	Animal species	Medicinal value	Socio-Cultural use value	Religious use value	Total use value
1	Tiger	0.2	0.08	0.09	0.09
2	Leopard	0.9	0.08	0.06	0.06
3	Sloth bear	0.09	0.04	0.04	0.04
4	Himalayan black bear	0.2	0.06	0.06	0.06
5	Caped langur	0.06	0.08	0.06	0.06
6	Assamese macaque	0.06	0.08	0.06	0.06
7	Rhesus macaque	0.06	0.08	—	0.09
8	Barking deer	0.04	0.05	0.06	0.19
9	Mithun	0.07	0.06	0.04	0.24
10	Hornbill	0.1	—	—	0.05
11	Jungle Crow	0.05	—	—	0.12
12	Python	0.08	0.04	—	0.19
13	Porcupine	0.15	0.04	—	0.09
14	Chinese pangolin	0.06	0.03	—	0.09
15	Monitor lizard	0.04	0.05	—	0.10
16	Civet	0.04	0.06	0.09	0.22
17	Lutra	0.06	0.07	0.06	0.11
18	Wild boar	—	0.05	—	—

Source: Based on survey conducted by the investigators.

Table 3 indicates the average loss of animals and animal categories in ethnozoological practices. A total of 426 individual mammals of different categories are lost every year, that makes nearly 86% of total loss of species occurred in the area. Ungulates are most affected groups of mammals that include mithun – a semi-domesticated ungulate species. Among the wild ungulates, deer is the major group that is killed largely, which constitute 51% of total ungulates and 22% of total mammals.

Primates are the next targeted group among mammals; loss for this group is 134 animals / year (27% of total loss). If mithun is not considered totally wild, then primates would acquire top most places in the list of animal categories killed by Nyishi tribe. Carnivores includes the lesser and larger, and insectivores animals are the third largest categories of animals that are killed by this tribal group (table1). Birds and reptiles are exterminated equally i.e.35 animals/

Table 2 : Indigenous Use of Animal Body Parts

Name of the animals	Body Parts				
	Food	Therapeutic	Ailments	Culture	Magical religious
Mithun	Meat	Gall bladder	Malaria, Typhoid and Dysentery	Meat and whole animal	Skull and horn
Tiger and leopard	Meat	Horn	Menstrual irregularity	Teeth and skin	Teeth, skin and hoof
		Penis	Breast pain and lactation		
		Meat and bone	Malaria, Rheumatic pain, pox and wound		
Bear	Meat	Gall bladder	Malaria, typhoid and dysentery	Skin, teeth and claws	Teeth, skin and Claws
		Fat	Rheumatic pain		
		Gall bladder	Malaria, typhoid and dysentery		
Non-human primate	Meat	Meat	Malaria, typhoid and delivery pain	Skin	Skull
		Gall bladder	Malaria, typhoid and dysentery		
Hornbill	Meat	Meat and Fat	Malaria Rheumatic Pain, pox and wound	Beak	Feather
Wild boar	Meat	—	—	Teeth	Teeth
Barking deer	Meat	Meat and testis	Male impotency	—	—

Contd.

Name of the animals	Body Parts				
	Food	Therapeutic	Ailments	Culture	Magical religious
Chinese Pangolin	Meat	Exoskeleton	and growth of children	Skin	—
Porcupine	Meat	Alimentary canal	Wounds	Sting	—
Monitor lizard	Meat	Meat	Abdominal Pain	Skin	—
Civet	Meat	Meat and fat	Body weakness, malaria and typhoid	Skin, taws and nail	—
			Body weakness and abdominal pain		
Python	Meat	Meat and fat	Rheumatic pain	Skin	—

year. Cartridge gun, Snare, bow and arrow and other mechanical traps are the main hunting tools used by the Nyishi to kill the animals recorded in this study. Cartridge gun is the modern tool used by all economically sound members of the tribe. It is more effective and has larger impact on loss of wild faunal resources because it is also lent to others.

Table 3 : Loss of Animals Per Year

Sl. No.	Animal categories	Loss of animal	% of loss
1.	Mammals	426	85.94
	Primate	134	26.9
	Bear	9	1.77
	Carnivores	41	8.6
	Insectivores	66	11.24
	Ungulates	187	37.43
2.	Birds	35	7.0
3.	Reptiles	36	7.0

Source: Based on survey.

Table 4 : Details of Loss of Animals and Method of Trapping/Killing

Sl. No	Animals	Average loss	% of loss	Methods of trapping
1	Tiger	3.0	0.6	Cartridge gun, snare, bow and arrow, mechanical trap
2	Leopard	4.0	0.8	
3	Sloth bear	3.0	0.6	
4	Himalayan black	5.8	1.17	
5	Civet	14.6	3.0	Cartridge gun, snare, bow arrow, mechanical trap
6	Caped langure	10.5	2.1	Gun and mechanical trap
7	Assamese macaque	50	10.0	
8	Rhesus macaque	73.5	14.8	Cartridge gun
9	barking deer	95.5	19.2	Cartridge gun
10	Mithun	65.5	13.1	Dao
11	Wild boar	25.5	5.13	Cartridge gun, snare, bow and arrow, mechanical trap
12	porcupine	35.5	7.14	Trapping by case, suicide rope and mechanical trap
13	Chinese pangolin	20.4	4.1	Trapping by case, suicide rope and mechanical trap
14	Monitor lizard	35.5	7.14	Trapping by case, gun snare and mechanical trap
15	Lutra	20.0	4.0	Cartridge gun
16	Jungle crow	20.0	4.0	Cartridge gun
17	Hornbill	14.5	3.0	Cartridge gun
18	Python	16.5	4.5	Cartridge gun and snare

Source: Based on field survey.

Discussion

Indigenous and traditional people have unique cultures that are closely integrated with local natural environment. These communities have a strong stake in the natural resources around them due to their dependence on varied resources to sustain their livelihood and culture. Their close relationship with the natural environment makes them well informed about the type of resources available, period of their availability, approach routes and other relevant details. The ethnic groups in North-eastern part of India including Arunachal Pradesh have been observing age old traditional customs in which use of wildlife and their products is very common (Pal, 1993; Borang, 1996; Datta, 2002; Solanki et al, 2002; Solanki et al., 2004 a and b). In order to meet some

festivity large scale hunting of animals for food, magical religious and for therapeutic uses is done that leads to depletion of biological diversity of the region. Large-scale killing of animal is subjected to use value of the animal category (table 1). Mammals are intensively killed, as the rate of loss is 86% of the total kill in a year. All the species reportedly killed are the scheduled species as per the Wildlife (Protection) Act, 1972. A study by TRAFFIC (1998) in East Asia indicated that the species and their parts have been illegally traded in and outside the countries, like China, though the driving forces behind the killing vary from region to region (Anon, 1998). Larger carnivores are illegally killed for skin, fur as trading material and bone and claws are used in making traditional Chinese medicine for rheumatic and other body pains (Jackson, 1978). The tiger and leopard are the topmost carnivorous animals, which play major role in ecological balance the natural ecosystem and maintenance of healthy genotype.

The hunting of non-human primates and the utilization pattern of endangered primates for food and medicine have posed serious threats for their survival in many of African and Asian countries as reported by Butynski and Koster (1994), Ammann *et al* (2000), Angelici *et al* (1999), Bailey *et al* (2002), Bennett (2002), Bowen and Pendry (1999), Bowman (2000), and Friedmann, (2003). Ellis (1999) has published a report of commercial trade of chimpanzees and Gorillas in Cameroon. Flecheiso tribe of Amazon regularly uses the smoked meat of various monkeys as primary protein supplements (Scott Wallace, 2003). The primates are very much essential and important in seed ecology, which maintains regeneration of natural fruit plants, thus enrich genetic/generic and ecosystem diversity. The wildlife trade is illegally flourishing in various ways (second to the narcotics trade). It is earnings are estimated at US \$ 20 million annually (Hanfee, 1997). The trade includes everything from small songbirds as pets to reptiles and large fur bearing mammals for skin and their meat to animal parts for medicinal use.

In the Nyishi community most of the folk medicines are administered in the form of liquid/syrup, powder or plasters, and massage oil. Malaria, abdominal pain and rheumatic pain and un-diagnostic fever are the frequent ailments in which preparation from gall bladder and fat are the most commonly used therapy. Usually gall bladder of primates is used in the form of extract and syrup and fat in the form of massage oil for the treatment of strains, bruises, insect bites, boils and rheumatism. Further research is required for conformity of the medicinal value of this traditional therapy, to encourage the use of herbal therapy and make the indigenous people aware about the available plant based therapeutic system. It would prove probably a more ecologically and socially sound development.

Indiscriminate use of animals and their parts as medicine is a world wide concern. The local trade of wild products to be used as medicine becomes a source of income. The therapeutic use of animals is also common in Arunachal Pradesh. Therapeutic use to treat diseases,

decoration and some magical religious aspects associated with their culture are prime patterns of use of these animals (Table 1). The instinct of killing animals, smaller or larger, in the Nyishi is the main cause for getting the faunal components invisible from the forest of their areas. The unjustified policy of issuing fire arms particularly guns, air gun and cartridge gun, no policy on submitting account of cartridges used by the gun owner, use of explosives freely for killing and capturing fishes, poor publicity of conservation education programme and enforcement of laws and act are the cause for large scale disappearance of animals. The animals perform vital roles in the forest as predators, pollinator, and seed disperser disappearing; other species will also go along and make the forest system fragile. The cumulative impact of all the above aspects will lead the reserve forest and community forest towards "empty forest syndrome".

Suggestions

Instead of taking punitive measures against the practitioners of zootherapy or creating policies which force them to abandon their traditional customaries, we would suggest to examine this human-nature interaction within its cultural dimensions. People have been using animals in their culture since time immemorial. Suppression of tradition will not save them from extinction unless possible alternative is proposed. Traditional farming system for the species that are widely used in their socio-cultural and ethnic frame work would be a viable proposition where both traditional and scientific management techniques could be clubbed together.

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'A COAT': FROM ROMANTICISM TO ROMANTICISM

B.C. Tewari

The poem 'A COAT' (Yeats, 1993 : 142) may be construed as a crucial poetic statement declaring a departure or shift from Yeats's earlier position as a romantic in form and theme. The last line of the poem 'For there is more enterprise in walking naked' seems to announce that he will henceforth adopt the stance of a modern realist writing in an unadorned direct language. According to Unterecker, 'A Coat' brings the earlier section to a close.

Yeats created his poetry with great care and love and embroidered it with mythical figures, rich metaphors and expressions inherited from the Romantic movement. He was very proud of it till he came to know that mediocre poets were imitating and stealing his poetic technique in broad day light. The metaphor of coat for poetic creation is very meaningful and symbolizes the delicacy of his subtle art, his secret magnetism, his imaginative mysticism rooted in Celtic tradition and also his creative power "to raise with words the spell of a mysterious atmosphere... to efface the outlines of material objects in a dreamy mistiness and to draw the most aerial and spare images upon this thin grey background, in the style of a Japanese print" (Legouis and Cazamian, 1926: 1285).

All these qualities are also the characteristics of the Romantic tradition. But it does not mean that Yeats by refusing to wear the coat and announcing to 'walk naked' has made a definite departure from Romanticism.

Yeats's 'walking naked' is also romantic and 'enterprising'. The 'nakedness' here stands for originality, purity and freedom from artificial decoration or ornamentation. It also means that the poet will henceforth not adopt artificial external means to write poetry but he will bear heavily upon the innate creative power of his soul.

As Harold Bloom has argued, Blake and Shelley remained potent influences throughout Yeats's career (Hollander, 1968 : 501-520). William Blake exercised great influence on W.B. Yeats, who collaborated with Edwin Ellis in editing the works of Blake. Blake was a poet and painter at the same time. His paintings of naked human bodies such as the painting of Satan with Adam and Eve reveal the power of the naked form. He believed that the secret of creative power was within, in the loosening of one's soul and therefore one must return to one's soul to find out a solution to the process of poetic creating because old poetic techniques become outdated and meaningless

through excessive use. Commenting on the poetry of William Blake, Cazamian writes:

The psychological secret of moral renovation lies in the loosening of the soul. When its efforts to realize art, truth or virtue have become artificial and sterile through their automatic working, the result of a prolonged strain, it finds a new fecundity by renouncing what have proved to be exhausting and fruitless ambitions; by returning through simplicity, to its own deeper powers; by resuming contact with the elementary energy of the subconscious (Hollander, 1968 : 989).

Now we can safely say that the enterprise in walking 'naked', as announced by Yeats can become a symbol of returning to one's natural self. 'Walking naked', in the poem, therefore does not exhibit any departure of Yeats from Romanticism. His poetry, in fact, moved from surface romanticism to a deeper and more natural form of romanticism. Yeats began as a romantic and remained one till the end.

He began as one of the last Romantics and remained one till the end, with all his effort to modify, extend, strain and stretch the tradition, which was his valued, if not implicitly accepted heritage (Rai, 1971 : 2).

'A Coat' also foreshadows Yeats's passage from songs of innocence to songs of experience. A romantic at heart, he, like Blake, moves deeper into the essences of the spirits of the universe.

Again reverting to the metaphor of coat, we can clearly see that the 'Coat' is 'embroidered' or decorated and made beautiful from heel to throat and that the stuff that decorates the coat is made up of mythology. This embroidered coat is definitely the coat of the romantic tradition, which has been made artificial and sterile by foolish imitators. The poet now, therefore, decides to throw off the coat and walk naked. 'Nakedness' here also means that the truly beautiful do not stand in need of any decoration or ornament from outside. This also implies that the poet has grown purer in his heart, attained the real excellence of writing poetry and matured in the art of creating beauty out of the harsh realities of the modern world.

Now the poet realizes that he has reached a stage where external forms of art do not matter and he can pour out his soul through imagination in spontaneous creations of the beautiful and the sublime.

The truly beautiful, like the beautiful objects of nature, do not need any ornamentation or decoration. The truly beautiful women will look beautiful even without wearing ornaments or jewels, Kalidasa, the great Sanskrit poet, describes the beauty of Shakuntala and says that her beauty is beyond comparison even when she is wearing clothes

made of bark. The poet concludes that those who are naturally beautiful do not need any ornamentation. Dushyant declares:

This slim girl is more charming than richly dressed court ladies even in her bark covering. Surely what is there that does not become an ornament to naturally beautiful bodies. (*Abhigyan Shakuntalam*, Act.1, LL : 34)

Thus, the 'enterprise in walking naked' is as romantic as walking in an embroidered coat. The coat stands for exuberant romanticism the poet prepares meticulously out of mythology for himself. It is a long coat, which stretches from heel to throat. The personality of the poet is steeped in the vast beautiful coat of romanticism and he was very proud of it until he found that others too were wearing a similar coat. Only then the poet realizes that the coat or ornamentation has become superfluous.

The external decoration of the true beauty is also a kind of bondage and Yeats resolves to throw off the coat and rid himself of the burden of a hackneyed poetic diction.

Although the metaphor of the coat can not go too far and it has its limits, it suffices to say that by announcing to walk naked might have meant more freedom to compose his sonorous verses, more free play of the imagination and creation of realistic poetry, romanticism.

The poem 'A Coat' does not mark a transition from romanticism to neo-classicism or the ironic mode. The poem clearly establishes that Yeats moved from one dimension of Romanticism to a new dimension of Romanticism, which reflects his maturity and greatness as a romantic poet.

Herold Bloom, in his article on Yeats and the Romantics, says that some critics like R.P. Blackmur and Allen Tate belonging to formalistic new criticism and Eliotian theory are distorting the nature of the poetry of the established Romantics like Yeats and Wallace Stevens through misinterpretation:

The best of our modern poets, in Britain and America alike, were romantics, akin in creative procedure and in theme to a main tradition in English poetry, the line that runs from aspects of Spenser and of Milton, through Blake and Wordsworth, Coleridge, Shelley and Keats on to Tennyson, Browning, Swinburne and William Morris, Yeats and D.H. Lawrence in Great Britain, Wallace Stevens and Hart Crane in this country- are the legitimate inheritors of this Spenserian or romantic line of poets, whose theme is the saving transformation. (Bloom, 1968 : 501)

Thus we see that Yeats is the legitimate inheritor of the great tradition of the romantic line of poets. Some writers, the followers of Eliot, in their classical enthusiasm misrepresent Yeats by saying that his greatness does not lie in the romantic tradition but in curiously called metaphysical tradition which is a wrong notion. Yeats began as a romantic and remained one till the end.

Yeats began as a mock of decadent romantic, and matured into a true one, a genuine inheritor of the fulfilled renown of Blake and of Shelley, the apocalyptic myth-makers among the Romantics. To chronicle the attitudes of Yeats towards Blake and Shelley, and towards Shelley in particular, is to chronicle also the stages by which Yeats found at last his true self as a poet (Bloom, 1968 : 502). R.S. Sharma in his pedagogical exposition of the poem has explained the romantic connotations of the diction of this poem. 'Naked', he observes, is the key word :

It does not necessarily mean without any kind of clothing whatsoever', still the word is quite startling. It conveys a deeper meaning here, which can be inferred (Jha and Bhargawa, 1988 : 212).

'A Coat' was included in 'Responsibilities' published in 1914, which is regarded a turning point in Yeats's poetic career. But that does not mean rejection of his romantic self. It is simply a change of mask. Yeats, throughout his life, remained engaged in his personal exploration of sensuous life, spiritual entities and immortality of art within a cosmic system of occult forces-in short, his mystical quest and adventure, which relate him to Romanticism.

In 'A Coat', Yeats declared his intention to rid himself of the later Victorian embroidery. It must be noted that the coat stands for the style and language of his earlier poetry. It implies rejection of the dress and not the poetic self, which continues to be the same.

As regards the unity and consistency of Yeats's entire oeuvre, the following comment by R.F. Foster is quite relevant:

Towards the end of his life, in a famous late poem, he would declare the need to search back into his own experience and emotions 'where all the ladders start, but the process had taken shape a quarter century before, in this landmark collection of 1914 (Foster, 1997 : 522).

Yeats was deeply attached to the idea of heroism touched with adventure, which is an important element of Romanticism. His pursuit remained unchanged although in his later poetry "the quest was for the maskless, naked 'I'" (Schmidt, 1979 : 56). In his excellent article, comparing

Eliot and Yeats, (The Shaping Spirit, 1957 : 47) A Alvarez concludes: 'Yeats' poetry is the new flowering of a very old tree' (The Shaping Spirit, 1957 : 47). This old tree, it may easily be inferred, includes the Romantic spirit as well as folk tradition and age-old native expression. It is worth noticing at the end that in 'A Prayer for Old Age' composed towards the end of his life, Yeats asserted his final stance with symbols associated with Romanticism. Commenting on this poem Unterecker observes that here Yeats once again "experiments with poetry of direct speech" (Yeats, 1993 : 245). Unterecker, however, feels that it is a Mask (ibid). On the other hand, Anthony Thwaite thinks that is a kind of epitaph. The poem ends :

I pray-for fashions word is out
And prayer comes round again-
That I may seem, though I die old
A foolish, passionate man (ibid.41).

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GIRL'S ACCESS TO SCHOOLING : CONSTRAINTS AND OPTIONS

Meghali Baruah

Introduction

Education has long been identified as one of the most important factors of economic growth. It is both an indicator and an instrument of development. Education increases labour productivity in both urban and rural sectors and economic returns to investment in education are typically high. The human capital theory (Schultz, 1961) stipulates that education is an investment that yields returns for the individual and for the society at large. In fact, the economic benefits of education derive not just from increases in cognitive skill, but to a far greater extent from the increase in non-cognitive abilities as reflected by changes in a person's ideas, perceptions and attitudes (Colclough, 1982). Education increases economic output and raises productivity levels. It is instrumental in reducing poverty. The social return from education is also considerable. Schooling alters perceptions, attitudes and behaviour; it generates awareness and builds personality in such a way as to promote development and welfare of a nation and its people. More over, since educated parents are more likely to send their children to school, the benefits of education are perpetuated from one generation to next.

It has been observed that the greatest returns from education are achieved through the provision of primary education. Indian policy makers have long been aware of the benefits of universal elementary education but the goal of universal elementary education has been an elusive one. Huge disparity exists in the provision of elementary education and it is more acute in rural India.

India is a rural economy. More than 70% of India's population resides in rural areas. A cursory glance at the development rate in rural India reveals a very sad picture. In spite of many developmental programmes created exclusively for the rural population, much is left to be said. Analysis reveals lack of information (on education) as one of the major reasons. Further investigation also shows that wide gender disparity exists even in rural areas of North-East which has hampered the development process. Hence, it becomes necessary to give special emphasis to women education in rural areas.

Importance of Women's (Girls) Education

The returns from women's education are exceptionally high. Women's education is instrumental in reducing fertility and infant and child mortality rates, in improving the nutritional status of children and health care practices. All of these have significant spillover benefits as well. But most importantly women's education is beneficial for women themselves. In this context, the schooling of girls assumes special significance. It is therefore important to catch them young and guide them in the proper direction so that they are better equipped to handle life ahead as a woman.

Educational Status of Women (Girls) in Rural North East

Although women in North East enjoy relatively better position than the rest of India, there are subtle discriminations. A glance at the status of women reveals that there is much to be desired. What has gone wrong even after so many years of planning? One of the reasons may be that no development programme has focused on the autonomy aspect of the women. No development programme will hold meaning if she does not enjoy autonomy. Autonomy is determined by the following components:

- Women's positions within the family and the society.
- Access to resources-economic, material and intellectual.
- Control over their own labour.
- Control over their own bodies.
- Availability of reliable health care facilities.
- Mobility and the ability to move beyond their immediate environment.
- Personal laws, which determine their rights within the family.
- Opportunity to come together as a collective being to realize and assert power.

Thus, there is a need to look at the entire issue of girl education from a fresh perspective and it has to be addressed from the socio-economic set-up in which a girl has to struggle for survival.

Girl's Access to Education

Why is education not accessible to poor girl?

- Because she is poor.
- And because she is a girl.

This brings into focus the factors affecting girl's access to education (both the supply as well as the demand side) and the internal dynamics of the family and collectivity. The pedagogical factors and the institutional factors constitute the supply side whereas the familial factors constitute the demand side. They may be discussed as follows.

Pedagogical Factors

1. Structure, environment and ideology of the school- The structure of schooling are inflexible and the environment and ideology of the school is alien to the girl. There is a mismatch between construction of knowledge in home and in schools.
2. Content of education and level of achievements- There is a close relation between class structure, gender hierarchy and the educational system. By and large, the school syllabi are transmitted through textbooks written by urban educated middle class professionals in a standard language, which is to be understood by all. The reality is that it is alien to those for whom it is created. Besides, the course content is not gender sensitive. Thus, there is a general lack of interest among the girl students toward irrelevant content.
3. Teacher commitment and teaching methods- Irrelevant teaching methods and the general attitude of teacher towards girls reduced girl's entry to schools.

Institutional Factors

1. Availability and costs of schooling-Although schools are available in rural areas, cost of schooling is very high. Since rural people are poor, expenses in education especially for a girl child gets the least priority.
2. Absence of girl schools and women teachers- Although it may be argued that separate school for girls may lead to further segregation, it becomes important at the initial stages of education.
3. Appropriate physical structure-Facilities like safe drinking water, toilets, etc. are important factors for attracting girls to schools, which are almost absent in most of the schools.
4. Child care facilities-Care of siblings is one of the main tasks of young girls and a major factor in limiting their participation in school. Universalizing elementary education is difficult without a good system of pre-school care, which is vital to prepare the child for school and helps to release older girls from taking care of younger siblings. A framework of pre-school facilities exists in the ICDS but there is need for better co-ordination with regular schools and more effective functioning.

More than the supply-related factors, it is the demand-related factors, which determine girl's access to education. The demand side comprises of the familial factors, which are discussed as below:

1. Feminine socialization, Parental attitudes and Role expectations-For the survival and unity, families build on the docile aspects of femininity which is contrary to the ideal goals of learning that stress on certain amount of independence of thought and spirit. A girl, and later a woman, is viewed as a natural care-giver and going to

school is viewed as waste of time more so when the contents of education seems so irrelevant.

2. Child Labour- A major chunk of the girl population are child laborers. In this context, the meaning of child labour needs to be redefined. It is not to be understood as something, which is to be measured in terms of money alone. Most of the girls engage in survival tasks and non-market productive activity. The factors that have been found to influence school enrollment include the number of animals per family and distance to forest and sources of drinking water. In other words, the opportunity cost of sending girls to schools is very high.
3. Access to resources within the home- there is a high rate of drop-out among girls. One of the reasons is that she does not have equal access to resources within the home. Education is a resource and a privilege. Granting the privilege of education is determined by socio-economic status of the individual families as well as governing family ideology. And generally the preference for providing education is more towards boys than girls for obvious reasons.

Agenda for Action

Having discussed the factors hampering girl's access to education, the next step is to set-up realistic agenda, which will impede girl's schooling. In this regard, the role of the NGO cannot be ignored. NGOs may not be directly involved in the process of education, but can act as a support centre by providing resources in the form of curriculum development, teacher's training etc. They will thus act as a sustaining agent. NGOs may focus attention on the crucial weak link, namely the demand dimension, involving advocacy and mobilization at the local level. This is not to deny NGOs a role on the supply side. Indeed there is an executive experience of successful NGO interventions in this regard. What they need to do, in addition, is to find ways and for means its wider diffusion through empowering potential users. It is a known fact that resources are not a binding constraint for schooling of girl children. Lack of political will and social bias constitute far greater obstacles to the delivery of education. The priorities of the government will change only when it becomes sensitized to the needs of the excluded. NGOs can play a role in this by mobilizing a demand for education.

Thus, NGOs with gender-sensitive agenda should focus on the following :

- Learning from the community, in particular its women, requirements for girl's education.
- Opening more pre-school-cum-child care centres.
- Assessment of incentives, which will best benefit the girls.

- Better school environment.
- Collaborating with other NGOs and Government agencies so that there is no overlapping of activities.

Decision on whether a girl should be educated or not are part of familial world view, which can be influenced by positive interventions. It is important to remember that a girl's access to resources such as education depends on a number of factors, some of which relate directly to available facilities while others depend on a family's life chances, disposition and relevance of education. At the same time, any meaningful intervention must be preceded by

1. Discussion and wherever necessary identification of possible collaborators in the field.
2. Research and analysis of problem areas and assessment of feasibility of intervention using Participatory Rural Appraisal (PRA) techniques as well as discussions with community leaders, parents, teachers and students.

Thus, girl's access to schooling needs to be tackled comprehensively for which both the government and NGOs should work together to achieve this end.

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ROLE OF TEACHER AND STUDENT IN NATIONAL RECONSTRUCTION

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India has chosen a democratic way of life and governance. The success of democracy largely depends on the degree of education and enlightenment of the people. An educated citizenry is a greater defence to a democratic country than a vast standing army. Moreover, roads and buildings, factories and offices do not make a man civilised. Good education alone has potency in realizing the goal of national reconstruction. Education is a process of development from the cradle to grave. Man becomes a gentleman through education and he alone can be educated while the other living organisms are trained. While his life is guaranteed by food, it is glorified by education (Aravanan, 1991). A nation needs good man first and then amenities for comfortable living. A nation to live long and prosper needs men of culture, character, learning and understanding. The Education Commission (1964-66) has rightly pointed out that the destiny of the country is being shaped in her class rooms. Evidently the commission has in mind the role of teachers and students in realising the goal of national reconstruction.

It is a fact that every educational institution is a temple of learning and an excellent meeting place of human mind. Indeed, education is a continuous process in which one personality acts upon another in order to modify the development of other. The process is not deliberate but a conscious one. The educator has to clearly realize the intension of modifying the educand. The teacher is an indispensable element in the process and without him the process is thought to be inoperative. The process of education is also impossible without the student. The teacher and the student are two poles of the same process. John Adams held that these two poles are indispensable and the magnetic interaction of teacher and student imparts ideal education.

The future of the country depends on the type of the students the teachers are making in the classrooms. It is true that if an engineer errs a building collapses; if a doctor errs a patient dies, if an administrator errs there is disorder for a short while; but when a teacher errs a generation suffers. Similarly, a Chinese proverb says, "If you plan for a year, plant grain, if you plan for a decade plant trees, if you plan for century plant men". Therefore, teachers have very important role to play in shaping the future generation.

In one of his speeches Dr. Radhakrishnan suggested that the profession of the teacher
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should not be reduced to a trade. It is the duty of the teacher to make pupils the good citizens of a democracy. They must impart to the students zest for new experience, love for adventure in knowledge. At another place he has expressed his feelings about what kind of a teacher is needed in today's world. He said "Teacher must be a committed man, committed to faith in the future; in the future of this country and the world. He must work with this implicit confidence in the power of humanity, in the recuperative power, which it has, by which it can clean and purify itself. Unless he has faith then he will never be able to advance higher."

The primary duty of the teacher is teaching in the class. Through magnificent teaching he imparts new and tremendous knowledge and gives good understanding to his students too. It is recognised that teaching is an expert's job. It is an art. One who is gifted with this art can be a successful and effective teacher. A successful teacher's mental reservoir is always full. He is the master of the subject he teaches. He not only teaches but also creates in his pupils a desire and thirst for more knowledge and understanding. He draws out and develops the latent faculties of his students. He lights the lamp within. He possesses a sense of humour and a knack to amuse and control with a smile and a joke. He knows how to laugh away any friction or tension which is bound to crop up sometime. He has an abiding faith in the powers and capabilities of his pupils. Besides teaching, he takes keen interest in organising different co-curricular activities, maintaining discipline, developing healthy relation with the community, providing guidance to the students and many more. He takes initiative to organise seminars, discussions, workshops and activities alike for development of the profession. He keeps himself abreast with latest relevant information and knowledge. He is ready to conduct researches, because it keeps the teacher alert and regenerates him from fossilised ideas. Teaching is always benefited by research (Goheen, 1985). An ideal teacher continues to learn throughout his life. In the words of R.N. Tagore "A teacher can never truly teach, unless he is still learning himself. A lamp can never light another unless it continues to burn its own flame". Moreover, only he can teach who can love. The greatest teachers of men have been lovers of men. The real teaching is a gift; it is a sacrifice (Tagore, 1924)

The essential quality of the teacher is love for his students. Education is not a mechanical process. To mould the life of the young pupil, it is necessary that the teacher should reach their heart and cast his personal influence on them. Young pupils respond to love and affection and not to rod. Any influence based on love and affection becomes lasting on them. The teacher should have abundant love and affection for his pupil so that whatever he says or does impresses the child. The teacher should respect their personality. He should care for their feeling and sensibilities.

The teacher can help to make the life of students better, fuller, happier and meaningful. The teacher has to create such a situation in the class-room (with out any discrimination on the

basis of caste, creed, colour, sex, religion, region and race) that individuality of the students is fully developed and properly shaped in accordance with the requirement of the country. The students in the classroom are human resources of the country. They have to be cultivated and developed in such a way that their potentialities can be utilised in the making of the country and putting her on the path of progress to realise the dreams and aspirations of our national leaders in real sense of the term. The teacher has not only to develop the mind, body and spirit of the students but he has also to inculcate the attitude of peace, freedom, justice and safety in their mind. All he says and does bears the imprint of truth and sincerity. He exhibits in his own personality all those attitudes and habits which he wants his pupils to imbibe and imitate. He wins the loyalty and respect of his students by love and services.

The teacher is not merely an actor on the dais of his classroom, he is not merely a judge of the academic achievement of his pupil, he is not merely an account assistant of office, he is not merely a record keeper of the periodical progress of his wards, he is not merely an assistant administrator to the head, he is all these rolled into one (Reddy, 1991). However, a true teacher is a philosopher, friend and guide (Sri Aurobindo, 1960). Teachers can be described in uncountable ways. They have been linked to gardeners, artists, nation builders etc. Teachers are intelligent participants in efforts to improve their community and nation, mindful of their relationship to the world community, clear in their mind as to the goals of education for international understanding, conversant with method and able to help to create world minded children and youth. No doubt, an ideal teacher is a missionary. He has burning zeal to spread the light of knowledge. He is at the base of the entire pyramid of social changes and growth.

On the other hand, students have far more duties to perform. There are certain things, which must be taken as a discipline by students. According to Radhakrishnan, "If you are a student you cannot lead a comfortable life. For a man who likes comfort there can be no learning, if a man wants to be a true student, he must become as ardent worker, leading a strenuous and disciplined life". Constant vigilance and preparedness to study is the price students have to pay for grand success in life. Work is privilege and a pleasure, idleness is a luxury that none should afford. Every student is to work and prosper in life. He, like steel, shines in use and rusts in rest. Work is worship. It exalts man if done honestly. Those who toil are, sooner or later, rewarded with luck and success. A student of action acts in the living present. There is no tomorrow for him. He makes the best use of his time. Life is a challenge and struggle for him. He wins it with an excellent and sharp weapon of love.

What does it matter if a man lives for ninety years and it is all a story of idleness and waste opportunities? Jesus Christ died when he was hardly thirty; Swami Vivekananda died before he was forty; Napoleon did not live to be fifty; Lenin died before he was sixty. And yet they have their impression on human history that no

octogenarian can claim. Not poverty but idleness of students is a great curse. If students waste precious time, time shall waste them and make their life precarious. A lesson missed means it is missed forever. A life crammed with work is a life humbling with the joy of success. Great men and distinguished scholars of the world were born in cottage but they died in palaces. America's famous president Abraham Lincoln was born in a log cabin in the forest. He could not afford a lamp and read borrowed book with the light of the fire in the hearth. And yet by dint of hard work, he rose to be the greatest man of his time. Stalin, the late prime minister of Russia, was the son of a mere cobbler. Thomas Alva Edison worked for twenty hours a day. He slept only for two to three hours on the laboratory table with his books as his pillow. Our beloved first prime minister late Pt. Nehru worked for seventeen hours a day and seven days a week. There were no holidays in his calendar. Mahatma Gandhi worked ceaselessly day and night and won freedom for his country. Hence, hardwork is the price that we pay for success and all the gifts of life.

The students should have *sraddha* or regard for the teacher. In fact, the Gita explicitly states that the first and foremost quality needed for the attainment of truth is true regard for the teacher and the next, self-control and discipline. So ideal students are obedient to their teachers. They are guided by them. They never give their teachers a cause for complaint. They are courteous to one and all. They show proper respect to the National Flag and National Anthem. They greet members of the staff with decorum and proper salutation. They observe silence and due decorum whether inside the class-room and outside the institution premises. They cultivate good manners and habits. They are industrious, honest and sympathetic. They possess a keen sense of duty and responsibility to the society. They are regular and punctual on their job. They never cherish an evil thought within their heart. They are not way-ward. They shun bad company. They are diligent. They act as the messenger of peace and reconciliation between one community and another. They are free from communalism. They preach love and unity. They aim at national prosperity. They are great lover of truth. They have thirst for knowledge. They attain exactness of mind. Dignity, discipline, self-control, sacrifice, humanity, love, fellow-feeling, co-operation, justice, liberty, equality, fraternity, constructive organisation and self-restraint are their watch words. They act like brave and fearless soldier in a national cause. They are tolerant and free from prejudices, narrow mindedness and selfish motive.

Let us go back to the *gurukul* system of education. If we really want to make our journey in pedagogical sea more secure and safe then let us join our hands, let us share a common life of high aspiration; let us hope for a plain living and high thinking. Let us improve the atmosphere of each and every educational institution as an excellent man making industry. Let us make this wonderful place of learning essentially by a corporation of charming and ideal teachers as well as simple, hardworking and obedient students. Then only the relation between

the two (educator and educand) can be of a sacred character. Students can be trained to approach life's problems with the fortitude, forgiveness, self-control, abstaining from theft, purity of mind and body, mastery of senses, pure intellect, wisdom, truthfulness and sense of balance which our new conditions demand. Moreover, let us make it imperative to infuse values of life into the various levels and portals of education of both teachers and students, so that the foundation for a better world of tomorrow can be laid without delay. The keynote of education is "Know thyself" or self-realisation. If every teacher and student of all the educational institutions of our country has realised his own self then it can be said with full confidence that we can convey the following noble sentiments of best wishes to all over the world.

"Let all be happy and healthy
Let all be courteous, gentle and
Let nobody feel the pinch of sorrow".

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गुरु ग्रंथ साहिब में प्रेम की अवधारणा

विशाल भारद्वाज

सारांश

गुरु ग्रंथ साहिब भारतीय साहित्य की अनुपम उपलब्धि है। उस ग्रंथ में कई संतों की वाणियाँ संकलित हैं। पूरे ग्रंथ में प्रेम के प्रचार पर बल दिया गया है। गुरुग्रंथ साहिब का संदेश है कि प्रभु अपनी भक्ति उन्हीं को प्रदान करता है जिनका हृदय निष्कपट होता है। सांसारिक विकारों से मुक्त हुए बिना अलौकिक प्रेम का रसास्वादन नहीं किया जा सकता है। प्रेम प्रदर्शन नहीं, अनुभूति है। सिक्ख गुरुओं का जीवन प्रेम से परिपूर्ण था। गुरुग्रंथ साहिब में प्रेम और विरह की तड़पन का हृदयस्पर्शी वर्णन किया गया है। समस्त गुरुवाणियों में भक्त भगवान से यही प्रार्थना करता है कि मेरे मन का अनुराग तेरे चरणों में बना रहे। प्रस्तुत शोध-पत्र में गुरुग्रंथ साहिब में वर्णित प्रेमतत्त्व को व्याख्यायित करने का प्रयास किया गया है।

विश्व में आज अराजकता और अशांति का वातावरण है। सब लोग इसके बारे में चिंतित हैं, पर फिर भी जीवों के लिये संकीर्ण दायरों से निकल कर बंधुत्व से संबंधित जीवन मूल्यों को अपनाना असंभव नहीं तो दुरुह अवश्य प्रतीत होता है। मनुष्य का स्वार्थी स्वभाव उसे अपने से बाहर सोचने ही नहीं देता। अगर हम विश्व में शांति और सद्भावना चाहते हैं तो हमें प्रेम को अपनाना ही होगा। प्रेम के सद्गुण को अपनाने का संदेश प्रत्येक धर्म में दिया गया है। गुरु ग्रंथ साहिब में प्रेम को नैतिक और आध्यात्मिक दोनों स्तरों पर अपनाने का आदेश वाणी के रचनाकारों ने दिया है। इस विश्व कल्याण के प्रेरणादायक ग्रंथ में यद्यपि जीव के प्रभु से प्रेम करने पर बल दिया है परन्तु प्रभु के जीव के प्रति प्रेम, जीव के जीव के प्रति प्रेम और जीव के प्रकृति के प्रति प्रेम के संदर्भ भी प्रचुर मात्रा में प्राप्त होते हैं। जहाँ प्रेम के विकसित होने के लिये अहं का त्याग आवश्यक है, वहाँ परोपकार, साहस, नम्रता, दया जैसे गुण भी वांछनीय हैं। इस प्रकार गुरु ग्रंथ साहिब में प्रेम की एक विस्तृत अवधारणा है।

गुरु ग्रंथ साहिब में इस तथ्य पर भी बल दिया है कि प्रभु अपनी भक्ति उन्हीं जीवों को प्रदान करता है जिनका हृदय निष्कपट हो। सांसारिक विकारों से मुक्त प्राणी ही प्रभु के अलौकिक प्रेम का रसास्वादन कर सकता है। जो जीव सदाचार और आध्यात्मिकता जैसे गुणों से समलंकृत हैं, वही प्रभु का दिव्य सम्पर्क प्राप्त कर सकते हैं। मिथ्या-प्रदर्शन (पाखण्ड) एवं हठवादिता को गुरु ग्रंथ साहिब में परमात्मा की प्राप्ति में महान बाधक बताया है। जो सांसारिक प्रदर्शन के लिए भक्ति करते हैं वह प्रभु कृपा से तो वंचित रहते हैं साथ में उच्चतम मूल्यों को प्राप्त करने में भी असमर्थ होते हैं (गुरु ग्रंथ : १५९)।

मानव पाखण्ड, परनिन्दा, अहंकारादि का त्याग करके ही प्रभु प्रेम का पात्र बनता है। प्रेम प्रदर्शन नहीं, अनुभूति है। प्रेम भौतिक हो अथवा अभौतिक, उसे शब्दों में समेटना वैसा ही दुरुह कार्य है जैसा गूँगे के लिए मधुर पदार्थ को चख लेने के उपरान्त भी उस आनन्द को वाणी द्वारा व्यक्त कर पाना। यद्यपि सांसारिक पदार्थों के प्रति हम आकर्षित होते हैं और इस आकर्षण से स्वयं को

पत्राचार : गुरु नानक अध्ययन विभाग, गुरु नानक देव विश्वविद्यालय, अमृतसर (पंजाब)

मुक्त कर पाना असम्भव नहीं तो अशक्य अवश्य है। परन्तु सांसारिक पदार्थ प्रकृतिजन्य होने से परिवर्तनशील हैं परिणामतः हमारा उनके प्रति आकर्षण चिरस्थायी कैसे हो सकता है। परन्तु इसके विपरीत प्रभु प्रेम शुद्ध, निरपेक्ष, अपरिवर्तनीय है। निर्विकार भाव से एकरसता तथा शाश्वतता प्रभु प्रेम का महनीय गुण है। इसमें प्रायः सभी तत्त्वज्ञ एकमत है। सांसारिक विषयों में आसक्त मन का निग्रह वैसा ही दुष्कर कार्य है जैसे वायु को रोकना। मन को बलात् नहीं रोका जा सकता, प्रेम के पाश में मन स्वयं वैसे ही बंध जाता है जैसे भ्रमर सूखे काष्ठ को काट देने की सामर्थ्य रखते हुए भी स्वयं को कमल की कोमल पंखुड़ियों के भीतर प्रेमवश कैद किये रहता है। अन्यथा पंखुड़ियों को काट कर वह बाहर भी जा सकता है। इसी प्रकार यदि मन को प्रभु प्रेम का आस्वाद दे दिया जाए तो वह वहीं रुककर उसी में लीन हो जाएगा। परन्तु जब तक कोई प्रभु को जान नहीं लेता वह प्रभु से प्रेम कैसे करेगा। इसलिए प्रभु को जानना नितान्त आवश्यक है। प्रभु प्रेम द्वारा ही जाना जाता है। प्रेम द्वारा ही उसे पाया जाता है। संत-सिपाही गुरु गोबिन्द सिंह जी ने दशम ग्रन्थ में भी यही कहा है। (गुरु ग्रन्थ : ३५)।

प्रेम की अबाध मन्दाकिनी सिक्ख गुरुओं की वाणी में प्रवाहित हुई है। सच तो यह है कि सिक्ख गुरुओं का समस्त जीवन प्रेम से ओत-प्रोत था। प्रभु प्रेमी एक क्षण के लिए भी परमात्मा को विस्मृत नहीं करता वह प्रभु को सदैव हृदय में विराजमान देखता है (गुरु ग्रन्थ : ७९४)।

प्रेम की अभिव्यक्ति कलम-दवात के माध्यम से नहीं की जा सकती बल्कि यह तो हृदय की बात है। अन्य प्रेम चाहे समाप्त हो जाए परन्तु हृदय का प्रेम कभी समाप्त नहीं होता। गुरु ग्रन्थ साहिब में प्रेम और विरह की तड़पन का हृदयस्पर्शी वर्णन किया गया है (गुरु ग्रन्थ : ३५)।

जब प्रभु-प्रेम में लीन भक्त के हृदय में विरह-ज्वाला उदीप्त हो उठती है तब नेत्रों से अविरल अश्रुधारा प्रवाहित होने लगती है, प्रभु-मिलन के लिए मन छटपटाता है तब प्रभु कृपा करते हैं (गुरु ग्रन्थ : ९४)।

प्रभु-प्रेम में नींद और चैन सब समाप्त हो जाते हैं। भक्त का मन ईश्वर के सिवाय कहीं नहीं लगता। भक्त को एकमात्र यही आकुलता निरन्तर बनी रहती है कि प्रभु कब अपनी कृपा करेंगे। अपने सिर को कटवाने के लिए भी तैयार रहता है (गुरु ग्रन्थ : १०९४)।

जैसे सूर्य उदय होने पर कमल अपनी सत्ता धारण करता है, मछली जल में रहकर अपने जीवन को धारण रखती है। ठीक उसी प्रकार भक्त अपने जीवन को अध्यात्मिकता में धारण रखता है। प्रभु प्रेम प्राप्त करने के लिए भक्त सांसारिक जीवन को न्यौछावर करने में तनिक भी संकोच नहीं करता। ऐसे भक्तों पर प्रभु कृपा करते हैं। गुरुबाणी में प्रभु-प्रेम के लिए प्रार्थना की भी उत्कृष्ट भूमिका है। भक्त भगवान से यही प्रार्थना करता है कि मेरे मन का अनुराग तेरे चरणों से बना रहे। प्रभु चरणों में की गई प्रार्थना कभी भी व्यर्थ नहीं जाती। प्रार्थना द्वारा भक्त को प्रभु की सर्वव्यापकता एवं निकटता का बोध होता है। साधु-संतों से मिलन होता है। इन संतों द्वारा की गई ज्ञान चर्चा से प्रेम उदय होता है (गुरु ग्रन्थ : ७१३)।

प्रेम के हृदय में उदय होने से भक्त नाम स्मरण करने लगता है। फलस्वरूप प्रभु कृपा का अविरल स्रोत प्रवाहित होने लगता है। प्रभु की याद सदा के लिए उसके हृदय में स्थित हो जाती है। वह जन्म-मरण के दुःख से सदा के लिए छुटकारा पा लेता है (गुरु ग्रन्थ : १२२)।

है। प्रभु प्रेमी संत-महान पुरुषों की संगति करता है। उन्हीं के मार्गदर्शन में अध्यात्मिक साधना करता हुआ प्रभु का गुणगान करता है (गुरु ग्रन्थ : ६६७)।

प्रभु प्रेमी के मन में समर्पण का तीव्र भाव होता है। वह प्रभु के विधान में प्रतिकूलता न देखकर अनुकूलता ही देखता है (गुरु ग्रन्थ : ३९२)।

वह प्रभु की आज्ञा को ही शिरोधार्य करता है। उसके ऊपर परमात्मा की अपार अनुकम्पा होती है। वह परमात्मा जो सभी का योग क्षेम करता है, उसकी शरण में जाकर प्रभु-प्रेमी जन्म-मृत्यु की चिन्ता से भी मुक्त हो जाता है। यह सब तभी सम्भव हो सकता है जब मनुष्य के अन्दर विवेक पैदा हो। उसे संसार की वास्तविकता का बोध हो जाए तभी प्रभु प्रेम में अनुराग होगा। क्योंकि इस संसार में परमात्मा के बिना पंच भौतिक शरीर तो मिथ्या है इसलिए इससे क्या प्रीति करनी (गुरु ग्रन्थ : १९८६)।

भक्त को यह बोध हो जाता है कि इस क्षणभङ्गुर जीवन में प्रभु से किया गया प्रेम ही शाश्वत है, अन्य सब कुछ अस्थिर है। गुरु ग्रन्थ साहिब का यह एक महत्वपूर्ण तथा व्यावहारिक पक्ष है। गृहस्थ-आश्रम में रहते हुए प्रभु प्रेम की प्राप्ति के लिए पुरुषार्थ करना। गृहस्थ आश्रम की ओजस्विता दाम्पत्य-प्रेम की नीति पर अधिष्ठित है। दाम्पत्य प्रेम में प्रभु प्रेम का समन्वय गृहस्थ को मणिकाञ्चन संयोग जैसी गरिमा प्रदान करता है (गुरु ग्रन्थ : १४८)।

प्रेम से ही भूतों की उत्पत्ति होती है, उसमें ही लोग जीते हैं और उसमें ही प्रविष्ट हो जाते हैं। प्रेम शब्द इतना व्यापक है कि सम्पूर्ण ब्रह्माण्ड और उससे परे-सब इसकी परिधि में आ जाते हैं। यही अव्यक्त भावरूप प्रेम सत्त्व, रज और तम-इन तीन गुणों के प्रभाववश विविध विकारों के रूप में बुद्धि में प्रतिबिम्बित होता है और व्यवहारों से व्यक्त होता है। यही प्रेम बड़ों के प्रति आदर, छोटों के लिए स्नेह, समान उम्रवालों में प्यार, बच्चों के लिए वात्सल्य, भगवान के प्रति भक्ति, आदरणीयों के प्रति श्रद्धा, जरूरतमन्दों के प्रति दया एवं उदारता, न जाने किन-किन नामों से सम्बोधित होता है। प्रेम तो वह है जो ईश्वर और छोटे से छोटे जीव तक में अन्तर प्रति दया एवं उदारता, न जाने किन-किन नामों से सम्बोधित होता है। प्रेम तो वह है जो ईश्वर और छोटे से छोटे जीव तक में अन्तर समाप्त कर देता है। जब अपने में और विश्व में एक-जैसा ही भाव आ जाए और बना रहे तो वह तीनों गुणों से परे शुद्ध प्रेम है। यह प्रेम साध्य है और इस प्रेम को पाने का साधन भी प्रेम ही है। प्रेमी को अपने अंदर ही सारा विश्व दृष्टिगोचर होने लगता है और सम्पूर्ण विश्व में उसे अपने ही स्वरूप के दर्शन होने लगते हैं, अपने प्रभु के दर्शन होने लगते हैं, तब समझ लेना चाहिए कि अनन्य प्रेम की प्राप्ति हो गयी। प्रेमी प्रेम में मग्न होकर भवसागर पार कर देने वाले पद 'मोक्ष' को भी ठुकरा देता है। प्रभु चरणों की प्रीति को प्रमुखता देता है (गुरु ग्रन्थ : ५३४)।

गुरुबाणी में प्रेम क्षेत्र का विस्तार मिलता है। परिवार आदि छोटे क्षेत्र का प्रेम राग तथा स्वार्थ पर आधारित है। गुरुबाणी में उसे विश्व प्रेम और प्रभु प्रेम में परिवर्तन कर उसके क्षेत्र को निरन्तर विस्तृत करते हुए जगत् के प्रत्येक जड़-चेतन को प्रभु का रूप समझ उनकी सेवा-सहायता हेतु तत्पर रहना ही प्रभु से वास्तविक प्रेम है और यही अभिन्नता की अनुभूति है। प्रेम का विस्तार तभी होगा जब वह हृदय से होगा क्योंकि प्रेम वास्तव में बाहर की चीज नहीं यह तो हृदय का गुप्त धन है। जो हृदय के लिए हृदय से हृदय को मिलता और हृदय से ही किया जाता है। प्रेम हृदय की वस्तु है इसीलिए गोपनीय है। प्रेम को पाकर मनुष्य सिद्ध हो जाता है, अमृतत्व को पा जाता है, सब तरह से तृप्त हो जाता है। परमात्मा तो प्रेमस्वरूप है-प्रेम का स्रोत है; अतएव सच्चा प्रेमी वही है। उसको पा लेने के बाद कुछ पाना बाकी नहीं रह जाता। प्रभु प्रेम हृदय में प्रकट होते ही मनुष्य को उन्मत्त बना देता है। अतः प्रेमी भक्त सदैव प्रेम की मादकता (नशे) में चूर होकर प्रभु के गुण-गान और प्रभु चिन्तन में मग्न रहता है। उसे परनिन्दा, परचर्चा अच्छी नहीं लगती। वह पूर्णतः शान्त होकर प्रभु से तादात्म्य स्थापित कर लेता है। उसे भौतिक मृगतृष्णा भ्रमित नहीं करती। प्रेम में अनन्यता सर्वोपरि है। अनन्यता अर्थात् अपने प्रिय (प्रभु) को छोड़कर दूसरे आश्रयों का त्याग करना। यह प्रभु प्रेम भोगी को योगी, स्वार्थी को परमार्थी,

प्रभु प्रेमी का जीवन विनम्रतामय होता है। वह अपनी जाति, कुल, रंग-रूप, वैभव आदि के अहं का सर्वथा त्याग कर देता

कृपण को उदार और नीरस-सरस बनाकर मानव जीवन के चरम लक्ष्य का बोध बड़ी सरलता, सरसता और सुगमता से करा देता है।
ध्यान रखना चाहिये
कि प्रेम निष्काम भावना से किया जाना चाहिए।

प्रेम मानव-जीवन का स्वाभाव है। यह स्वभाव जब तक अविद्या से आवृत है, तब तक घृणा और द्वेष से व्याप्त रहता है। आज सम्पूर्ण विश्व में द्वन्द्व तथा द्वेष की जो अग्नि प्रज्वलित है उसका मूल कारण है मनुष्य का स्वार्थ। मनुष्य-मनुष्य में जो भिन्नता आज दिखाई दे रही है, उसका मूल कारण स्व का अज्ञान है। यह अज्ञान कैसे हटे इसके लिए सबसे पहले अहं का त्याग आवश्यक है। अहं प्रेम में सबसे बड़ा बाधक है। प्रभु प्रेम मनुष्य में सहजता लाता है। जो जितना सहज और सरल होगा वह उतना ही प्रभु के निकट होगा।

गुरुबाणी विश्वबन्धुत्व एवं पारस्परिक सौहार्द की प्रबल समर्थक है, अतः श्री गुरु ग्रन्थ में संकलित गुरुओं अन्य संतों की बाणी में मानव मात्र में प्रेम, सौहार्द, सद्भाव एवं परोपकार आदि दिव्य भावों को जाग्रत किया गया है। गुरुबाणी में मधुर भाषण, विनम्रतायुक्त व्यवहार, पाखण्ड के सर्वथा अभाव, कृतज्ञता एवं निष्कपटता आदि मूल्यों की गणना की गयी है। यह दिव्य गुण मानवीय व्यवहार को श्रेष्ठ बनाने के साथ-साथ मानव का आध्यात्मिक उत्थान भी कर सकते हैं। इस युग में बढ़ रहे परस्पर विरोध को समाप्त करने का एक कारगर उपाय प्रभु प्रेम है जिसके द्वारा एक दूसरे के विचारों को आत्मसात् कर प्रेम भाव, सेवा, सहानुभूति, विश्व-बन्धुत्व जैसे नैतिक मूल्यों को जीवित रखा जा सकता है। यही गुरु ग्रंथ साहिब का समूह मानवता को संदेश है।

संदर्भ:

भगति करहि मूरख आपु जणावहि ॥
नचि नचि टपहि बहुतु दुखु पावहि ॥ (गुरु ग्रन्थ : १५९)
साचु कहौ सुन लेहु सभै जिन प्रेम किओ तिनही प्रभु पायो ॥
मेरे मन हरि का नामु धिआइ ॥
साची भगति ता थीऐ जो हरि वसै मनि आइ ॥ (गुरु ग्रन्थ : ३५)
काली कोइल तू कित गुन काली ॥
अपने प्रीतम के हउ बिरहै जाली ॥ (गुरु ग्रन्थ : ७९४)

- १) हउ रहि न सका बिनु देखे प्रीतमा मै नीरु वहे वहि चलै जीउ ॥ (गुरु ग्रन्थ : ९४)
- २) हरि हरि दइआ करहु गुरु मेलहु जन नानक गुर मिलि रहसै जीउ ॥ (गुरु ग्रन्थ : ९४)
- तू जउ सजण मैडिआ डेई सिउ उतारि ॥
नैण महिजे तरसदे कदि पसी दीदार ॥ (गुरु ग्रन्थ : १०९४)
- १) साधु संगति होई परापति ता प्रभु अपुना लहीऐ ॥ (गुरु ग्रन्थ : ७१३)
- २) प्रेम पदारथु पाईऐ गुरुमुखि ततु वीचारु ॥ (गुरु ग्रन्थ : ६१)
- जिसु अंतरि प्रीति लगै सो मुकता ॥ (गुरु ग्रन्थ : १२२)
- नानक दासनि दासु करहु प्रभु हम हरि कथा कथागी ॥ (गुरु ग्रन्थ : ६६७)
- आठ पहर निकटि करि जानै ॥
प्रभु का कीआ मीठा मानै ॥ (गुरु ग्रन्थ : ३९२)

अब हम चली ठाकुर पहि हारि ॥
जब हम सरणि प्रभु की आई राखु प्रभु भावै मारि ॥ (गुरु ग्रन्थ : ५२७-२८)
साधो ऐह तनु मिथिआ जानऊ ॥
या भीतरि जो रामु बसतु है सोचा ताहि पछानो ॥ (गुरु ग्रन्थ : ११८६)
नारी पुरख पिआरु प्रेमि सीगारीआ ॥
करनि भगति दिनु राति न रहनी वारीआ ॥ (गुरु ग्रन्थ : १४८)
राजु न चाहउ मुकति न चाहउ मनि प्रीति चरन कमलारे ॥ (गुरु ग्रन्थ : ५३४)

नाममाला में दादू के शिष्यों की संख्या १५२ बतलायी गयी है। इन १५२ शिष्यों में भी ५२ को अत्यधिक महत्वपूर्ण माना गया है। इन ५२ शिष्यों में से अधिकांश के नाम पर सम्प्रदाय भी स्थापित हुए, इनकी परम्पराएँ चलीं, इनके थाम्बे स्थापित हुए। दादू पंथ में जितनी बड़ी संख्या में विद्वान शिष्य हुए उतने अन्य किसी संत सम्प्रदाय में नहीं हुए। हम यह अवश्य मानते हैं कि पूरे निर्गुण संतों में कबीर निर्विवाद रूप से सबसे बड़े संत हैं परन्तु, कबीर के अनुभवों को सुसंगठित रूप में जन-जन तक पहुँचाने में दादू पंथी संतों का बहुत बड़ा योगदान रहा है। दादू पंथ में जिस तरह की शिष्य-प्रशिष्यों की संख्या विकसित हुई ऐसी अन्यत्र किसी अन्य संत सम्प्रदाय में देखने को नहीं मिलती। निर्गुण संतों के यहाँ विधिवत् शिक्षा जैसी कोई बात नहीं थी परन्तु दादू पंथ में ऐसा नहीं था। इस मामले में ये बिलकुल अलग प्रकार का संत सम्प्रदाय जान पड़ता है। इस सम्प्रदाय में अनेक शिक्षित एवं विद्वान शिष्य-प्रशिष्य हुए हैं जिनमें सुन्दरदास (छोटे) गरीबदास, जगन्नाथ दास, मसकीनदास, रज्जब, निश्चलदास आदि नाम महत्वपूर्ण हैं।

“दादू पंथी संतों में एक बहुत बड़ी संख्या पढ़े-लिखे संतों की है। प्रायः निर्गुण संतों की कोई औपचारिक शिक्षा नहीं हुई थी। लेकिन इस प्रकार की बात दादू पंथियों के साथ नहीं है। सुन्दरदास जैसे प्रकाण्ड शास्त्र पंडित और साधु निश्चलदास जैसे दार्शनिक दादू पंथी ही थे। संत साहित्य के संरक्षण और संवर्द्धन की दृष्टि से बहुत महत्वपूर्ण कार्य दादू पंथियों ने किया। इन लोगों ने अपने गुरु की वाणियों को संरक्षित तो किया ही, पूर्ववर्ती तमाम संतों की वाणियों का संरक्षण भी किया। ऐसे संतों में रज्जब का नाम महत्वपूर्ण है (पाण्डेय : २००४)।”

पूरे उत्तर भारत में दादू पंथ का विशाल जनाधार है। दादू और दादू पंथियों में साम्प्रदायिक सौहार्द की भावना कूट-कूट कर भरी हुई है। संत सम्प्रदायों में दादू पंथ एक ऐसा पंथ है जिसमें हिन्दू और मुसलमान एक साथ जुड़े। हिन्दू और मुसलिम दोनों धर्मों के राज परिवारों ने दादू पंथ का शिष्यत्व ग्रहण किया। देश की आम जनता चाहे उसकी उपासना पद्धति कुछ भी हो, दादू पंथ से जुड़ी। हिन्दू और मुसलमान समान रूप से दादू को आदरणीय मानते हैं। इसका कारण दादू की साम्प्रदायिक सौहार्द की भावना है। समाज में साम्प्रदायिक सौहार्द की स्थापना हेतु कबीर जैसे संत ने जहाँ तेज वाणी का प्रयोग किया था, दोनों सम्प्रदाय के लोगों को डाट-फटकार कर समझाने का प्रयास किया, वही दादू ने अपनी सरल वाणियों तथा विनम्र पदों के माध्यम से समाज को समझाया। डॉ० नन्द किशोर पाण्डेय ने संत रज्जब पुस्तक में लिखा है : “दादू को हिन्दू-मुसलिम एकता की दुहाई देने या बल देने में कोई रुचि नहीं है। वे दोनों के कर्मकाण्डों को फटकारने में भी कम ही दिलचस्पी दिखलाते हैं। ये मन की पवित्रता पर अधिक बल देते हैं। दादू जब हिन्दू और तुरक दोनों को एकसाथ संबोधित करते हैं तब कहते हैं कि दोनों उस सत्य को नहीं जानते (पाण्डेय : २००४)।”

यही कारण था कि लोग उनसे अधिक मात्रा में आकृष्ट हुए। इस प्रकार के कई पद दादू के यहाँ प्राप्त होते हैं जहाँ उन्होंने हिन्दू और तुरक की अलग सत्ता को स्वीकार करते हुए जनता को यह समझाने का प्रयास किया कि भगवान एक है तथा हम सब उसके बताए हुए हैं। हिन्दू-तुर्क का भेद निरर्थक है। दोनों एक जैसा मांस और रक्त से निर्मित हैं। दादू का एक पद द्रष्टव्य है :

“अलह राम छूटा भ्रम मोरा।

हिन्दू तुरक भेद कछु नाहीं : देखौ दरसन तोरा ॥

सोई प्राण प्यंड पुनि सोई, सोई लोही मासा।

सोई नैन नासिका सोई, सहजै कीन्ह तमासा ॥

श्रवणौ सबद बाजता सुणिये, जिभ्या मीठा लागै।

सोई भूष सबन कौ व्यापै, एक जुगति सोई जागै ॥

सोई संधि बंध पुनि सोई, सोई सुष सोई पीरा।

सोई हस्त पांव पुनि सोई, सोई एक सरीरा ॥

यहु सब षेल षालिक हरि तेरा, तैहि एक कर लीनां।

दादू जुगति जानि करि ऐसी, तब यहु प्रांन पतीना ॥ (चतुर्वेदी : १९५२ : ३१)।”

विशाल शिष्य परम्परा ही दादू पंथ को विशिष्ट बनाती है जो अन्य संत सम्प्रदाय में नहीं है। दादू के शिष्यों की संख्या इनके जीवन काल में ही बहुत बड़ी हो गई। लालदास की नाममाला में इनके शिष्यों की संख्या १५२ हो गई है। १५२ में १०० वीतरागी बतलाए जाते हैं। शेष ५२ शिष्यों में से अधिकांश की परम्पराएँ भी चलीं। सुन्दरदास दादू के प्रिय शिष्यों में से एक थे। इस परम्परा में एक और सुन्दरदास का नाम आता है इसलिए इन्हें छोटे सुन्दरदास के नाम से जानते हैं। इनके बारे में कहा जाता है कि दादू ने अपनी पहली दौसा यात्रा में एक वैश्य दम्पति को पुत्रोत्पत्ति के लिए आशीर्वाद दिया था। जब वह दुबारा यहाँ गए तो वह बालक सात वर्ष का हो चुका था। यही बालक आगे चलकर सुन्दरदास (छोटे) के नाम से प्रसिद्ध हुआ। इनका जन्म जयपुर राज्य के दौसा में सं० १६५३ को हुआ था। ये अध्ययन के लिए कई वर्षों तक काशी में रहे। वहाँ इन्होंने अनेक शास्त्रों का गम्भीर अध्ययन किया। दर्शन, व्याकरण, साहित्य आदि का इन्होंने विधिवत् अध्ययन किया। सुन्दरदास ने कुल ४२ ग्रन्थों की रचना की जो ‘सुन्दर ग्रंथावली’ के नाम से प्रकाशित हुई है। सुन्दरदास के कई शिष्य थे। दयालदास, श्यामदास, दामोदरदास, निर्मलदास तथा नारायण दास इनके नाम से प्रकाशित हुई हैं। सुन्दरदास के कई शिष्य थे। दयालदास, श्यामदास, दामोदरदास, निर्मलदास तथा नारायण दास इनके पाँच प्रमुख शिष्य थे। पाँचों शिष्यों के अपने-अपने थांबे हैं। कुछ तो अभी तक चल रहे हैं। दादू दयाल की सारी रचनाओं की संख्या लगभग २० हजार बतलायी जाती है। इन सब का अभी तक कोई प्रामाणिक संग्रह प्राप्त नहीं हुआ है परन्तु जो रचनाएँ उपलब्ध हैं उन सबको असंदिग्ध रूप से दादू का नहीं कहा जा सकता है। दादू दयाल के शिष्यों में से संतदास तथा जगन्नाथदास ने इनकी रचनाओं का एक संग्रह “हरडेवाणी” नाम से तैयार किया था। रज्जब ने दादू की रचनाओं को भिन्न-भिन्न अंगों में विभक्त किया और उस संग्रह का नाम ‘अंग बंधु’ रखा। रज्जबदास दादू के अत्यन्त प्रभावशाली विद्वान शिष्य थे। दादू के शिष्यों में इनका स्थान विशिष्ट है। ये प्रायः दादू के साथ ही रहा करते थे। इनका जन्म सं० १६२४ में सांगानेर के एक पठान परिवार में हुआ था। इनके पिता जयपुर नरेश के यहाँ नायक के पद पर कार्यरत थे। बचपन से ही दादू रज्जब अली के लिए आदरणीय थे। सं० १६४४ में जब विवाह के लिए वे जा रहे थे, तो रास्ते में सोचा कि आमेर में दादू से भेंट कर लें। वही कहते हैं कि दादू ने एक दोहा पढ़ा-

किया था कुछ काज को, सेवा सुमिरण साज।

दादू भूल्या बन्दगी, सर्या न एको काज ॥

रज्जब ने तत्काल वही शादी का निर्णय बदल दिया और दादू के चरणों में समर्पित हो गए। रज्जब जीवन भर दुल्हे के वेश में रहे। दादू के यहाँ दीक्षित होकर यही रज्जब अली ‘रज्जब जी’ के नाम से प्रसिद्ध हुए। रज्जब ने काशी में रहकर साहित्य, व्याकरण, दर्शन आदि का गम्भीर अध्ययन किया। रज्जब सम्पादन कला में निपुण थे। उन्होंने दादू की रचनाओं का सम्पादन किया तथा स्वयं भी रचनाएँ की। इनकी “रज्जबदास की सर्वगी” तथा ‘रज्जब वाणी’ नाम से दो पुस्तकें प्राप्त होती हैं। रज्जब बहुत अनुभवी थे। रज्जब की भक्ति में सूफी तत्व को देखा जा सकता है। रज्जब अपने गुरु दादू से बहुत प्रभावित थे। कहते हैं कि दादू के स्वर्गवास के पश्चात् उन्होंने यह कहते हुए आँख बन्द कर ली कि जो इस संसार में दर्शनीय था वह अब इस दुनिया में नहीं रहे, इसलिए आँखों को खुली रखने का कोई औचित्य नहीं है। दादू पंथ में रज्जब ऐसे संत थे जो ग्रंथन कला में निपुण थे, इसलिए इनका महत्व और भी बढ़ जाता है। संतों की बानियों को संगृहीत करके रज्जब ने महान भूमिका को निभाया। रज्जब ने अपने पूर्ववर्ती संतों की बानियों को संरक्षित एवं प्रचारित तो किया ही, साथ ही साथ समकालीन अन्य संतों की बानियों को भी लोगो तक पहुँचाया। दादू पंथ में समृद्ध साहित्य होने का कारण भी यही है। यह समृद्धि अन्य किसी संत सम्प्रदाय में उपलब्ध नहीं है। रज्जब की ग्रंथन कला पर प्रकाश डालते हुए नन्द किशोर पाण्डेय कहते हैं - “ग्रंथों के ग्रंथन की एक सर्वथा नूतन पद्धति ‘अंग’ को अंगीकृत कर रज्जब ने संकलन-सम्पादन के क्षेत्र में मौलिक कार्य किया है। यह पद्धति अध्याय, सर्ग, उच्छ्वास उल्लास, अंग, तरंग, परिच्छेद, उद्योत, विमर्श से भिन्न तो है ही; समय, बोध, गोष्ठी, पल्लव और काण्ड से भी भिन्न है। सर्वथा पृथक और नूतन। अंगों के साथ रागों का निबन्धन इस ग्रंथन प्रक्रिया को और अधिक सूक्ष्म बनाता है। रागों का नामोल्लेख बड़े विस्तार के साथ किया गया है। रागों का नाम रखने से पहले उनके गायन के समय और रचनाओं के भाव को ध्यान में रखा गया है (पाण्डेय : २००४)।”

रज्जब के नाम पर भी एक पंथ खड़ा हुआ। इनके अनुयायियों को ‘रज्जब पंथी’ या ‘रज्जबावत’ कहते हैं। रज्जबदास के

दस शिष्यों का नाम राघोदास के 'भक्तमाल' में प्राप्त होता है। इसके अतिरिक्त इनके चार शिष्य और बतलाए जाते हैं। इनकी मुख्य गद्दी सांगानेर में हैं। अपने व्यापक अनुभव के कारण ही रज्जब न केवल उच्चकोटि के संत थे बल्कि एक अच्छे कवि भी थे। रज्जबदास एक अच्छे कथा वाचक थे। दृष्टान्तों के प्रयोग में वे दक्ष थे। संवत् १७४६ में इनका स्वर्गवास बताया जाता है।

दादू पंथ में गरीबदास एक बड़ा नाम है। ये दादू के औरस पुत्र बताये जाते हैं। कुछ लोग इन्हें दादू का पालित पुत्र बताते हैं। परशुराम चतुर्वेदी जी ने 'उत्तरी भारत की संत परम्परा' में बताया है कि- "किसी माधोदास द्वारा रचित 'संत-गुणसागर' नामक ग्रंथ के आधार पर स्वामी मंगलदास जी ने लिखा है कि ये दादू दयाल जी के औरस पुत्र न होकर केवल पोष्य पुत्र थे। (उत्तरी-भारत की संत परम्परा (५१२))" 'भक्तमाल' तथा 'नामलीला परची' में इस प्रकार की किसी भी बात का उल्लेख नहीं होने के कारण इन्हें दादू दयाल का औरस पुत्र ही मानना चाहिए। दादू के स्वर्गवास के पश्चात् उनके उत्तराधिकारी का पद गरीबदास जी ने संभाला। ये दादू के प्रमुख ५२ शिष्यों में से एक थे। इनका जन्म सं० १६३२ में बताया जाता है। गरीबदास बहु आयामी संत थे। साधक होने के साथ-साथ कविता आदि में भी इनकी बहुत रुचि थी। वे एक अच्छे कवि थे। यही नहीं जनश्रुति के अनुसार वे एक अच्छे संगीतज्ञ तथा वीणा वादक थे। पंथ की मान्यताओं के अनुसार लगभग २३००० वाणियों की रचना इन्होंने की। 'गरीबदास की वाणी' के नाम से इनकी वाणियाँ प्रकाशित हुई हैं।

दादू के कुछ अल्पख्यात शिष्य भी थे वे अल्पख्यात होते हुए भी इस पंथ के लिए महत्वपूर्ण कड़ी हैं। दादू के अव्यख्यात शिष्यों की परम्परा में वषना महत्वपूर्ण हस्ताक्षर हैं। वषना मुसलिम संत थे। वषना का जन्म नरैना में हुआ था; जहाँ दादू ने अपने अंतिम दिन व्यतीत किये। वषना बहुत अच्छे गायक तथा संगीतज्ञ थे। इनकी इन्हीं विशेषताओं से प्रभावित होकर दादू ने इन्हें भगवान का गुणानुवाद करने के लिए प्रेरित किया। तत्काल वषना ने दादू जी की शिष्यत्व ग्रहण किया। वषना के नाम से एक संग्रह 'वषनाजी की वाणी' के नाम से प्रकाशित है।

"वषना का महत्व हिन्दी साहित्य में कई दृष्टियों से है। ये भारत की सामासिक संस्कृति के वाहक हैं। ये हिन्दी के उन चुनिन्दे कवियों में से एक हैं जो जाति, धर्म की सीमाओं को पार कर मानवता की सामान्य भूमि तैयार कर रहे थे। हिन्दी साहित्य के इतिहास में जिन कवियों के कारण भक्तिकाल स्वर्ण युग है, उनमें वषना एक महत्वपूर्ण कड़ी हैं।" (संत रज्जब, २००४)। कबीर दादू के आदरणीय थे। दादू ने यह भी बताया है कि कबीर का जो आराध्य है वही मेरा भी। यही कारण है कि दादू एवं दादू के शिष्यों में भी कबीर जैसा गुण दिखलाई पड़ता है। वषना ईश्वर की एकरूपता के उपसाक थे। हिन्दू-मुसलिम को लेकर कबीर का जो 'ना हिन्दू ना मुसलमान' वाली भावना थी वह वषना में भी दृष्टिगोचर होती है। साम्प्रदायिक सौहार्द को बढ़ावा देने के लिए वषना ने अरबी फारसी को छोड़ हिन्दी में ही अपनी बानियों की रचना की। वषना का आराध्य हिन्दू-तुरक के घेरे से मुक्त था। वे कहते हैं-

जिसका साहिब तुरक न हिन्दू, पषा दुहुँ थैं न्यारा।

वषना बंदी चौड़े धरिए चलै गड़े संसारा॥

दादू के १५२ शिष्यों में वाजिद एक बड़ा नाम है। ये पठान परिवार से थे। इनकी जन्म तिथि तथा जन्म स्थान की सूचना अभी तक नहीं मिल पाई। जनश्रुति से यह पता चलता है कि एक बार शिकार के दौरान इन्होंने एक गर्भिणी हिरणी को मार दिया। दया का भाव जागते ही उन्होंने अपने किए पर ग्लानि एवं पछतावा हुआ। बाद में सतगुरु की खोज में भटकते हुए इनकी भेंट दादू से हुई। दादू का शिष्यत्व ग्रहण कर ये दादू वाणियों के प्रचार-प्रसार में लग गये। स्वभाव से सरल एवं दयाशील थे। साम्प्रदायिक सौहार्द के साथ नैतिक मूल्यों की स्थापना के लिए उपदेश दिया करते थे। ये अपने अरिष्टों के लिए जाने जाते हैं।

दादू पंथी संतों में निश्चलदास का नाम भी प्रसिद्ध है। इनकी जन्मतिथि की सही जानकारी अबतक प्राप्त नहीं है। इनका जन्म पंजाब के किसी जाट परिवार में हुआ था। ये बचपन से ही दादू पंथ से जुड़े तथा वहाँ दीक्षा भी प्राप्त किये। बचपन से ही संस्कृत

सीखने-पढ़ने की लालसा जगी। संस्कृत सीखने की जुनून ने इन्हें काशी लाया। काशी में इन्हें अपनी जाति छुपानी पड़ी। स्वयं को ब्राह्मण बताकर इन्होंने काशी में संस्कृत दर्शन, व्याकरण तथा साहित्य की पूर्ण शिक्षा प्राप्त की। बाद में न्यायशास्त्र के अतिरिक्त अध्ययन के लिए बंगाल गए। इनके नाम से तीन पुस्तकें 'विचार सागर', 'वृत्तिप्रभाकर', तथा 'मुक्ति-प्रकाश' प्रकाशित है।

दादू दयाल ने अपने इस सम्प्रदाय का सूत्रपात अपने साथियों की गोष्ठी के अन्तर्गत आध्यात्मिक तत्वों की चर्चा द्वारा किया था। उनका मुख्य उद्देश्य यही था कि किस प्रकार प्रचलित धर्मों और सम्प्रदायों के बीच समन्वय लाने वाली बातों का निरूपण किया जाय। इसके सिवाय उनकी यह भी इच्छा थी कि ऐसे यत्नों द्वारा सर्वसाधारण के लिए भी सुलभ तथा उपयोगी सिद्ध होनेवाले किसी जीवन पद्धति का निर्माण किया जाय और उसका सब कहीं प्रचार करके सब किसी को लाभान्वित करने की चेष्टा की जाय। दादू ने अपने पंथ के बारे में स्पष्ट लिखा है कि मेरा पंथ अलग है। दादू का पंथ एकनिष्ठ भाव से प्रभु की आराधना करनेवाले संतों का पंथ था। दादू का पंथ सभी प्रकार के वाद-विवाद, तर्क-वितर्क से परे था। इस पंथ में किसी प्रकार की मोह ममता नहीं सताती। दादू पंथ उन संतों के लिए है जो केवल सृष्टि के सृजनकर्ता के संग को पसन्द करते हैं। दादू के यहाँ इस तरह के अनेक पद मिलते हैं। यथा-

"भाई रे ऐसा पंथ हमारा।

द्वै पष रहित पंथ गहि पूरा, अवरण एक अधारा॥ टेक॥

बाद बिबाद काहू सौं नाहिं, माहिं जगत थे न्यारा॥

समदृष्टि सुभाइ सहज मैं आपहि आप बिचारा॥

मैं तैं मेरी यहु मति नाही निर्बेरी निरकारा।

पूरण सबै देषि आपा पर, निरालंब निर्धारा॥

काहू संगि मोह न ममिता, संगी सिरजनहारा।

मन ही मन सौं समझि सयाना, आनन्द एक अपारा॥

काम कल्पना कदे न कीजै, पूर्ण ब्रह्म पिआरा।

इहि पंथि पुहँचि पार गहि दादू, सो तत सहज संभारा॥ (चतुर्वेदी : १९५२)।"

दादू पंथ में दादू पंथी उपसम्प्रदायों का बहुत महत्व है। इन उपसम्प्रदायों का जनाधार सम्पूर्ण उत्तर भारत में है। दादू द्वारा नरैना के महंत जैतराम के समय से दादू में उपसम्प्रदायों ने जोर पकड़ना प्रारम्भ किया। दादू पंथी कम से कम पाँच उपसम्प्रदायों में विभक्त दिखलाई पड़ते हैं।

१. खालसा : दादू पंथियों के भीतर भी खालसा पंथ है। इनका मुख्य केन्द्र नारायना है। खालसा के सदस्य पठन-पाठन में विशेष रुचि रखते हैं। ये लोग साधारण गृहस्थों की भांति जीवन यापन करते हैं।

२. नागा : यहाँ नागा साधु से तात्पर्य नम्र रहनेवाले साधुओं से नहीं हैं। ये बहुत ही सादगी पूर्ण जीवन व्यतीत करते हैं। इस उपसम्प्रदाय के प्रवर्तक बड़े सुन्दरदास थे। बाद में भीम सिंह ने इसे सुसंगठित किया। जयपुर राज्य के साथ इनका घनिष्ठ संबंध रहा है। ये लोग सिपाही का काम करने के लिए प्रशिक्षण भी लिए थे।

३. उत्तराढी : इस शाखा के साथ पंजाब के लोग बड़ी मात्रा में जुड़े। ये लोग प्रायः समृद्ध थे। इनमें बहुत से लोग अच्छे वैद्य भी थे। कुछ विद्वान रज्जबदास को तो कुछ बनवारीदास को इसका प्रवर्तक मानते हैं। बनवारीदास ने अपना पहला स्थान पटियाला के रतिया ग्राम में बनाया था। वहाँ से ही यह पंथ उत्तर भारत में फैला। इस सम्प्रदाय के संतों ने ५२ थाम्बे स्थापित किये। इस सम्प्रदाय ने बड़े-बड़े विद्वानों को अपने साथ जोड़ा। साधु निश्चलदास जैसे विद्वान इसी सम्प्रदाय से सम्बद्ध थे।

४. विरक्त : विरक्त वास्तव में विरक्त होते हैं। ये द्रव्य को स्पर्श भी नहीं करते हैं। ये भिक्षावृत्ति कर अपने साधना कर्म में लगे रहते हैं। ये लोग भी पढ़ने-लिखने में विशेष रुचि रखते हैं। ये दादू पंथी गृहस्थों को उपदेश देने का काम करते हैं।
५. खाकी : इस सम्प्रदाय के साधु बहुत ही साधारण जीवन व्यतीत करते हैं। तन पर कपड़े भी कम धारण करते हैं। शारीरिक साधना में ये विशेष रुचि रखते हैं। एक स्थान से दूसरे स्थान तक निरन्तर घूमते रहते हैं। 'रमता जोगी बहता पानी' वाली उक्ति उन पर चरितार्थ होती है।

हिन्दी निर्गुण संतों में साहित्य की व्यापकता और शिष्यों की दृष्टि से दादू पंथ का जनाधार बहुत व्यापक है। दादू पंथ के अनुयायियों ने अपने प्रधान गुरुओं तथा अन्य संत की भी बानियों की रक्षा तथा प्रचार के लिए बहुत यत्न किए। इसी कारण ऐसा साहित्य जितना दादू पंथी क्षेत्र में उपलब्ध है, उतना अन्यत्र कहीं भी नहीं पाया जाता। दादू पंथ ने संत साहित्य ही नहीं, इस देश का भी बहुत भला किया है। सही मायने में दादू पंथी साहित्य ही साम्प्रदायिक सौहार्द का साहित्य है।

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काव्य-मीमांसा की संस्कृत परंपरा

श्याम शंकर सिंह

सारांश

प्रस्तुत लेख में काव्य-मीमांसा की संस्कृत परंपरा के नैरन्तर्य की विवेचना करते हुए दर्शाया गया है कि आचार्य भामह से लेकर विश्वेश्वर पंडित तक ये परंपरा निर्बाध रूप से चलती रही और इसकी पद्धति वाद-विवाद-संवाद की थी। इस लेख में आचार्य मम्मट के बाद इस समृद्ध और गौरवमयी परंपरा की हासोन्मुखता एवं आधुनिक युग के प्रवेश-द्वार पर इसके नष्ट प्रायः हो जाने के कारणों की जाँच-पड़ताल की गई है। प्रयत्न किया गया है कि संस्कृत काव्य-मीमांसा के विकसनशील स्वरूप को उभारा जा सके। इसी परिप्रेक्ष्य में भारतीय परंपरा के पूर्व-पक्ष एवं उत्तर-पक्ष जैसी द्वन्द्ववात्मकता को उभारा गया है। यहीं इस बात की ओर भी ध्यान आकृष्ट करने का प्रयत्न किया गया है कि भारतीय भाषाओं के साहित्य में काव्य-मीमांसा की परंपरा संस्कृत में ही चली। दूसरे, संस्कृत काव्य-मीमांसा का सम्बंध गतिशील जीवन और उससे उद्भूत रचना से क्रमशः दूर पड़ता गया जो कि उसके क्षय का एक कारण क्रमशः बनता चला गया। तीसरे, इस्लामी सत्ता का जो प्रभाव कम-से-कम, कश्मीर में पड़ा जो कि संस्कृत काव्यशास्त्र के इतिहास की समाप्ति के हेतुओं में से एक सिद्ध हुआ। अंत में, आधुनिक युग की औपनिवेशिक संस्कृति और विचारधारा ने इस पर अन्तिम प्रहार किया जिसके कारण संस्कृत काव्य-मीमांसा अतीत का एक प्रसंग भर बन कर रह गया।

काव्य मीमांसा की संस्कृत परम्परा जिस समय से अविरल और अखण्ड रूप से चली, उसके प्रामाणिक साक्ष्य तो उपलब्ध हैं, लेकिन उसके उद्भव काल का प्रामाणिक साक्ष्य प्रस्तुत करना अभी भी एक जटिल समस्या के रूप में बनी हुई है। अन्य वस्तुओं की तरह, मध्य युग में राजशेखर ने 'काव्य मीमांसा' में काव्यशास्त्र के उद्गम को भी ईश्वर से जोड़ने का प्रयत्न किया। लेकिन इतना निश्चित है कि रचना की शास्त्रीय चर्चा रचना परंपरा की शुरुआत हो जाने के पश्चात् ही सम्भव होती है।

विद्वानों ने काव्यशास्त्र के बीज को ईसा सन् से पहले खोजने के प्रयत्न में वेद-वेदांगों और व्याकरण शास्त्र तक दौड़ लगायी है। लेकिन यह निरर्थक सा लगने वाला प्रयत्न ही, अभी तक, सिद्ध हुआ है। निदानतः काव्यशास्त्र का वास्तविक आरंभ दर्शन और व्याकरण के मूल ग्रंथों की रचना के बहुत बाद का जान पड़ता है। एस. के. डे और काणे जैसे उद्भट विद्वानों ने ईसा की पहली पांच शताब्दियों में ही काव्यशास्त्र का उद्भव माना है। शिलालेखों की काव्योचित प्रशस्तियाँ, अश्वघोष और भास के ग्रंथ और कालिदास की आलंकारिक कविता और इससे पूर्व संस्कृत के आदि कवि वाल्मीकि कृत रामायण जैसे ग्रंथ आदि सभी इसी ओर संकेत करते हैं। फिर भी, आचार्य भरत के समय में कविता की शास्त्रीय चर्चा करने वालों की गूँज-अनुगूँज सुनायी पड़ने लगती है। विद्वानों ने भरत मुनि के काल का निर्धारण अनुमानतः २०० ई. पू. से २०० ई. तक किया है। भरतमुनि के 'नाट्यशास्त्र' में कृशाश्व और शिलालिन के नामों का उल्लेख मिलता है। यहीं पर यह भी बात महत्वपूर्ण रूप से उल्लेखनीय है कि नाट्यशास्त्र में प्रसिद्ध रस-सूत्र उद्धृत रूप में ही है।

पत्राचार : राजीव गाँधी विश्वविद्यालय, रोनीहिल्स, ईटानगर, दूरभाष : २२७७२६७

इसके बाद सातवीं सदी के मध्य में आचार्य भामह ने मेधाविन का और आचार्य दंडी ने काश्यप को उद्धृत किया है। परन्तु इन सभी के ग्रंथ अभी तक उपलब्ध नहीं हुए हैं। आचार्य भरत मुनि के 'नाट्यशास्त्र' में भी काव्यतत्त्वों का विवेचन आनुषंगिक रूप में ही, प्रसंगवश मिलता है। भरत के द्वारा काव्य तत्त्वों का निरूपण 'नाट्यशास्त्र' के अंतर्गत किया गया है-स्वायत्त रूप में नहीं। फिर भी काव्य तत्त्वों के उल्लेखन की दृष्टि से उसका पर्याप्त महत्व है। भरत मुनि ने नाटक या दृश्यकाव्य के संदर्भ में रस-विमर्श बड़े ही विस्तृत रूप से प्रस्तुत किया है। इस सम्बंध में उन्होंने आचार्य नंदी का भी उल्लेख किया है। 'नाट्यशास्त्र' के १६ वें अध्याय में ४ अलंकारों, १० गुण और १० दोषों का विवेचन एवं ३६ लक्षणों का उल्लेख मिलता है। छठवें एवं सातवें अध्याय में नाट्य की दृष्टि से रसों एवं भावों की विवेचना की गयी है। १३ वें और २० वें अध्याय में क्रमशः प्रवृत्तियों एवं वृत्तियों पर विचार किया गया है। 'नाट्यशास्त्र' में ही सबसे पहले प्रयोजन सम्बंधी अनिवार्य समस्या पर चिन्तन मिलता है। काव्य के एक भेद रूपक पर शास्त्रीय दृष्टि से विचार करने का श्रेय भी आचार्य भरत को ही जाता है (भरत, १९७२)।

आचार्य भरत मुनि के बाद आचार्य भामह तक के बीच में काव्य मीमांसा सम्बंधी न तो कोई ग्रंथ मिलता है, और न ही कोई अन्य प्रमाण। १५० ई. के आस-पास रुद्रदामन के शिलालेख से स्पष्टतः आभास मिलता है, कि काव्य के तत्त्वों पर विचार विमर्श जारी था। आचार्य भामह ने मात्र मेधाविन नामक आचार्य का उल्लेख किया है। भामह के टीकाकार नमिसाधु और राजशेखर ने भी अपने-अपने ग्रंथों में आचार्य मेधाविन का उल्लेख किया है। 'भट्टिकाव्य' का काल निर्धारण अभी तक सर्वमान्य तरीके से नहीं हो पाया है। 'भट्टिकाव्य' में जिस आधार पर अलंकारों का वर्गीकरण और विवेचन हुआ है, उससे इतना तो पता लग ही जाता है कि आलंकारिकों की परंपरा उभरकर सामने आने लगी थी। वास्तव में, काव्य चिंतन की परंपरा के प्रवर्तक आचार्य भामह ही हैं। कारण कि, उन्होंने ही सबसे पहले काव्य के तत्त्वों का विवेचन स्वतंत्र रूप से किया। काव्य की परिभाषा दी और काव्य प्रयोजन पर विमर्श किया। वस्तुतः आचार्य भामह के द्वारा की गयी काव्य की मीमांसा, उस समय की दृष्टि से बड़ा ही गंभीर और महत्वपूर्ण है।

काव्य मीमांसा की संस्कृत परंपरा का अगला चरण अनुशीलन की पुष्टि से विशिष्ट, कारयित्री प्रतिभा से परिपूर्ण और सर्वाधिक महत्वपूर्ण है। इसकी गौरवमयी शुरुआत आचार्य दंडी से हुई, हालांकि आचार्य दंडी के 'काव्यादर्श' और आचार्य भामह के 'काव्यालंकार' का अगर हम ध्यानपूर्वक अनुशीलन करें तो यह पता चलता है कि वाद-विवाद-संवाद का क्रम जारी था। यह कई स्थलों पर देखा जा सकता है जैसे मार्गों के संदर्भ में, अलंकारों के संदर्भ में आदि (दंडी : १९५८)।

मौलिक सिद्धांतों की उद्भावना की दृष्टि से यह चरण इतिहास में बड़ा ही सुनहला है। इसलिये इसे स्वर्णकाल या आदर्शकाल अथवा सृजनात्मक काल के नामों से पुकारा जाता है। कारण कि, फिर से ऐसे मौलिक सिद्धांतों की उद्भावनायें बाद के समय में नहीं दिखीं। दूसरे, यह चरण बाद में आने वाले आचार्यों के लिये आदर्श रूप में उपस्थित हुआ। सृजनात्मकता से भरे इस चरण ने आदर्शों की उपलब्धि की।

सृजनात्मकता से ओत-प्रोत इस चरण में एक ओर विष्णुधर्मोत्तरपुराणकार और अग्निपुराणकार काव्य पर आनुषंगिक रूप से विचार कर रहे थे, तो दूसरी ओर सेक्युलर नजरिये और शुद्ध शास्त्रीय दृष्टिकोण से विचार विमर्श हो रहा था। आचार्य भामह ने 'काव्यालंकार' में, आचार्य उद्भट्ट ने 'काव्यालंकारसारसंग्रह' और आचार्य रुद्रट ने 'काव्यालंकार' में काव्य के विभिन्न सौंदर्य-परक साधनों का विवेचन किया और इन्हीं में काव्य को समग्र रूप से प्रस्तुत करने का प्रयत्न किया; अन्य तत्त्वों का समाहार भी किया; ग्रंथों के नाम भी अलंकार से ही संबंधित रखे गये। इस प्रकार अलंकार-मत को मानने वाले अनुयायी उभर कर सामने आने लगे। ऐसा लगने लगा कि काव्य मीमांसा में आलंकारिकों का एक अलग वर्ग ही बन गया और इस प्रकार अलंकार संप्रदाय की स्थापना हुई। यही नहीं, इस विवेचन के आधार पर शुरू-शुरू में काव्यशास्त्र को 'अलंकारशास्त्र' के नाम से भी अभिहित किया जाने लगा। लेकिन इससे यह फायदा भी हुआ कि काव्य के स्वरूप को उभारने का प्रयत्न किया जाने लगा।

इसी क्रम में दूसरी ओर आचार्य दंडी के पश्चात् आचार्य वामन ने काव्य की अभिव्यक्ति में सौंदर्य के प्रसाधन मार्ग अथवा रीति तथा उसमें अन्तर्भूत दस गुणों पर विशेष बल दिया और रीति को गुण सहित एक वाद के रूप में प्रतिष्ठित कर संपूर्ण काव्यत्व को उसमें समाहित कर लिया (वामन : १९५४)।

इस प्रकार काव्य की उद्दिष्ट अभिव्यक्ति की सिद्धि में प्रारम्भ में गुण और अलंकारों को विशिष्ट स्थान दिया गया। काव्य-रचना में इन दोनों पद्धतियों का प्रयोग पर्याप्त मात्रा में प्रयोजन को सिद्ध करने वाले समझे गये। इन दोनों पद्धतियों का प्रयोजन काव्य में दोषों का निवारण, गुणों की सिद्धि और अलंकारों का योग था। परवर्तीकाल में आचार्य मम्मट के काव्यलक्षण का आदर्श यही बने।

चूंकि काव्य मीमांसा की अविरल और अखण्ड परंपरा से यह चरण उद्भूत होता है, अतः स्वाभाविक था कि सारा ध्यान काव्य पर ही केन्द्रित होता और व्यवहार में ऐसा ही हुआ। आचार्य भामह और आचार्य दंडी ने काव्य के वस्तुनिष्ठ विश्लेषण की परंपरा शुरू की। भामह ने ही सबसे पहले काव्य भाषा का प्रश्न उठाया और इसे व्याकरणिक भाषा, तर्क एवं शास्त्र की भाषा से भिन्न कहा। काव्य की स्वायत्तता की प्रतिष्ठा ही उनका ध्येय था। उन्होंने काव्य-प्रत्यक्ष और काव्य-अनुमान का विश्लेषण किया। काव्य-न्याय की प्रतिष्ठा ही उनका ध्येय था। आचार्य वामन ने सबसे पहले 'सौंदर्य' का प्रश्न उठाया। उन्होंने अलंकार को ही सौंदर्य कहा। आचार्य रुद्रट ने अलंकार और अलंकार्य में भेद किया। आज की शब्दावली में इसे काव्य के वस्तु एवं रूप के सम्बंधों का प्रश्न कहा जा सकता है। यह काव्य मीमांसा सम्बंधी चिन्तन का अगला चरण है। आचार्य भामह ने सबसे पहले काव्य का लक्षण प्रस्तुत किया और आचार्य दंडी ने काव्य-शरीर एवं इससे आगे जाकर आचार्य वामन ने काव्यात्मा का प्रश्न उठाया। अर्थात् अब काव्यत्व की खोज गंभीरतापूर्वक प्रारंभ हुई।

उपरोक्त आलंकारिकों के अतिरिक्त, अन्यत्र, 'नाट्यशास्त्र' के प्रसिद्ध रस-सूत्र की व्याख्या करने वाले आचार्य भट्टोल्लुट एवं आचार्य शंकुक प्रभृति विद्वान भी विद्यमान थे। इन्होंने साहित्य के सौन्दर्यशास्त्रीय तत्त्व रस के महत्व को उसकी महत्वपूर्ण व्याख्या के द्वारा प्रकाशित करने का प्रयास किया। आचार्य उद्भट्ट, आचार्य वामन, आचार्य रुद्रट जैसे मर्मज्ञों पर भी इनका प्रभाव पड़ा। इनकी रचनाओं से (उद्भट्ट आदि) से यह परिलक्षित होता है। यही नहीं, क्रमशः इनका बढ़ता हुआ प्रभाव भी दिखता है। परंतु इस समय तक रस-पद्धति का विवेचन मुख्यतः नाटक तक ही सीमित था। आचार्य रुद्रट ने आचार्य उद्भट्ट के 'नव नाट्ये रसाः स्मृताः' (उद्भट्ट आचार्य, १९६६) का संशोधन किया और 'नव काव्ये रसाः स्मृताः' की घोषणा की। यही नहीं, अपने पहले के आलंकारिकों के द्वारा लक्षित समाहित, प्रेय, भाविक, रसवत्, जैसे अलंकारों का नाम तक नहीं लिया।

ध्वनि संप्रदाय के प्रतिष्ठापक आचार्य आनंदवर्द्धन को ही यह श्रेय जाता है, कि उन्होंने काव्य-मीमांसा में ध्वनि के अन्तर्गत रस को प्रतिष्ठित किया; रस को स्वायत्त रूप में प्रकाशित किया। उन्होंने ध्वनि को काव्य की आत्मा मानकर एक ओर आलंकारिकों की वाह्य साधना को आलोचना का विषय बनाया तो दूसरी ओर रस-पद्धति की अव्याप्ति का भी परिहार किया। ध्वनि की प्रतिष्ठा के द्वारा उन्होंने यह भी व्यंजित किया कि नाटक की तरह कविता में भी और उसकी मीमांसा में भी रस के तत्त्वों की उपेक्षा नहीं होनी चाहिये। इस प्रकार नाटक में जिन रस सम्बंधी पद्धतियों की पहले से व्यापक मान्यता प्राप्त हो चुकी थी, उन्हीं का अनुप्रयोग काव्य में भी होने लगा। अर्थात् काव्य-मीमांसा की यह प्रवृत्ति नवीन थी। इस का परिणाम यह हुआ कि काव्य-मीमांसा में बड़े व्यापक पैमाने पर परिवर्तन घटित हुआ। रस को काव्य तत्त्व के अनुकूलन हेतु अभिव्यक्ति की साधन रूपा ध्वनि-मत को आविष्कृत किया गया। रस ही नहीं, वरन् वस्तु ध्वनि और अलंकार ध्वनि जैसे भेदों के द्वारा ध्वनि-मत की परिधि में वस्तु और अलंकार भी सिमट गये।

इसी के साथ ही गुण और रीति के स्थान का भी निर्धारण किया गया। आचार्य आनंदवर्द्धन ने अपने से पूर्व के आचार्यों के

चिन्तन का सूक्ष्मातिसूक्ष्म अन्वीक्षण कर सबका सह-सम्बन्ध ध्वनि तथा रस के साथ स्थापित किया। इस प्रकार अब तक की चली आ रही काव्य-मीमांसा परंपरा के समन्वय से एक व्यापक सिद्धांत की स्थापना का प्रयत्न किया गया। रस-ध्वनि सम्बंधी चिन्तन के कारण काव्य-मीमांसा की परिधि में मुक्तक कविताओं को भी उचित स्थान मिलने लगा, जहाँ विभाव-योजना सम्यक् रूप से संभव नहीं हो पाती थी। ध्वनि-मत को ही यह श्रेय प्राप्त है कि उन्होंने शब्द-शक्तियों का सूक्ष्म विश्लेषण किया। अर्थ-मीमांसा की इस पद्धति की प्रासंगिकता आज तक ज्यों-की-त्यों बनी हुई है। यही नहीं, उन्होंने निर्द्वन्द्व रूप से और ऐकांतिक रूप से काव्य-हेतुओं में प्रतिभा एवं काव्य-प्रयोजन में आनंद को स्थान दिया।

इस प्रकार सृजनात्मकता से भरे इस चरण के अन्त में काव्य का स्वरूप निश्चित हुआ-काव्य की आत्मा ध्वनि; उसके आश्रित रहने वाले धर्म-गुण; अलंकार काव्य के अंगभूत शब्दार्थ के धर्म हुए और रीति को संघटना या अवयव संस्थान की तरह माना गया।

इस प्रकार काव्य-मीमांसा की संस्कृत परंपरा का यह काल श्रेष्ठतम प्रमाणित हुआ। परवर्ती काल में यही आदर्श सिद्ध हुए। मौलिकता की दृष्टि से परवर्ती काल में मुख्य रूप से आचार्य कुंतक एवं गौण रूप से आचार्य क्षेमेन्द्र ही हुए।

काव्य-मीमांसा की संस्कृत-परंपरा का अगला और बड़ा ही महत्वपूर्ण चरण आचार्य आनंदवर्द्धन के बाद से शुरू होता है। हालांकि विद्वानों ने आचार्य आनंदवर्द्धन को ही धुरी मानकर उनके बाद के समय को निर्णयात्मक काल के नाम से अभिहित किया है। लेकिन, यह आंशिक सत्य है। क्योंकि आचार्य आनंदवर्द्धन के बाद भी मौलिक उद्भावनाओं का सर्वथा अभाव नहीं रहा। दूसरे, 'ध्वन्यालोक' में जिस प्रकार से काव्य के प्रभेदों की व्यवस्था की गई है, उसके अन्तर्गत विवक्षित तथा अविवक्षित दोनों ही स्थितियाँ हैं। विवक्षित के दो पक्ष हैं: प्रधान और अप्रधान। वस्तु तथा अलंकार तो वाच्य भी हो सकते हैं परंतु रस सदा प्रतीयमान ही होता है।

वस्तुतः यह समय वाद-विवाद-संवाद का था। आचार्यों की प्रतिभा के उन्मेष का यह दूसरा पहलू था। आचार्य आनंदवर्द्धन द्वारा प्रतिपादित ध्वनि मत की बारीकियों को एक निश्चित रूप दिया गया, जिसकी परिणति यह हुई कि 'ध्वनिप्रतिष्ठापकपरमाचार्य' मम्मट ने अपने 'काव्यप्रकाश' में ध्वनि मत को एकमात्र मत के रूप में जड़ीभूत कर दिया। इस संदर्भ में आचार्य मम्मट पूरी तरह सफल रहे। उनके बाद में आने वाले अधिकांश आचार्यों ने इसी मत को मान्यता दी और प्रामाणिक भी माना। खंडन-मंडन के इस काल में जो भी नवीन मत आविर्भूत हुए, उन्हें वस्तुतः स्वतंत्र मत के रूप में नहीं जाना जा सकता। दूसरे, उनको मान्यता देने वाले नहीं रहे।

काव्य-मीमांसा की संस्कृत परंपरा की यह विशेषता कही जा सकती है कि कोई भी मत अपने में भले ही सुव्यवस्थित या व्यापक रूप में प्रस्तुत हुआ हो, लेकिन उसे बगैर आलोचनात्मक विवेक के स्वीकार नहीं किया गया। इस सम्बंध में आचार्यों की प्रतिभा सराहनीय रही। कुछ आचार्य ऐसे हुए जिन्होंने आचार्य आनंदवर्द्धन की काव्य-मीमांसा सम्बंधी मान्यता को स्वीकार नहीं किया। आचार्य कुंतक ने अपनी मान्यताओं को प्रस्थापित करने के लिये आचार्य भामह की वक्रोक्ति सम्बंधी मान्यताओं से संकेत ग्रहण करते हुए उसका परिष्कार कर और उसे व्यापक बनाते हुए अपने वक्रोक्ति मत को स्थापित करने का प्रयास किया। आचार्य भट्ट नायक ने रस-सूत्र की नई व्याख्या तो प्रस्तुत की ही, साथ-ही-साथ ध्वनि-मत के विरोध में भी अपना स्वर ऊँचा किया। उनके ही समकालीन आचार्य अभिनव गुप्त के गुरु भट्टतोत ने भी रस-सूत्र की नई व्याख्या प्रस्तुत की और ध्वनि-मत का समर्थन किया। आचार्य महिम भट्ट ने तर्कशास्त्र के सिद्धांतों के आधार पर ध्वनिवाद को खंडित करने का प्रयास किया। आचार्य कुंतक भी अभिधावादी आचार्य थे। उन्होंने लक्ष्य-व्यंग्य अर्थ की सत्ता मानते हुए भी उसका अन्तर्भाव वाच्य में ही कर लिया। उन्होंने कविता के जीवित रहने का कारण वक्रोक्ति को माना। प्रासंगिकता की दृष्टि से आचार्य कुंतक का वक्रोक्ति-मत इस काल की महत्वपूर्ण उपलब्धि है। यह एक वस्तुनिष्ठ सिद्धांत है और काव्य की आधुनिक भाषिक अवधारणा के निकट है। दूसरे, उन्होंने कविता को स्वायत्त रूप में प्रतिष्ठित किया। काव्य-मीमांसा की संस्कृत परंपरा में आचार्य कुंतक ही ऐसे आचार्य थे, जिन्होंने सबसे पहले

कविता को कवि-स्वभाव से जोड़ा। यहाँ यह उल्लेखनीय है कि ध्वनि-मत विषयपरक भी है।

लेकिन ध्वनि-मत को प्रतिष्ठापित करने में आचार्य अभिनवगुप्त का योगदान विशिष्ट है। उनके अभाव में ध्वनि-मत को मान्यता एवं लोकप्रियता न मिल पाती। उनके 'लोचन' की समानता पतंजलि के 'महाभाष्य' से की जा सकती है। उन्होंने अपनी गहराई तक देखने वाली प्रज्ञा और परिपक्व विवेचना-शक्ति के द्वारा ध्वनि सम्बंधी जितनी भ्रांतियाँ और आक्षेप थे, उसको जड़ से उखाड़ फेंका और 'अभिनवभारती' के द्वारा रस की प्रतिष्ठा को अकाट्य रूप से स्थापित किया।

उधर आचार्य क्षेमेन्द्र ने 'औचित्यविचारचर्चा' के द्वारा औचित्य-मत की स्थापना की और औचित्य को ही रस की आत्मा कहा (क्षेमेन्द्र, १९३३)। लेकिन बाद में आने वाले किसी भी आचार्य ने इस की चर्चा तक नहीं की और 'औचित्यविचारचर्चा' क्षेमेन्द्र तक ही सीमित रह गई।

इसी काल में भोज ने शृंगार रस को रसराज के रूप में प्रतिष्ठित करने का प्रयास किया और काव्य के तत्त्वों का वर्णन एवं विवेचन किया। धनिक-धनंजय जैसे चिन्तकों ने नाट्यशास्त्र पर ग्रंथ लिखा। आचार्य मम्मट ने ध्वनि-मत के विरोधियों को निरर्थक सिद्ध किया और ध्वनि-मत को सभी तरह से पुष्ट किया। उन्होंने इसे इतने दृढ़ आधारों पर व्यवस्थित और व्याख्यायित किया कि बाद में आने वाले आचार्यों ने ध्वनि-मत को खण्डित करने के बारे में न सोचा और न ही साहस किया। यहीं अलंकारवादी आचार्य राजानक रुच्यक के द्वारा ध्वनि-मत का समर्थन करना उल्लेखनीय है। ध्वनि के विरोधियों में मुकुल भट्ट भी महत्वपूर्ण थे।

काव्य-मीमांसा की संस्कृत परंपरा के इस चरण में एक उल्लेखनीय बात यह रही कि अब काव्य के तत्त्व विशेषीकृत हुए और उसी के अनुरूप काव्य के एक-एक अंग पर चिन्तन होने लगा। पहले प्रायः पुस्तकों का नामकरण 'अलंकार' शब्द के जुड़ने से होता था और अब ग्रंथों के नाम जो रखे गए वे विशिष्टताओं के आधार पर थे, जैसे- 'ध्वन्यालोक', 'अभिनवभारती', 'ध्वन्यालोकलोचन', 'हृदयदर्पण', 'व्यक्तिविवेक', 'वक्रोक्तिजीवित', 'अलंकारसर्वस्व' इत्यादि। ये इस युग के उज्ज्वल एवं अमूल्य रत्न हैं। इनमें सृजनात्मक गंभीरता देखते ही बनती है। सभी आचार्य मेधावी थे। आचार्य महिम भट्ट की तर्कशीलता देखते ही बनती है। आचार्य आनंदवर्द्धन की उद्भावना शक्ति; आचार्य अभिनवगुप्त की विवेचनशीलता; आचार्य भट्ट नायक का रस-सूत्र सम्बंधी मौलिक भाष्य तथा साधारणीकरण व्यापार जैसी अवधारणा; आचार्य कुंतक का आलोचनात्मक विवेक जैसे तत्त्व इनकी असाधारणशीलता को ही व्यंजित करते हैं।

इस काल में काव्य का स्वरूप निश्चित हुआ-काव्य की आत्मा रस, उसके धर्म गुण; शोभावर्धक धर्म अलंकार; रीति-संघटना और सब में औचित्य अर्थात् सभी अंगों का उचित संघटन।

काव्य-मीमांसा की संस्कृत परंपरा का अगला चरण हासोनुखी अवस्था को व्यंजित करता है। आचार्य मम्मट के बाद से इस चरण की शुरुआत होती है और विश्वेश्वर पंडित के साथ समाप्त हो जाती है। वस्तुतः व्याख्या के माध्यम से परंपरा को जीवित रखने की परिपाटी को ही इस चरण की मुख्य विशेषता के रूप में जाना जा सकता है। जितना लंबा यह चरण है उससे यही व्यंजित होता है कि यह काव्य-मीमांसा की गौरवमयी संस्कृत परंपरा के अवशिष्ट के समान है। यह परंपरा बीच-बीच में बुझते दीपक की लौ के समान भूके की तरह अत्यंत तीव्र-सी भी दिखने लगती है।

अब मतों को व्याख्या के माध्यम से परिष्कृत किया गया। प्रायः आचार्य मम्मट ने जिस प्रकार से काव्य के तत्त्वों को व्यवस्थित किया था, उसी प्रकार से अन्य आचार्यों ने अपने विचारों को सुव्यवस्थित तथा संक्षिप्त रूप से प्रस्तुत किया। इन आचार्यों के विचारों की मौलिकता सामान्य श्रेणी की है। इस काल में काव्य सम्बंधी मतों की सूक्ष्मताओं तथा बारीकियों पर भी विमर्श हुआ। इस काल की रचनाओं से व्याख्याकारों की निपुणता तथा पैनापन व्यंजित होता है। लेकिन सृजनात्मकता का पता

नहीं चलता।

इस युग में बहुतेरे टीकाकार तथा टीकाओं का भी अनुसरण करने वाले टीकाकार हुए। पहले से प्रस्थापित मतों का विस्तार या छिद्रान्वेषण करना अथवा टीका लिखना जैसे उबाऊ कर्म ही एकमात्र साध्य बन गये। इस काल में ऐसे लोकप्रिय लेखक भी हुए जिन्होंने सामान्य बोध के उद्देश्य से काव्य-मीमांसा की संस्कृत परंपरा को सरल एवं सुबोध बनाने का प्रयास किया। संस्कृत पाठशालाओं से संबंधित ग्रंथ भी इसी साधारण श्रेणी में आते हैं। काव्य का लक्षण प्रस्तुत करने की दृष्टि से आचार्य विश्वनाथ और पंडितराज जगन्नाथ का स्थान बड़ा ही महत्वपूर्ण है। पंडितराज जगन्नाथ तो इस काल की सामान्य प्रवृत्ति की दृष्टि से अपवाद के रूप में दिखते हैं।

इस युग में कुछ आचार्यों जैसे हेमचन्द्र, विश्वनाथ कविराज, जयदेव आदि ने काव्य के परंपरा प्राप्त अधिकांश तत्वों की विवेचना के लिये महत्वपूर्ण ग्रंथों की रचना की। कुछ आचार्यों ने काव्य के विविध अंगों-विशेष रूप से अलंकार एवं रस पर अलग से ग्रंथ लिखे। रूय्यक, जयदेव, विद्याधर और अप्पयदीक्षित जैसे मर्मज्ञों ने अलंकारों पर अपना ध्यान विशेष रूप से केन्द्रित किया। सागरनंदी, रामचन्द्र-गुणचन्द्र पहले आचार्य थे जिन्होंने रस के स्वरूप को सुख-दुख रूप माना और उन्होंने इसके पक्ष में बड़े ही सशक्त तर्क भी प्रस्तुत किये। भानुदत्त के रस विवेचन में भी प्रांजलता है। रूप गोस्वामी ने गौडीय वैष्णव-मत के अनुसार मधुर रस की व्याख्या की और साथ-ही-साथ भक्ति रस की स्थापना की।

इसी बीच कुछ लोगों ने चमत्कार को ही काव्य का स्वरूप या नित्य लक्षण मानना शुरू किया। विश्वनाथ ने 'साहित्यदर्पण' के रस-प्रसंग में अपने पूर्ववर्ती विद्वान धर्मदत्त के आधार पर यह सूचना दी है:

तदाह धर्मदत्तः स्वग्रन्थे -
रसे सारश्चमत्कारः सर्वत्राप्यनुभूयते।
तच्चमत्कार सारत्वे सर्वत्राप्यद्भुतो रसः।
तस्माद्दभुतमेवाह कृतीनारायणो रसम्।

अर्थात् सब रसों में चमत्कार सार रूप से प्रतीत होता है और चमत्कार (विस्मय) के सार रूप (स्थायी) होने से सब जगह अद्भुत रस ही प्रतीत होता है, अतः पंडित नारायण केवल एक अद्भुत रस ही मानते हैं। (विश्वनाथ, १९५६)।

वस्तुतः यह हासोन्मुखी अवस्था का द्योतक है।

राजशेखर की परम्परा को आगे बढ़ाते हुये अरि सिंह, अमरचन्द्र, देवेश्वर आदि ने कवि-शिक्षा विषयक ग्रंथ लिखे और इसके द्वारा इस विषय को व्यवस्थित और लोकप्रिय बना दिया। हिन्दी साहित्य का रीतिकाल इससे भी प्रेरित हुआ। वीरेश्वर पाण्डेय का 'अलंकार कौस्तुभ' पांडित्य परंपरा को ही प्रमाणित करता प्रतीत होता है। नागेश भट्ट बड़े मेधावी पंडित थे। इस काल के सर्वोत्तम उपलब्धि के रूप में पंडितराज जगन्नाथ प्रतिभा सम्पन्न और मौलिक आचार्य के रूप में दिखते हैं। इन्होंने एक बार फिर से ध्वनि-मत को ही प्रतिष्ठित किया और चित्र-काव्य का खण्डन किया। हालांकि उनका ग्रंथ 'रसगंगाधर' अधूरा ही रह गया। लेकिन, उस अधूरेपन में भी पंडितराज जगन्नाथ की तर्क शैली और विवेचन शैली की प्रौढ़ता दिख ही जाती है। काव्य-मीमांसा की संस्कृत परंपरा की समाप्त प्रायः वेला में लिखे जाने पर भी गंभीरता तथा विद्वता की दृष्टि से आचार्य अभिनवगुप्त एवं आचार्य मम्मट जैसे आचार्यों की याद कराते प्रतीत होते हैं।

काव्य-मीमांसा की संस्कृत परंपरा के स्वर्णिम अतीत को देखते हुए सहसा यह प्रश्न उठना अस्वाभाविक नहीं जान पड़ता कि यह परंपरा आखिरकार लुप्त कैसे हो गई? रस-सूत्र के भाष्यकारों में भट्टनाटक और अभिनवगुप्त, अलंकार सम्प्रदाय के प्रवर्तक आचार्य

भामह और प्रमुख पोषक उद्भट एवं रुद्रट, रीति मत के प्रतिष्ठापक आचार्य वामन, ध्वनि संप्रदाय के प्रवर्तक आचार्य आनन्दवर्धन और प्रमुख पोषक आचार्य मम्मट, वक्रोक्ति मत के प्रतिष्ठापक आचार्य कुन्तक तथा औचित्य मत के प्रतिष्ठापक आचार्य क्षेमेन्द्र जैसे काव्य मीमांसक कश्मीर के रहने वाले थे और ये सभी बारहवीं सदी से पहले हुए। अर्थात् जब कश्मीर में इस्लामी सत्ता की स्थापना नहीं हुई थी। यहाँ पर यह ध्यान जाना स्वाभाविक है कि कश्मीर में उस समय के आस-पास व्यापक पैमाने पर धर्मान्तरण की प्रक्रिया चली। काव्य मीमांसा की संस्कृत परंपरा के स्वर्णिम अतीत को ध्वस्त करने में इस प्रक्रिया का भी योग कहा जा सकता है। आचार्य मम्मट के बाद पंडितराज जगन्नाथ एक अपवाद के रूप में ही दिखते हैं-इसका उल्लेख पहले हो चुका है। दूसरे, रचना और शास्त्र में दूरी बहुत बढ़ चुकी थी। एक तो संस्कृत काव्य-मीमांसक अपने विवेचन के केन्द्र में ज्यादातर संस्कृत साहित्य को ही रखते थे-प्राकृत और अपभ्रंश या अन्य भारतीय भाषाओं को कम।

संस्कृत को छोड़कर मध्ययुग की अधिकांश भारतीय भाषाओं के साहित्य का कथ्य एवं रूप या संरचना अपने समय से संश्लिष्ट है। अतीत के संस्कृत साहित्य या संस्कृत साहित्य-शास्त्र से इसका सम्बंध महज रूढ़ि के स्तर तक सीमित है। बारहवीं सदी के बाद का संस्कृत काव्यशास्त्र ऐसा दिखता है जैसे कि अलग-अलग रूप से शास्त्री या आचार्य रचना की जीवंत परंपरा से कटकर लक्षण ग्रंथ लिखने में लगे हुये हों। कवि-शिक्षा से सम्बन्धित ज्यादातर ग्रंथ भी इसी तथ्य की पुष्टि करते हैं। भक्ति आन्दोलन के समय का साहित्य के अधिकांश लक्षण स्वतन्त्र रूप से विकसित हुए। उदाहरणार्थ, निर्गुण संतों के साहित्य का कथ्य-रूप, या सूर साहित्य का कथ्य-रूप लें या पद्मावत की संरचना। तुलसी का मानस भी परंपरागत संरचना से काफी हद तक मुक्त है और उनके शेष साहित्य की भी स्थिति कमोबेश यही है।

काल के दरवाजे पर जैसे ही आधुनिकता ने दस्तक दिया वैसे ही एक बार फिर से काव्य-मीमांसा की संस्कृत परंपरा के गौरवशाली रूप का उद्धार करने का प्रयास किया गया। लेकिन, चूँकि औपनिवेशिक संस्कृति और विचारधारा भी सामने आकर खड़ी हो चुकी थी और खड़ी ही न हो सकी थी बल्कि अपना जड़ जमा चुकी थी। इसलिये एक तो जो कुछ बचा भी वह उसी रूप में नहीं रहा जो रूप काव्य-मीमांसा की संस्कृत परंपरा में था। दूसरे, काल ने अपना एक विशेष रूप प्रकट किया। जैसा कि, हमेशा से होता आया है। तब यह जरूरी था कि काव्य-मीमांसा की संस्कृत परंपरा अपने उसी रूप में नहीं रह पाती।

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दंडी, (१९५८) : काव्यादर्श, व्याख्याकार, आचार्य रामचन्द्र मिश्र, प्र० चौखम्बा, वाराणसी।

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Lieten, G.K. (2004) : 'Child Labour in South Asia : An Account of Numbers', in G.K. Lieten, Ravi Srivastava and Sukhadeo Thorat (eds.), *Small Hands in South Asia : Child Labour in Perspective*, Manohar, New Delhi : 37-59.

c) **Whole Book**

Chatterje, S. K. (1986): *Emergence of Dynamic Economy*, Associated Publishing House, New Delhi.

d) **Report/Bulletin**

Chippendale, G. . and Wolf, L. (1981) : 'The natural distribution of Eucalyptus In Australia', Australian National Parks and Wildlife Service, Special Publication No. 6, Canberra.

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