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## *God is Eternal. Nietzsche is Dead.*

Amit Waghmare

### **Abstract**

Through this Paper, I have attempted the ambitious task of transfiguring Nietzsche's philosophy with the aid of Vaiṣṇava philosophy. For this purpose, I have resorted to a poetic style of writing reminiscent of Nietzsche himself in his work "Thus Spoke Zarathustra" on which the current work is based. The entire piece is a fictional monologue addressed to Zarathustra. In the first section named 'Assailant Zarathustra', I have tried to put forward Nietzsche's position and in the following section, I have posited the arguments in a counter-positive way which are based on Vaiṣṇava philosophy.

I have specifically chosen "Thus spoke Zarathustra" for my task, because, the opportunity felt so appealing to me to venture into a highly unlikely breathing space in Nietzsche's psyche with the aid of his characterization of Zarathustra; which otherwise would have been very difficult as there is always a chance of getting entangled in his enigmatic aphorisms! Through Zarathustra, Nietzsche exhibited his entire domain of spirituality and 'will' to reach a higher purpose which I feel could become a victim of being easily neglected if not pondered upon with an aim to make it reach the 'highest'. So mine is an attempt to build up on the terminologies of bridge and Superman and extend a ladder to an inconceivable realm that has perplexed the living entity since creation and has been his constant light in the darkness, even though he believes it to be true sometimes but unfortunately forgets in the wake of his next life! And rather than greedily going after 'new knowledge' which is bound to get drowned in its own meaninglessness, it's time to extend the limits and rise above mediocrity, which Nietzsche himself had demanded from us, the 'New Philosophers'.

### Introduction

The name of the article may appear to be stern and provocative to many but I want to be very clear that there is neither any malice in it nor intention of displaying any sort of disrespect. Friedrich Wilhelm Nietzsche as we all know is one of the most radical thinkers of the past century and surely his way of philosophising will tremble the surface of the earth for centuries to come. His writings paved the way for postmodernism and have had a huge turnaround in how we analyse history today as compared to the generations before him. He stands out among philosophers with his use of satire and unique style, of which I am a huge admirer.

This entire work is based on Nietzsche's "Thus spoke Zarathustra", in which through the character of Zarathustra, Nietzsche has expressed his disappointment about how humanity is faring, which circumstances have diseased humanity's progress, which path would raise them up and his bright expectations considering the human fate. Throughout the work Nietzsche alludes to the advent of the 'Superman' which he considers will be the summit of mankind and passionately through Zarathustra's teachings, describes the requisites and qualities that a person should acquire in himself to reach at that apex. He presents Man along with his history as a bridge to attain the goal i.e., Superman. Along with the 'eternal return of all things', Nietzsche talked about God and most famously quoted the statement: 'God is dead', which of course gives away my inspiration for the title.

I have specifically chosen "Thus spoke Zarathustra" for my task, because, the opportunity felt so appealing to me to venture into a highly unlikely breathing space in Nietzsche's psyche with the aid of his characterisation of Zarathustra; which otherwise would have been very difficult as there is always a chance of getting entangled in his enigmatic aphorisms! Through Zarathustra, Nietzsche exhibited his entire domain of spirituality and 'will' to reach a higher purpose which I feel could become a victim of being easily neglected if not pondered upon with an aim to make it reach the 'highest'. So mine is an attempt to build up on the terminologies of bridge and Superman



and extend a ladder to an inconceivable realm which has perplexed the living entity since creation and has been his constant light in the darkness, even though he believes it to be true sometimes but unfortunately forgets in the wake of his next life! And rather than greedily going after 'new knowledge' which is bound to get drowned in its own meaninglessness, it's time to extend the limits and rise above mediocrity, which Nietzsche himself had demanded from us, the 'New Philosophers'. Finally, because of lack of austerity and penance, I am not qualified enough to preach about God yet! But neither are those who refute him with their inebriated senses and substandard sciences.

#### **Assailant Zarathustra**

"What is great in man is that he is a bridge and not a goal: what is loveable in man is that he is an overgoing and a downgoing". For Oh Zarathustra (Z) a man who hasn't touched the bottom cannot reach the summit and a man who has always been at the summit hasn't reached there. You have always wanted to take us up another level and for that you showed your desire to be patient. You were determined and focused on the path that was exerted upon you, you didn't care how many of them would follow, for you always knew the quality of your preaching. O what scoundrels they are that they don't want to listen to you! There will definitely come a time when they will start to miss you. You Oh Z stand calm on the cold mountains with your hands outstretched and gushing cold wind unable to flap your black cape, you need time to hibernate before your return to the rabble down below. A few good souls crave for your wisdom, they want to embrace your thoughts and proceed a new life out of it. What a wish to say that your wisdom may go with your pride but how truthful you are Z that you know, wisdom may sometimes forsake you hence in that case you want your pride to run away with your folly! To open the doors of light for others is a difficult task in which to progress, but being meek and humble is the approach always appreciated.

Z you proclaim to your student that spirit being imperishable is only symbolic to you, how can we understand imperishable hence we take it as a parable. Body is what we have at our disposal and it is advised to keep it healthy. it can be risky what we opt for when it is not functioning well and wealthy. There are many who despise this body and plan on reaching for the stars they say they want to release their 'self' from the captivity of this vessel i.e., their body. "Behind your thoughts and feelings there is a mighty lord, an unknown sage-it is called 'self' — it dwells in your body, it is your body. To perish thus wishes your 'self' hence you despise the body". Long have we ventured our thoughts in the unfathomable depths of the outside, it's time to come inside, dwell inside and see what matters do we have in our own hands.

Oh Z to man clings your will, with chains do you bind yourself to man, because you are pulled upwards to the Superman: for there does your purpose lie. Man stood across the sweep of time, he reinvigorated his thoughts and possessed a youthful spirit, who else but in he we see the light that will shine and bring forth Superman's might. Vanity always interests your tragic mind, where pride is wounded you say there grows something better than pride. Therefore you are forbearing to the vain, because they are the physicians of your melancholy and keep you attached to man as to a drama. The down-going ones do not preserve themselves and can go beyond, they seem to hold the key for the bridge towards Superman. Their thoughts become transparent to themselves — they can understand the truth better without any inhibitions, it's time for them to bless themselves and start their over-going.

Z when you reveal your heart entirely to your friends you say: "if there were gods, how could I endure it to be no God! Therefore there are no gods". Throughout history when people were unable to keep up with the norms, their weak and feeble mentality gave away the path and thus emerged the word 'God'. Will to create has been the engine running man to the far reaches of the globe, well what would remain to create? If there were gods! Long has our progress been tarnished when we put aside everything and pray to God, refrain from

getting abducted by the faint-hearted devil in the corner of your heart who may persuade you towards God. On his name when everything was up for grabs, they used him, played him and sucked him dry: when he showed them pity and asked them to reignite the faith anew, well, they left him to die! They killed him and now they laugh him off as a joke withering away in some ancient times. Fate Z seems to always keep you up on your toes, so why should we conjecture a thought about God and kneel before someone when you already have fate as your automatic carrier. "It is he, however, who creates Man's goal and gives to the earth its meaning and future; he only effects it whether anything is good or bad who works towards becoming a creator". "Dead are all Gods": now we want the Superman to live.

"Abandoned to the favor, the spirit and the madness of every generation that comes, and reinterprets all that has been as its bridge!" There has always been a longing in man to reach the realm of his dreams and how to travel the path from this world to that? Well of course he will need to take help from the bridge. Every man of intellect aims to construct one of his own, he even wants a river setting with all the florals in bloom and don't forget to mention the guardian angel providing support from below. He wishes to climb from the deplorable to the land of heavenly abode. "So seems Z to speak again the word of the great noontide of earth and man, to announce again to man the Superman, so wills your eternal fate: as announcer do you perish! The hour now has come for the down goer to bless himself. Thus- ends Z your downgoing". You created the bridge with your raging thought, destined for happiness and always ready to dance, with Man as the spearhead of your attack you surely wish to accomplish Superman. But we already know that however we plan and construct and play there is always an echo which comes from the well, 'eternal fate' does ring a bell.

"Every moment begins existence, around every 'Here' rolls the ball 'There'. The middle is everywhere. Crooked is the path of eternity". When the burden of life takes its toll. can't imagine for how long we have been pulled away in this slipping roll. Can't just stop with the designated duty for one must go on: if one tries to move against the

circle, well, then on his path misery and delusion will be put on. Thus Z you come again eternally to this identical and selfsame life, in its greatest and its small, to teach again the eternal return of all things. No point in continuing the sobbing and blaming our eternal return as suffering, so let's get on the positive drive and try to embrace whatever may come and thrive. Strive for the top and gather around whatever we have got, make use of the bridge created by man and reach the summit where Superman is, Possibilities are many and achievable with the right attitude, Z preaches; wisdom will guide you to the flight towards the higher men but at least first learn to laugh at yourselves. The soul in being, which plunges into becoming, the possessing soul, which seeks to attain desire and longing. We concise our efforts towards the highest goal and we try to complete this drama by amalgamating Superman in our Role.

**Without The Hand of God above his Head,  
A Preacher Becomes A Pariah**

Never has one Man ran an entire show. it's the supporting cast always moving the wheel who got themselves entangled in him. Can't say with certainty about the power dynamics involved in a reign, this game of creation and destruction has been on for billions of years without holding on to anyone's fame. Man has always been filled with his passions and desires, he clawed his way hither and thither which has simply enough led to disturbances. Living entity came in contact with matter, it got away from the supreme truth, forgot it's real identity and fell into this material hole. This forgetfulness we call it our ego, but as it has come to its being by getting diverted from its rightful path, it should be called 'false ego'! The overgoing and downgoing of man are the fluctuations of the false ego, a fellow whom we can call a rising star, surely must have learned to control its meter. So my dear Z, your wisdom your pride, your folly are a cohesive intricate unit together; if one forsakes you, make the other run with another. Master the interplay of words and make them stick together, for a funny man always knows how to evade the false ego!

Material energy is always loyal to its task of keeping us all in illusion, we bewilder ourselves, accept the false reality because we lack vision. We are part and parcel of the supreme being hence he dwells in all of us, he has even provided a bit of freedom for our individual souls. Freedom, how much do we love it! We went far away to eat the fruit of our desires, instead of accepting him as our guide and making informed decisions, we went ahead perturbed and made him just a watcher. Soul in collaboration with false ego tricks us into different selves. For some that self is a mighty lord, for some an unknown sage and well for most of them it is the devil. Self is not our body, it is eternal and unchangeable. Our body is not a machine which functions because of its intricate internal wiring. Soul is that which keeps the body alive and without soul the body dies. Keep your body healthy enough to support your spiritual might, don't despise it as your future life depends on the deeds it performs and for your soul it is its present site. Spirit is the elixir of life and it doesn't get contaminated by the body, so it is time for us Z to move away from material spirituality.

Get above vanity and your consistent self-loving contemplation, for the human form of life is the closest you can get towards God realisation. Diverting from the truth empties your soul and gives birth to dry speculation, people here get hooked on to each other just because of lack of inspiration. No doubt because of this we always have exciting drama on our hands, we know tragedy is what amuses you Z but let's try to go a further step beyond. God has his own mysterious ways and if he wants to call you closer to him, who knows what kind of unexpected tragedy may befall upon you? But not to get frustrated and bewildered at this juncture is the inkling of a devoted man, he trusts the lord and waits for his mercy to improvise this tragedy into an adventure which God already has for him in his plan. My dear Z, can't just sulk on stories of wounded pride and vanity, verily self-sympathy is a disease which will bring you so close to yourselves that you will start to forget your identity. Trying to find medicine for your melancholia with forbearance towards the vain will only bring you pain. It will just provide you with drip by drip short-

lived intoxication, free yourselves from its clutches and try to find your place in God's constitution.

If demi-gods, extraterrestrial beings and sages who travel through space lie beyond your mind's limited conception, then superman on this material earth must surely describe the stretch of your imagination. Superman will be a joyous fellow with delight for life, he will understand the new possibilities with a cheerful spirit, he will break through the shackles of the age old 'goodness prison', but still after all he will be human all too human! Periodically for eons our planet has been graced by Men way more blessed than the anticipated Superman, but we are reluctant to decipher; our timelines are too brief, for us the past is too bleak, knowledge is valid where the power breeds and Oh well! No surprise then, for us the Greeks are the first philosophers. Crunch the numbers and put on the table your strategy, hey! Where is the data?? Don't forget that you are a slave to technology. God created this creation to bring the slumbered souls out of this material world via liberation; but men here can't stop boasting about their creativity, although it is just a perverted reflection of God's imagination. They steal away the treasures which belong to others and proclaim their superiority with a certain verve, they put ink on the papers of history taking into consideration which dynasty they serve. What is God? It's just a name! They say, it's time to ignite faith in ourselves instead, but god still remains overseeing time and almost all of them are dead. You are correct Z that we should bless the over-going of the capable down-goers for submissive hearing is the prime quality required to understand the scriptures. Resigning to your own fate is definitely an intelligent step in one's evolution, but what is fate? It's nothing but your accidental devotion. Z you teach your supermen to be evilier to counteract the evil world, to learn to lie which will make them know the truth and to be foolish with happiness than be foolish with misfortune. But they will bring only a minuscule relief in the suffering of the earth, this age is doomed for devastation for at least another 4,27,000 years.

Looking outside leads to permutation and combination of material desires in our dreams, but a man who dwells inside gets the chance to experience an inconceivable thing. Bridges and Man have somehow always

shared a romantic relation in time, he built it to connect cities, countries and even continents in his prime. Material bridges won't help man to reach the paradise of his dreams, matter won't work here and we need something transcendental it seems. When we renounce our material claims and surrender ourselves to reach that sacred abode, our journey begins through the supremely knowledgeable bridge which is of course sent by God. The bridge is serenely lucid and deserves respect comparable to God's incarnation. Contemplate and assimilate the language it conveys because its aim is towards mankind's salvation. The soul is eternally bound to change different bodies until it reaches liberation and the cycle of birth and death is a rigorous one which punishes everyone with exhaustion. To break this vicious circle, the living entity must go back to the supreme being and to achieve this, the path is simple, it requires the Lord's remembering. Remembrance of God enlivens the bridge and it comes to you, devotional service is the simplest and most auspicious path which you must always keep in view.

External energy of the material world is illusive and brings you sometimes in an awkward position, if you try to win it over, all your efforts go in vain. Don't be perturbed because the internal energy of the lord works simultaneously at this juncture, go with it and choose the path which will help you elevate. There is always a choice which is near in sight and for the time being will make you stable, but go with the education path which will earn you the choice and it all comes to you when you become able.

Work! Hustle! Create! Get what you want! And enter the race for lording over material nature which currently seems like the only virtue! What is devotion? What will you achieve by sitting idly and chanting before a statue?

Well, it's your impudence that you ask about the statue! Through God emerges unlimited universes of which ours is just an insignificant bubble; he manifests himself in every atom and considering his unimaginable potency that shouldn't be any trouble! So give yourself a chance, don't blind yourselves by running behind the ratio of output/input=gain. Things may start to become clear when you at least try to resonate with God on the same transcendental plane.

So Oh Z, let's get above this spiritual poverty and put a stop to interpreting godly scripture; with remembrance and devotion, hope we find the bridge in near future.

### Conclusion

When Nietzsche wrote "Thus spoke Zarathustra", the world was already under the grasp of material industriosity and technology was taking its baby steps to strangle hold the future society. Nietzsche; being a genius of a philosopher, already prophesied the atrocities of war and brought in open the muddled nature of history and sciences. He therefore tried to direct us towards an elevated path away from that of bondage and as means he prescribed to grasp man's historicity which in turn would bring forth purity and freedom in our psychological capacity. But how can we emancipate ourselves from this material field by using material apparatus? Surely with our mind's power we can't get away from the advanced network of chains laid out by technology, which itself in the foreseeable future is on the verge of humanising itself. Hence there must be an absolute plane beyond material plane which legitimises the being of our soul, takes us out from the mechanical conception of humanity currently programmed into us, gives us the energy to familiarise with the inconceivable and guides us towards itself through the underrated medium of love.

Sometimes an angel is born of the devil, desert can't gobble up a fish nor the ocean an ant, living comes out from the non-living, surrender brings fortune, poison acts as nectar, servitude is favoured to becoming a ruler, and a prayer saves the day! Miracle, absurd, coincidence, luck-through words we try to map the whole, but with inferior senses we can't judge the whole. Through 'science', 'will' 'language' 'history'— we try to fill the gaps, but how can we ever complete the whole without devotion? When it is eternal.

### Notes

Friedrich Nietzsche. *Thus Spoke Zarathustra* an Adaptation Based on the Thomas Common Translation, ed. by Paul Douglas, pp. 7, 18, 50, 119, 124, 135, 137.



*Smallpox and Colonial Gaze : Indian Healing Practices and Belattie Chapah Vaccination in the Bengal Presidency<sup>1</sup>, 1864-67*

Madhu Singh

**Abstract**

The present paper revisits colonial epidemic of smallpox in the Bengal Presidency in the second half of the nineteenth century. Based primarily on the official accounts and medical tracts of the colonial period particularly that of Robert Pringle, Superintendent of Vaccination who promoted vaccination, and J.R. Bedford, Civil Surgeon of Rampur Bauleah, Dhaka who was against the prohibition of inoculation, I will attempt to show that a major paradigm shift occurred in the treatment—from an indigenous deeply embedded prophylactic measure of variolation to *Belattie Chapah* Jennerian vaccination. Under the colonial gaze, the western biomedicine outlawed variolation through legislations despite anti-vaccinationists lobbying for it. By ‘colonial gaze’, I here mean the ways in which colonial administrators, medical physicians and surgeons looked at the native practice of variolation and adopted state-sponsored voluntary vaccination programme in the North-West Provinces and observed the public response to vaccination. I will also show how the colonial gaze fell on the psychological and social spaces of inoculation in which *Sitala* worship was performed.

In the English edition of his classic work *Discipline and Punish*, (1975), Foucault (184-85) stated that “a normalising gaze” manifests the subjection of those who are perceived as objects and objectification of those who are subjected (184-5). This examination or the “ceremony” of objectification constitutes individuality through an administrative form of writing which leaves behind a dense layer of documents such as medical records and student records (189-91). Appropriating Foucault’s idea of a “normalizing gaze”, I propose that “the colonial

gaze” objectified the ‘native’ diseased bodies suffering from smallpox and inscribed a western biomedical prophylactic code on them.

From a large archive of administrative documents on smallpox comprising medical tracts, statistical records, census reports, diaries and journals of the British-ruled India which situate the disease and the diseased in “a network of writing” (Faucault 189), I have focussed primarily on two medical tracts: a thin volume of essays written by Robert Pringle, Superintendent of Vaccination who promoted the colonial enterprise of vaccination and another by J.R. Bedford, Civil Surgeon of Rampur Bauleah, Dhaka who had reservations against prohibiting inoculation uniformly all over India. However, in a major paradigm shift, the indigenous and deeply embedded prophylactic measure of variolation was replaced by *Bilattie chapah* (foreign marking) western vaccine through a series of legislations.

In 1869, Robert Pringle<sup>2</sup> M.D., Edinburgh, Surgeon of HM’s Bengal Army published a slim booklet titled *Papers on Smallpox, Vaccination and &c*<sup>3</sup> containing his paper ‘Smallpox and Vaccination in India, and Chiefly in the Bengal Presidency’<sup>4</sup> written to correct ‘imperfect information’ and ‘inaccuracies’ about a ‘fatal scourge’ smallpox which had perhaps reached his fellow brethren in Britain.<sup>5</sup> He emphasised that the details presented were based on his personal observation as administrative documentation of smallpox became possible only in 1901. The major issues in Pringle’s presentation were: the prevalence and mortality due to smallpox, the native practice of variolation and the Jennerian vaccination, and the voluntary adoption of vaccination by the agrarian social groups in the Himalayan region of the North-West Provinces. In contrast, J.R. Bedford’s 1853 medical tract provided present state of smallpox, vaccination and inoculation in Bengal, the deeply interesting question of public health followed by the arguments of anti-vaccinators lobby who were against outlawing variolation, a deeply embedded, prophylactic measure in many parts of India, mainly in Bengal.

### **Smallpox and Indigenous Prophylactic Measures**

Historically, a preventive measure against naturally acquired smallpox infection appears to have been discovered in India sometime

before AD 1000. The practice followed was to inoculate, either into the skin or by nasal insufflation, scabs or pustular material from lesions of patients. This practice resulted in an infection that was usually less severe than an infection acquired naturally by inhalation of droplets. It is believed that from India, the practice spread to China, western Asia, and Africa and finally, in the early 18th century, to Europe and North America.

Though smallpox was said to be prevalent in India since antiquity, the disease was not given much attention in the Indian medicinal tradition of Ayurveda. According to David Arnold (1988):

Two of the oldest and most revered texts, the *Caraka Samhita* and *Susruta Samhita*, compiled before the fifth century A.D., made only passing reference to an eruptive disease called *masurika* (from the resemblance of the pustule to a lentil, *masura*) and implied that it was only a minor ailment. It has, therefore, been suggested that smallpox either was not present in India when these works were compiled or had yet to assume its more malignant form. Only with later works, like the *Madhavanidana*, dating from the eighth or ninth century, are more detailed descriptions of smallpox to be found, indicating the severity that had by then come to characterise the disease. (125)

It is possible, Arnold states, that the virulence of the disease was not constant but fluctuated with differing viral strains and with changing human susceptibility. (1988: 46) Ralph Nicholson has argued mainly on the basis of literary sources, that small pox was relatively mild in Bengal until the eighteenth century. Maratha raiding and British conquest disrupted the rural society and caused the famines and population movements that favoured the dissemination of smallpox. He also argues, that in these circumstances inoculation would have been neglected, thus removing a hitherto important check on its spread. As the colonial regime withdrew most of the earlier patronage to the indigenous systems of medicine, the *vaidyas* and the *hakims* suffered loss of prestige against western medicine's claims of being a more rational and superior system. Mark Harrison states that the medical

traditions of Ayurveda and Unani lacked “the expansionist and hegemonic aspirations of Western medicine and even the most widely disseminated—*tibb*—adapted to those localities into which it had spread. Other medical cultures (such as Ayurveda) made a virtue of locality and of their organic relationship with places and peoples. (2015:663)

The earliest accounts of inoculation may be seen in the eighteenth century reports of the British doctors who gave details of the eastern mode of treating smallpox. The most widely referred was the account of Dr J. Z. Holwell<sup>7</sup> who was greatly impressed by the “foreign method” of variolation practised in India with “marvellous success”(1). Responding to an observation made by a learned colleague at the College of Physicians that medical cures in many instances were accidental and sometimes emerged from ‘ignorance and barbarism’ such as inoculation, he wrote ironically that “the salutary method of inoculation of smallpox now so happily pursued in England (howsoever it has been seemingly blundered upon) has the sanction of the remotest antiquity.”(2) Following which he presented a detailed observation on functioning of the Brahmin inoculators in colonial India :

Dividing themselves into small parties of three or four each, they plan their travelling circuits in such way so as to arrive at their place of their respective destination some weeks before the return of the disease. They arrived commonly in the Bengal provinces as early as February ... (8)

The inhabitants of Bengal knowing the usual time when the inoculating Brahmins annually return, observe strictly the regimen enjoined, whether they determined to be inoculated or not; the preparation consists only in abstaining for a month from fish, milk, *ghee*. They inoculated from home to home refusing to inoculate anyone had not strictly observed the regimen... (Holwell, 1767 : 14)

In 1850, the usual fee of inoculation was four annas and some rice for the procedure on a boy and two *annas* and some rice for a girl. (James, 1909 : 10)

Holwell closely observed the rituals and practices of inoculation which was performed from the matter from the inoculated pustules of the previous year and not with fresh matter. There were certain rituals, prescriptions and dietary restrictions. The eastern method of cold bathing with gallons of cold water poured over the patient in the morning following the procedure, which continued every morning and evening until the fever came around the close of the fifth day. Then, cold bathing was discontinued until eruptions were seen at the close of the third complete day when fever appeared. The bathing was resumed until the scabs of the pustules dropped off. All pustules were pricked with a fine sharp pointed thorn, as soon as they changed colour while the matter was in a fluid state. Confinement to the house was forbidden. On the contrary, the inoculated were exposed to the air.

In a similar case in 1880, M. Pasteur conducted an experiment on chicken-cholera virus, he observed that the tubes of virus hermetically sealed retained their virulence for months but tubes of virus exposed to pure air gradually and progressively with almost mathematical precision lost their virulence and became innocuous. The microscopic parasite was dead. The oxygen in the air weakened the virus and extinguished its virulence. M. Pasteur concluded that by inherent action of atmospheric oxygen, a natural force which is everywhere present, would be found efficacious in other virus (Collins 1880 : 913).

The diet prescribed for the inoculated was nourishing and cooling seasonal food such as banana, sugar-cane, water-melon, rice, gruel made of white poppy-seeds, and cold water, or thin rice gruel for their ordinary drink. Fish, milk and ghee were prohibited for one month from the day of inoculation. Holy water of the river Ganges was used to wash the pustules to maintain "the piety and solemnity" of the operation and also confidence to the patient. After issuing instructions on diet and a thanksgiving *pooja* to the goddess on their recovery, the operator took his fee, and left for another house. Thus, he was employed from morning until night, inoculating sometimes eight or ten people in a house. Holwell concluded by stating that "since this practice of the East had been followed without variation,

and with uniform success from the remotest known times, it was but justice to conclude, it must have been originally founded on the basis of rational principles and experiment.”(20)

To ensure that the smallpox virus did not spread from the inoculated to the uninoculated, quarantine was mandatory. The inoculated as also the smallpox victims were kept indoors for a period of fourteen to twenty-one days, and visitors were strictly prohibited and ceremonies avoided. In his report J. Murray (1869) stated that in a traditional ‘Hindoo’ household, quarantine was of ‘a very strict order which prevented the spread of contagion:

Hindoos are prohibited by their religion to give alms or food to the poor when inoculation is going on...A friend may not enter the house in his ordinary clothes, but is especially required to have a clean suit on; while any member of inoculated household, who has intercourse with the outside world, is thereby rendered unclean and has to change his clothes and bathe, before he can again enter the sick chamber...Also, a barber was not allowed to call in such a house for fear of infecting his next customer. (Murray, 1869: 7)

Thus, while in quarantine, crossing the boundary could potentially be catastrophic and was totally forbidden.

In Hazareebaugh town of Ranchee Circle in the North-West Provinces and Bengal, after a child was inoculated, the Bengali *baid* continued his attendance on her till she was considered well enough for a ritual bath on the fourteenth day. Besides food, drink and a *buksheesh*, an ordinary operator’s average gain per season was between Rupees 100 to 150 - a good sum in those days. So, inoculation provided him a decent reimbursement for their healing labour. However, when Bengali *baid*s gave up inoculation in face of the government’s opposition to the practice<sup>8</sup>, the wandering low caste vermilion sellers or *sindooriahs*<sup>9</sup> took over. Later, they were employed as government vaccinators and were quite successful in winning over the people for *Belattie chapah* vaccine. Besides the Hindoo *tikaits* of Chyebassa in the ‘Ranchee’ district, the vaccinators came from other castes and creed and were generally residents of the area.

Besides, the prophylactic measure of inoculation, health narratives and healing rituals related to the female deity *Sitala* were common in most parts of India. Though she was not a pan-Indian goddess nor was celebrated extensively in authoritative texts, she was worshipped by in many communities in India. According to Bedford (1853), the Hindoo inhabitants in the North-West Provinces and Bengal content themselves by making a pilgrimage to a celebrated shrine of the goddess *Situla*.<sup>9</sup><sup>10</sup> They believed that an outbreak of small-pox was due to the displeasure of the female deity who presided over this scourge. She was known as *Thakooranee* or the goddess<sup>11</sup>, but the nomenclature could vary in different dialects of the districts. Unfortunately, the numbers assembled at the religious ceremonies to appease the offended deity only spread the contagion further to those villages which had escaped it. According to J.W. Moore (1869), numerous temples devoted to the *Mata* or mother goddess were common also in Rajputana and the people firmly believe variola to be under the control of the Mother goddess *Mata* whose shrine was called 'Seetla Deir' where a fair was held in the month of March and thousands of women and children attend with offerings for the goddess. (*Medical Times and Gazette*, 1869, November, p. 634) Therefore, according to Naraindas (1998), 'the therapeutics was not only in a religious idiom but was a careful and assiduous ritual with *Sitala*<sup>12</sup> as its icon. She was both the disease and the cure; an arrival and a departure; the threat and the succour.'<sup>13</sup>

It was believed that in most places, the Mahamedan population in the villages of Bengal conformed closely to the Hindu customs, and complied with the sanitary restrictions of the ceremonial code already in existence.<sup>14</sup> He added that they were operated by Hindoo inoculators who guided them in all matters connected to the practice. However, he clarified:

I have not heard in any occasion of Mahamedans worshipping *Sittolah* but I believe they go so far as sometimes to procure Ganges water; it is usual for them to place votive offerings on the Ghatt,

in an orthodox manner, so that prayers may be offered to the *Sittolah* by the Hindoo inoculators<sup>15</sup>.

In fact, the Muslim reform movement of Faraizis who were active in Eastern Bengal in the nineteenth century wanted their community to give up un-Islamic practices such as their faith in *Sitala* and act upon their duties as Muslims.

### **The Bengal Prevention of Inoculation Act of 1865<sup>16</sup>, Anti-Vaccinationists and Public Health**

The British Empire's engagement with vaccination was impelled by the necessity to find a western alternative to the indigenous, 'native' practice of variolation or inoculation deeply entrenched in many parts of India in Bengal but not effectively diffused throughout India. As David Arnold (1993) argues that before about 1800 the accounts are largely favourable. He further states:

It seems likely, too, that as variolation fell into official disfavour and measures were introduced for its suppression, the nature of the practice changed, becoming more secretive and devoid of the prohibitions and prescriptions that had contributed to its earlier effectiveness. (126)

Based on the study of such regions, as Brimnes (2004) observed, the history of smallpox prevention in colonial India is often seen as consisting of two phases. Initially, the British looked with sympathy and even admiration on the 'popular' Indian practice of variolation, but after the advent of vaccination they grew increasingly hostile and by the mid-nineteenth century variolation was described as 'a murderous trade'.<sup>17</sup> Though Jenner's vaccine was introduced in India in the early 19th century, according to the 1850 survey of Bengali villagers, the overwhelming majority of the population continued with the traditional variolation rather than with vaccination; the traditional method flourished until the colonial government outlawed it in 1865<sup>18</sup>. Jennerian vaccination was popularised as a superior scientific technology against the indigenous healing practices which were considered inferior, obsolete, and superstitious.



However, in his essay of 1853, J.R. Bedford supported the anti-vaccinationists (who were pro-inoculation) and observed that inoculation was adopted by 85% of the population and a social system for its propagation already existed<sup>19</sup> but as he puts it ironically that the “humane and intelligent men”<sup>20</sup> advocated “such legislative arrangements which may render inoculation penal”(Bedford, 57)<sup>21</sup> His argument was: if the government was asked to implement a sanitary law in order to protect a nation which was *utterly unprotected* by any prophylactic against small pox, vaccination should be chosen, without any doubt, over inoculation, but when such a large proportion of population was already protected by inoculation, we should judiciously hesitate before any such legislation was recommended. The following section outlines the counter-arguments against the government policy of prohibiting inoculation in the nineteenth century.

Contrary to the government’s perception of variolation as ‘a murderous curse’<sup>22</sup>, Dr. Chevers argued against outlawing inoculation. Though prohibition was not a ‘positive evil’, the benefit it offered to the native community at large was very uncertain.<sup>23</sup> The only major disadvantage of inoculation was that the inoculated person became a centre of contagion whereas in vaccination there were no deaths and no contagion — which may not have held true at all times. However, he asserted that prohibiting inoculation in this country was ‘the removal of the only essential safeguard against the small pox which the large population possessed’<sup>24</sup> and therefore its prohibition should be regarded with ‘the utmost distrust and apprehension.’<sup>25</sup>

On a similar note, Dr. Wilson stated that inoculation was not a curse, but a blessing and was so considered in England till vaccination superseded. However, he suggested that only when the people were convinced of the efficacy of vaccination and it became popular with trained vaccinators, inoculation should be prohibited through enactment though this seemed rather impossible at the moment. On the basis of ‘the unanimous opinion of the natives’, he considered outlawing inoculation was ‘a harsh measure’<sup>26</sup> and also pointed out that the spirit of the Bengalees was altogether adverse to any such

forcible change.<sup>27</sup> As mentioned earlier, inoculation was extensively and skilfully practised and protected nearly 90 per cent of the population — those who remained unprotected were partly so from custom or religious prejudice.<sup>28</sup> Therefore, in a situation where the popular sentiment was against vaccination, 'no enactment on the face of the earth could make the entire parents of a district abandon an operation, so long they believed it to be effectual in saving the lives of their offspring.'<sup>29</sup> He warned that if the system of inoculation was 'actively interfered'<sup>30</sup> with, without convincing the natives of the 'superior, or equal efficacy of vaccination'<sup>31</sup> it was possible that their indifference could turn into opposition. Also, whenever a *ticcadar* or inoculator was removed, a vaccinator should be placed at once, otherwise the evil would increase. If inoculation was wholly or partially suppressed and vaccination did not have a similar wider reach, a larger population would be left unprotected, and when an epidemic struck, it would be with a vengeance.<sup>32</sup>

For Dr. Mackinnon, inoculation was 'a means of lowering the present ratio of mortality.'<sup>33</sup> Given that the practice of inoculation prevailed extensively in Bengal, a legalised system of inoculation<sup>34</sup> would be the best for this region. Even Dr. Pearson who successfully eradicated this endemic *mahamurree* from the Kumaon and Gurhwal hilly region, was decidedly of the opinion that 'taking away the right of the people to protect themselves through variolation when we are not in the position to confer the protective power of vaccination' was unfair.<sup>35</sup> But in those regions where sufficient number of vaccinators were available in Kumaon and Gurhwal, it becomes 'a duty to suppress inoculation which is great source of infection to others and the community and general welfare of the community.'<sup>36</sup>

Significantly, the impact of small pox on women was also discussed especially when the disease returned even after vaccination, and scarred or blinded them. Dr. Gregory suggested that the most efficient mode of preventing such a calamity was inoculation combined with vaccination. Though he did not believe that in all cases inoculation was the best measure, he felt that in India nothing better could be

devised.<sup>37</sup> Therefore, he suggested that inoculation should be adopted by the East India Company, placing it under the superintendence of the Government, and directing it to be performed by medical men.<sup>38</sup> Till 1830, as observed by medical historians, the East India Company extended its patronage to various health and healing practices and then it withdrew its support from Ayurveda and Unani, and state-sponsored western medicine was given pre-eminence.

Bedford agreed that vaccination might be more successful if the people were well inclined towards it. It could even become universal but for the large majority of people who were passively opposed to it due to various reasons such as prejudice, custom, superstition and others. However, much of this could be overcome by spreading active and intelligent vaccinators around the country.<sup>39</sup> According to him if three categories of uninoculated population — i.e., — children who were too young to inoculated, or adults due to apathy or poverty or the numerically small 'Itsha' community — devotees of *Hurree* or *Seetla* — could be *universally inoculated* 'all pabulum for smallpox would be removed and the disease would cease to exist, except when artificially excited. The legislation might advantageously step in this condition and insist upon the protection being afforded to all, and at an early period of life.'<sup>40</sup> (Emphasis added)

Finally, he argued that for public health any prophylactic measure should be universally diffused and made compulsory. This required active and well-instructed vaccinators superintended by European superintendents should personally visit every village and town in the North-West Provinces during the cold season. As legislative compulsory vaccination was most unfitted for Bengal at that time because it meant uprooting a thoroughly established social system, it would best to 'omit' vaccination altogether in the province and to substitute systematic inoculation properly superintended. (Bedford 61, 63)<sup>41</sup>. For other regions such as the North-West Provinces where the inhabitants had failed to get any protection, he suggested that less stringent but effective measures ought to be adopted, such as refusing government employment to unprotected persons, to encourage

vaccination.<sup>42</sup> He felt that as the Government was 'not prepared to carry out vaccination in that comprehensive way which alone can ensure success'<sup>43</sup>, the question naturally arose, 'whether it might not be judicious *to abolish vaccination altogether, and direct the present establishments to turn their whole attention to inoculation.*' (Emphasis added)

Contrary to Dr. Gregory's opinion, Bedford insisted that the co-existence of the two systems was evil and it was essential for public health that these should not be permitted to co-exist in the same part of the country, but to opt for any of these.<sup>44</sup> In all parts of the empire but Bengal such choice was easy, but in the Bengal province it was rendered difficult as the most extensive system of inoculation was already in operation.<sup>45</sup>

#### **Robert Pringle and Vaccination**

Robert Pringle conducted vaccination in the region of 'the Doab', that is, the region lying between the rivers Ganga and 'Jumnah' and south of the 'Sewalick' mountain range during his four-year stay there. He observed that in a population of more than nine millions, 95 per cent had been victims of smallpox at some point in their lives, in 60 per cent, the traces of the disease were visible on the face, in the 35 per cent, cicatrices could be discovered on a careful observation. The remaining unaccounted for 5 per cent did not show any traces of the disease but this was no proof that they had escaped the scourge completely<sup>46</sup>. Though this rate of mortality seemed almost unbelievable, the circumstances and conditions of a native village in India were conducive for the spread of the disease.

In the Himalayan range generally and in some parts of the Lower Bengal, small pox raged as an epidemic during hot and rainy seasons. Native inoculators travelled to the region carrying the virus to every man's door though this process of inoculation was apparently limited to Bengal<sup>47</sup> while the medical officers of the most important districts of the North-West Provinces such as Bareilly and Delhi denied the existence of inoculation in their region in their reports to the Smallpox

Commission. In this region except the districts in which inoculation was practised, Pringle (1869) keenly observed that agrarian social groups did not adopt any measures, either to check the disease or prevent its spreading. In fact, there was an 'utter absence of any treatment other than smearing the body with clarified butter and turmeric, together with the observance of some religious ceremony, consisting mainly in processions and offerings to the Deity.'<sup>48</sup> He also noticed that no basic hygiene was maintained to check the spread of the contagion such as disinfecting the clothes etc. which may not hold true for all communities where hygienic practices were strictly followed because of *Sitala* worship. There was an extremely high mortality among children: 80 per cent in very young children, 60 per cent in those a little older but rarely under 40 per cent. He also observed a perceptible 'a gap in the population'<sup>49</sup> that is, a complete absence of children between the ages of 8 and 12 years as they all had succumbed to smallpox.<sup>50</sup> Affected children were not segregated from the rest. The villagers' response was, 'Never mind, the child may as well take the disease now as a year or two hence the sooner, perhaps, the better. If it recovers, which God only knows, I can calculate on its life.'<sup>51</sup> There was also a popular saying in the rural community — 'never count children as permanent members of the family, nor make arrangements to leave them money, until they have been attacked and recovered from smallpox.'<sup>52</sup> The 'apathy' with which people viewed this disease may explain why they did not adopt any treatment other than 'the benefits supposed to be derived from religious ceremonies, but submitting with a fatalism'<sup>53</sup> Pringle constantly emphasised that his account of inoculation was based on his "personal observation"<sup>46</sup> as it was practised during the past thirteen years as maintaining a record of the epidemics started only in 1900:

On the first appearance of a case of smallpox in the Himalayas, imported probably from the plains, the inoculators hurry to the spot, and from ignorance, allowing the vesicular stage to pass, wait for the pustular, or generally for that of desiccation. During

both these latter stages, the inoculators collect as much pus and as many crusts as they can, the former on cotton or wool, and the latter as they fall off; though when in a hurry, by a small present they can easily remove them prematurely. Supplied with this variola virus, they hasten to their districts, and commence operations in a village as follows : Having collected all the cases which have neither had smallpox, nor been inoculated, they operate by scratching, with an instrument composed of a bundle of seven needles tied together, at the base of the thumb in the right arm in males, and left in females and having got a raw, bleeding surface, they bind on some of the cotton or wool charged with variola pus with blue thread. This they leave till an advanced stage of ulceration sets in, when it is removed.<sup>55</sup>

He added:

Should the supply of variola crusts be sufficient, they are powdered up with sugar and flour, and, with the addition of water, made into a ball, which is swallowed or eaten by each of the cases.<sup>56</sup> To prevent the smallpox resulting from these operations spreading to the neighbouring villages, all the cases requiring inoculation are operated on in the same day if possible, as the period of quarantine, strictly enforced, is limited to a month after the last case inoculated.<sup>57</sup>

But, a month-long quarantine imposed on the infected village generally proved to be of little benefit. During this period, all communication with the village was stopped. Villagers were often prevented from obtaining their annual supply of salt, rice, etc., at cheap rates from the plains and the interior, as no passing merchant would open barter with a village under inoculation. The inoculator lived at the expense of the villagers during this period and “what with fees for the treatment of any serious case resulting from his operations, and the perquisites of feasts and religious ceremonies, his time was “pleasantly and not unprofitably” spent.<sup>58</sup>

### **State sponsored Western Vaccination Programme in the Bengal Presidency**

The state-sponsored vaccination programme in the Bengal Presidency adopted Dr. Pearson's voluntary system of vaccination in face of stiff opposition from anti-vaccination lobby comprising of registered men and women medical practitioners. Smallpox completely disappeared from Kumaon and Gurhwal region where it was well entrenched and endemic with sporadic epidemic episodes with Pearson's intervention. Implemented in the North-West Provinces in 1827, the Bombay model required inspection and monitoring of the native vaccinators by European Superintendent and introduced a new era in vaccination in the Bengal Presidency. An upgrade was the use of vaccine needle<sup>59</sup> in place of a lancet and Dr. Husband's capillary tubes<sup>60</sup> for storing lymph. Vaccinating with a lancet was painful and also drew blood which was a constant source of fear for the Hindoo parents but Pearson's vaccine needle was almost painless with no sign of blood. Though equally effective as a lancet, it did not yield a large supply of lymph to vaccinate other children which was a disadvantage.

Dr. Pearson's scheme required a specific administrative machinery structured along the following lines:

- a. specially qualified European medical officers for supervision
- b. carefully trained staff of native vaccinators
- c. specific areas allocated for a vaccinator's operations
- d. a reliable system of returns to check any attempt at falsification

In the Bengal Presidency, an administrative unit was headed by a Divisional Superintendents-General of Vaccination who had superintendents of vaccination under him who were always European. They had a native superintendent working under him. Ten or twelve 'native vaccinators' worked under the native superintendent who chiefly supervised the vaccinators while operating and helped the superintendent in testing the accuracy of the returns and the quality of work. Should any opposition arise in the district or village, he was

expected to use his personal influence to overcome it by explaining the benefits of vaccination.<sup>61</sup>

During the vaccinating season the Superintendents arrived at the head-quarters of a vaccinator, and the 'Vaccinator's Diary' helped him ascertain the progress of work. On examining this Diary he took a day's work, and sent for the vaccinated cases. Thus, the superintendent could easily test the quality of the operations and the accuracy of the recorded results. Any attempt at falsification was not only readily detected, but also done in such a manner that the vaccinator stood convicted on his own written evidence, every record being in his own handwriting.<sup>62</sup> This ensured that the native vaccinators worked carefully and honestly to save their reputation. Also, the records of their work, if carelessly done, would hamper their future operations and cause loss of trust in the villagers.<sup>63</sup> This structure nicely illustrates "the network of gazes", to use the Foucauldian concept, facilitating the play of hierarchical observation in managing smallpox in the region. Also, this constituted the individual or a social group of 'natives' as "a describable, analysable object" (Foucault, *Discipline*, 190).

Dr. Pearson introduced a plan of having a Native Superintendent in charge of each *zillah* on Rupees 20 per month to enable the European superintendent to monitor a large number of vaccinators in this expansive region. In a report dated 22 July 1869 by J. Murray mentioned that three 'native superintendents', Baboo Jadub Chunder Ghose, Baboo Buddynath Brummo, Baboo Ram Soonder Ghose, were appointed for their good work, knowledge of vaccination, record keeping, a tact to handle people's opposition to vaccination. The officiating Superintendent of Vaccination, North-West Provinces, W. Watson recommended the names of five native superintendents: Toolsee Ram from Dehra Doon, Nubbi Bux, Cawnpore, Rujubully, Humeerpore, Ally Hussun Jounpore and Puddum Niddhie from Goruckpore for the award of a month's working pay of Rupees twenty for good work<sup>64</sup>. He also suggested a door-to-door vaccination facility performed by enlisting the services of all native practitioners, Brahmin *ticcadars*, *baidas*, *hakims* and others to the cause. He also suggested that Brahmin



*ticcadars* should be provided remunerative employment so that the “bigoted attachment” of the Hindoos to inoculation could be best overcome.<sup>65</sup> Caste factor also operated in preferring a Brahmin vaccinator to a Muslim one, or a Muslim vaccinator to a low caste Hindu.<sup>66</sup>

### State-Sponsored Vaccination and Public Response

Public opinion on vaccination constituted varied and deep-rooted beliefs and a tension between divergent cultural viewpoints and value systems. According to Naraindas (1998) ‘the primary reason why vaccination was unable to displace variolation was that the former was primarily prophylactic while the latter was a part of therapeutics’<sup>67</sup> Also, the ‘natives’ viewed vaccination unfavourably as a European or foreign innovation and the western vaccines as *Belattie Chapah* (or foreign marking) and, the vaccinators were looked with suspicion and distrust. The returning gaze of the unwilling subjects was ‘silent and gestureless’ and subversive. (Foucault, *Birth of a Clinic* 107) The native superintendent who supervised and monitored the vaccination network was a “watcher”, and yet he, too, was the object of a ‘gaze’: his performance as watcher was also under scrutiny. In Foucault’s words, “he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection. (*Discipline* 202-3).

Religious objections to smallpox vaccines were also based on the ethical dilemmas of using human tissue cells in vaccines, and the belief that the body should be healed by God or naturally. Even in early years of its introduction in Britain, suspicion and apprehension of vaccination was quite common and the desirability of vaccination was questioned on ethical grounds. Church raised objections to vaccination as interfering with the will of God, and argued that smallpox was sent to chasten the population. It was considered ‘ungodly and awfully impure method of fighting a disease’ which involved ‘unclean and sinful experiments, each one seemingly more vile and filthy than those that preceded it’.<sup>68</sup>

Similarly, panic, fury and resistance against vaccination was apparent in British-ruled India. In India *Bellatie Chapah* or English vaccines were thought to be Western conspiracies to sterilise or infect the population. The Government sponsored vaccination also triggered panic reactions in the North-West Provinces and Bengal. Pringle was quite amazed at the 'ingenuity' of rumours circulating in, what he contemptuously calls, 'the priest-ridden and bigoted city of Benares'<sup>69</sup>. He said:

... some of the priests of this city ... gave out that there was an old prophecy, that a black child would be born with white blood, who should rule India and turn the English out, as they expressed it; and it was with a view to find out the advent of this child that the Government had given orders to scratch the arms of their children.<sup>70</sup>

Quite naturally, all kinds of fears seized the minds of the people in the North-West Provinces:

(The government) wanted to steal the children for some purposes of witchcraft, or to send them away as coolies to some other British possessions, and that to this end they were vaccinated by way of setting the Government mark upon them, so that they might be readily traced, when wanted, by the police.

The most general idea was that the operation of vaccination was for the purpose of extracting a drop of blood, many of which would be given to a ship proceeding to England, and that in the event of shipwreck the sailors drowned would return to life, at the expense of an equal number of the native children vaccinated in India (whose blood they had brought with them) who would as suddenly die.<sup>71</sup>

It was also rumoured that a new capitation tax may be imposed in a few years after their fears had gradually subsided, and by then the Government would have obtained a 'census' of each village through this indirect manner.<sup>72</sup>

Scholars on colonial epidemics such as Arnold (1993) state that resistance against smallpox vaccinations stemmed from Hindu beliefs

that cows are sacred and made them uncomfortable with the cowpox vaccine<sup>73</sup>. However, Bhattacharya et al. (2005) note that resistance was not simply based on religious discontentment. In fact, members of the Muslim Ferazi sect in Bengal believed that using animal lymphs was an unclean practice.<sup>74</sup> Bennett (2007) submitted that even the Parsi communities in Bombay were initially deeply resistant towards vaccinations, because of the use of animal lymphs.<sup>75</sup>

While discussing the prospects for vaccination, J. MacGregor, the regional Superintendent of vaccination, mentioned in 1878 that “an alteration in social customs to be successful in India, as in other countries, must take firm root in the upper strata before it penetrates downwards to the masses.”(Arnold 149) Nevertheless, in his annual report of 1867-68, the Superintendent of Vaccination Hoskins admitted that they shouldn’t be surprised at the unwillingness of the people to accept vaccination voluntarily.<sup>76</sup> Even in England it was not able to contend successfully with smallpox, until not only was inoculation made a penal offence by Act of Parliament, but in addition, vaccination was made compulsory.<sup>77</sup> He argued that only when the practice of inoculation was prohibited can vaccination be successful.

#### **Vaccination and Pringle’s Success Story**

Given the shared colonial premise that inoculation was a threat to the people, Pringle worked towards popularising vaccination in India. It resulted in more cases of recovery but this claim had to be validated and its efficacy proved before the eyes of the people by comparing the results of vaccination and inoculation. Fortunately, Pringle got this opportunity to test the relative merits of inoculation and vaccination carried on simultaneously when he visited this village subsequently, before many of the inoculated cases had recovered, and pointed out to the natives who had assembled the vaccinated cases which had accompanied him. He showed them how he had arrived at the same result as they had hoped for, but at a very different cost. In the inoculated, only six deaths occurred out of sixty operated on, and the village had been debarred from all communication with the

neighbouring ones for nearly a month.<sup>78</sup> The evidence was too strong in favour of vaccination. He reported that the villagers were convinced and decided in favour of vaccination in place of "the time-honoured and priestly practice of inoculation."<sup>79</sup> The result of this and other similar cases were brought to the notice of the Government of India. Thereafter, an order was issued by the authorities prohibiting inoculation in his division of the Himalayas, or the region between the Ganga and Jumnah.<sup>80</sup>

Various factors were responsible for curbing the contagion in the Himalayan region in comparison to the plains of India: Pringle's long experience in the region, an efficient staff of native vaccinators, prohibition of inoculation, and the natives volunteering for vaccination. Also, the population in this region was more manageable and the spread of contagion was limited. He hoped the epidemic would be eradicated forever from the Himalayan region and the natives would be able to 'look back on its ravages...as the visions of a horrid dream.'<sup>81</sup> However, in the plains of India, small pox could be controlled only with extensive vaccination and stringent isolation. With its vast population, and the present scheme of voluntary vaccination in its infancy, he was afraid that "the day is far distant when a disease which counts its victims by thousands annually can be curbed and finally stamped out."<sup>82</sup>

#### **Post-script**

Almost two decades later on 8th May 1885, Robert Pringle, who was by then a Surgeon-Major, read another paper at the Society of Arts, London which was a reassessment of his observations on inoculation and vaccination, and even a retraction of his 1968-69 opinion on the efficacy of inoculation. Drawing attention to inoculation based on his 'continuous personal observation' (*The Lancet*, May 16, 1885, p. 913) during the past twenty years in the independent native state of 'Tirri Gurhwal' in the Himalayas where it had been practiced from time immemorial, he described its 'visible benefits' (ibid) and compared them with the effects of spontaneous small pox in the

foothills of the Himalayas where inoculation was not practised. Another significant and favourable observation was the accidental cultivation of the product from spontaneous small pox eruption which was considerably similar to M. Pasteur's<sup>83</sup> recent discoveries on chicken cholera. This meant that when the lymph was carried on through many transmissions till the cultivated product resembled in its action cowpox lymph, it only produced local but mild symptoms at the point of insertion remarkably similar to the common and destructive outbreaks of sheeppox and the rare and mild cases of cowpox. (*The Lancet*, 1885:913) Most importantly, Pringle who was previously quite dismissive of indigenous medicine, admitted that while the practice of inoculation no doubt kept up the disease of smallpox and was dependent on its presence for the virus, it was nevertheless "a very great boon" (ibid) to the population even if carried out imperfectly. This was because it could be practised throughout the year whereas vaccination was limited to the cold months only, that is, from the middle of October to the middle of March. So, Pringle had to keep his supply of lymph, in the "lymph nurseries" in the Himalayas. Moreover, inoculation did not require 'a repetition of the procedure' and produced lifelong immunity against smallpox. Therefore, on the basis of the latest information on vaccination, it was found that inoculation was "far superior to vaccination in countries like India." (ibid) But by then, inoculation (variolation) had already been outlawed by various legislations and the officially backed western biomedicine and vaccination technology had rendered this indigenous prophylactic measure obsolete, irrelevant, and irrational.

Vaccination became prevalent subsequently and through the practice of 'retro-vaccination', that is, by vaccinating a calf and taking the lymph from the eruption, Pringle created his sanitary circle with its population of ten million and other circles of similar extent without depending on the supplies from the National Vaccine Establishment. Following the colonial agenda, he spent twenty years in a continuous effort to supplant inoculation without a repetition of the operation, with vaccination followed by a revaccination after a given number of

years. (ibid) Despite all his efforts, the system of vaccination suffered both in terms of its veracity of the returns submitted, the quality of the work, and also due to the lack of knowledge and skill of the vaccinators. As a result, the system was stigmatised in a public document as a “wholesale fabrication of returns.” (*The Lancet*, 1885: 914) The probable causes of this failure, as Pringle observed, was not an “imaginary deterioration” in the vaccine virus under proper care, or in the “diminishing protective power” (ibid) of really good vaccination due to the lapse of years, or in the neglect of revaccination, but what the Government of the North-West observed in 1883: “the inexcusable negligence of the supervisory officials, and in many other cases to the ignorance of the operators, and the use of stored lymph which gave ‘false protection’ due to its spurious nature”. (ibid)

In 1897, when the Epidemic Diseases Act was passed, special powers were conferred upon local authorities to enforce measures to control epidemics strictly. Colonial power was used to forcefully segregate infected persons, disinfections, evacuation, and even demolition of infected places especially in cases of plague. Medical and administrative officials had the right to inspect any suspected person or place. As a result, riots were reported in some areas but the government used the military power to ensure strictest enforcement of preventive measures. Such surveillance of the colonial bodies was “a dense network of vigilant and multi-directional gazes” (Foucault, *Discipline and Punish* 177) which operated under sovereign power.

A news item published in the May 2, 1902 issue of the Bengali newspaper *Hitavadi* from Calcutta reported the prevalence of small pox in the villages of Sonthal Parganas district. The authorities forced the villagers to submit to vaccination. The newspaper noted that women were vaccinated by male vaccinators. In most cases vaccination had serious consequences and even death. Twelve people died of vaccination in the Rangatola, Khagarutola and Pitotola villages under the Rajmahal *thana*. So, people were frightened. As vaccination could not decrease the death toll significantly, it faced not only rivalry of

the indigenous method of inoculation, but also the technical shortcomings and economic stringencies of colonial rule.

After India's Independence in 1947, despite extensive programmes of immunisation to eradicate small pox, it became increasingly apparent by 1971 that mass vaccination did not eliminate smallpox in India. So, in 1973, a new strategy was developed whereby, teams of health care workers visited every village and every house one week every month to find cases and tackle the scourge. Rigid control measures were adopted. Two years later, using the approach of vaccination, control and surveillance, the last case of smallpox was reported in India in June 1975. This was the outcome of a momentous worldwide effort that involved almost every national government in the world as well as the World Health Organisation. It was said that at the heart of this effort was the smallpox vaccine, whose discovery was in itself a biomedical landmark as the first vaccine to be invented for an infectious disease. However, if it was a wonder vaccine why did it take almost a century for the vaccination to finally eradicate smallpox from India.

The definitive account of the eradication of smallpox published by the WHO stated: 'For posterity, smallpox and its eradication will serve, above all, as an inspiring reminder of the knowledge and efforts that transformed smallpox from a universally dreaded disease to one the world could safely forget.'<sup>85</sup> However, a medical report published by Stefan Riedel (2005) states that smallpox is one of the most devastating diseases that could potentially be used as a biological weapon. Given the enormous efforts made to eradicate the disease, the deliberate release of smallpox as a biological weapon would be an international crime of unprecedented proportions. Unfortunately, the possibility of releasing smallpox in aerosolised form is now a reality and the potential for a catastrophic scenario is great, and effective control measures must be implemented. Finally, the success in conquering the threat of a re-emerging smallpox epidemic will rest on the availability of adequate supplies of vaccine and other medications necessary for treatment. To ensure an effective and relatively inexpensive safeguard

for such a tragedy, it is necessary to provide an adequate stockpile of vaccine. (13-20) At present, when Corona Virus has not been contained altogether and completely, considering India's success in eradicating smallpox and polio in the past, the World Health Organisation is hopeful that India has 'tremendous capacities'<sup>84</sup> to control the spread of contagion. On January 16, 2021, India began the world's largest vaccination programme for COVID-19, targeting an initial group of 300 million people through vaccines produced by Serum Institute's Covishield and Bharat Biotech. After initial scepticism and reluctance, the vaccine recipients are coming forward for vaccines. Nevertheless, history shows an unchanging pattern in people's reactions to epidemics.<sup>86</sup>

#### Notes

<sup>1</sup> The Bengal Presidency included today's Uttar Pradesh, Uttarakhand, Punjab, Haryana, Himachal Pradesh as well as parts of Chhattisgarh, Madhya Pradesh, and Maharashtra. It also included the North-West Frontier and British Punjab provinces of Pakistan and Burma. Penang and Singapore were also considered to be part of the Presidency until they became part of the Crown Colony of the Straits Settlement in 1867.

<sup>2</sup> In 1884, Robert Pringle was appointed the Deputy Sanitary Commissioner of the 1st Circle North-West Provinces and Oudh. (*The Times of India*, 7 May 1884). In 1864, when the Vaccine Department of the North-West Provinces was remodeled after a false vaccine return was detected and exposed in the Agra and Meerut divisions, he was appointed the Superintendent of Vaccination. From 1864 to 1884, that is, for twenty years he served continuously in the Vaccine Department including some years of Sanitary duties. In 1884, he was appointed the Deputy Sanitary Commissioner of the 1st Circle North-West Provinces and Oudh. (*The Times of India*, May 7, 1884). In 1885, he became the Major-Surgeon in the North West Provinces. (*The Lancet* 18th May 1865).

<sup>3</sup> The other two essays were "On the possibility of stamping-out small pox, illustrated by three modes of procedure" and "On the synchronism of variola and vaccinia, & c"

<sup>4</sup> The footnote in the essay mentions that Pringle had read this paper at the Congress of the British Medical Association at Oxford earlier in 1868.

<sup>5</sup> Robert Pringle, "Small Pox and Vaccination in India, and Chiefly in the Bengal Presidency". *Papers on Small Pox and Vaccination & c.* (London: Wyman & amp; Sons, 1869).



- <sup>6</sup> Frank Fenner, Donald A. Henderson, Isao Arita, Zdenek Jezek, Ivan Danilovich Ladnyi, and World Health Organisation. 'Smallpox and Its Eradication', 1988.
- <sup>7</sup> Holwell, "An Account of the Manner of Inoculating for Small Pox in the East Indies", 1767.
- <sup>8</sup> E. J. Hoskins, *First Annual Report of Ranchee Circle for the year 1867-68*. (Calcutta: Government Printing, 1868), p. 4.
- <sup>9</sup> The travelling *sindooriahs* brought red and yellow *sindoor* made from *Kusum* flowers, turmeric, sandalwood powder and other natural products and sold using a local unit of weight *bhur* (approximately 11.66375 grams) or by the weight of a silver coin. Women waited eagerly for the arrival of *sindooriahs* as they added colour to their lives.
- <sup>10</sup> Bedford, *Statistical Notes*, p. 9.
- <sup>11</sup> Other variations of the female deities of small pox are: 'Bhariavi' in Bengal, 'Sitala' or the Cool one in the Gangetic plains, 'Bana Sankari or Elamma' in Karnataka, 'Bhagwati' in Kerala, 'Bhavani' in Maharashtra and 'Erukamma', 'Mariamman' in the Tamil country, Hariti in Nepal and throughout the Buddhist world of Southeast and East Asia.
- <sup>12</sup> The name Sitala has been spelt differently by British chroniclers. I have retained the different versions.
- <sup>13</sup> Harish Naraindas, "Care, Welfare, and Treason: The Advent of Vaccination in the 19th Century", *Contributions to Indian Sociology*, Vol.32, no.1, 1998, p. 74.
- <sup>14</sup> J. Murray, "Report on the Necessity of Regulating the practice of Small Pox Regulation in Bengal, Where it is not Prohibited." *Reports on Vaccination Proceedings throughout the Government of Bengal* (Calcutta: Office of Superintendent of Government Printing, 1869), p. 9.
- <sup>15</sup> *Ibid.*
- <sup>16</sup> The Bengal Prevention of Inoculation Act 1865 IV: An Act for the prohibition of the practice of inoculation in the Town and Suburbs of Calcutta and in towns to which Act III of 1864, passed by the Lieutenant-Governor of Bengal in Council, has been or shall hereafter be extended.
- <sup>17</sup> N. Brimnes, "Variolation, vaccination and popular resistance in early colonial south India" in *Medical History*, Vol 48, no. 2, (April 2004), p. 199.
- <sup>18</sup> Paul R. Greenough, "Variolation and Vaccination in South Asia, c. 1700- 1865: A Preliminary Note", *Social Science and Medicine*, Vol. 14D, p. 347.
- <sup>19</sup> J. R. Bedford, *Statistical Notes on Small-Pox, Vaccination and Inoculation in India* (Calcutta: Bishop's College Press, 1853), p. 57.
- <sup>20</sup> *Ibid.*
- <sup>21</sup> *Ibid.*, p. 57.
- <sup>22</sup> David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India* (Berkeley: University of California Press, 1993), p. 138.
- <sup>23</sup> J. R. Bedford, *Statistical Notes on Small-Pox, Vaccination and Inoculation in India*. (Calcutta, Bishop's College Press, 1853), p. 55.

- <sup>24</sup> *Ibid.*
- <sup>25</sup> *Ibid.*
- <sup>26</sup> *Ibid.*, 56.
- <sup>27</sup> *Ibid.*
- <sup>28</sup> *Ibid.*
- <sup>29</sup> *Ibid.*
- <sup>30</sup> *Ibid.*
- <sup>31</sup> *Ibid.*, 54.
- <sup>32</sup> *Ibid.*, 55.
- <sup>33</sup> Pearson, *Annual Report upon Vaccination in the North-Western Provinces for the season 1866-67*, No 46 of 1867. p. 6.
- <sup>34</sup> *Ibid.*
- <sup>35</sup> Bedford, *Statistical Notes*, 57.
- <sup>36</sup> *Ibid.*
- <sup>37</sup> *Ibid.*, 59.
- <sup>38</sup> *Ibid.*, 47.
- <sup>39</sup> *Ibid.*
- <sup>40</sup> *Ibid.*, 60.
- <sup>41</sup> *Ibid.*, 61.
- <sup>42</sup> *Ibid.*, 61.
- <sup>43</sup> *Ibid.*, 81
- <sup>44</sup> The mortality from small-pox witnessed in India referred to only those parts of Hindustan where inoculation was not practiced.
- <sup>45</sup> Bedford, *Statistical Notes*, p. 9.
- <sup>46</sup> Pringle, "Small Pox". p. 3.
- <sup>47</sup> *Ibid.*, 4.
- <sup>48</sup> *Ibid.*, 4.
- <sup>49</sup> *Ibid.*, 4.
- <sup>50</sup> *Ibid.*, 4.
- <sup>51</sup> *Ibid.*, 5.
- <sup>52</sup> The Vaccination Act of 1880 of Bengal outlawed inoculation and made it increasingly compulsory for children to be vaccinated. The reports reveal that the Act was continually updated and that similar legislation spread to other Indian regions.
- <sup>53</sup> See Pringle 1869, p. 5-6.
- <sup>54</sup> Early epidemiological evidences show that the Chinese employed a similar method of blowing smallpox matter — a powder made from the crusts of smallpox scabs— up their nose to protect themselves from the disease. They showed mild symptoms, but they were usually resistant to any subsequent exposure. A similar method of inoculation in folk-medicinal practice was common in many parts of the world such as Poland, Wales, Scotland, parts of Africa and China and a wide area of the Middle East.
- <sup>55</sup> Pringle, "Small Pox", pp. 5-6.
- <sup>56</sup> *Ibid.*, p. 6.

- <sup>57</sup> A slight modification of Dr. Graham Weirs, sometime before 1866, this vaccination lancet was used for giving smallpox vaccines by scarification. This was a technique that broke the skin to introduce cowpox lymph material into the body. Cowpox is a milder form of smallpox and an attack of the former gives immunity to the latter. However, vaccination does not give life-long immunity. The four small blades were used to scratch the skin lightly in a cross-hatch pattern. The sharp pointed blade was used to collect the lymph material from a pustule of a person already vaccinated with cowpox. The blade was also used to apply the lymph material to cuts made in the skin of another person. The lancet with the tortoiseshell case would have been used in the same way.
- <sup>58</sup> The capillary tubes in use in the North-West Provinces much before they were generally known in England.
- <sup>59</sup> Pringle, "Small Pox", p. 10.
- <sup>60</sup> *Ibid.*, 9.
- <sup>61</sup> *Ibid.*, 10.
- <sup>62</sup> W. Watson, *North-Western Provinces Returns of Vaccination, 1869-70*. (North-West Provinces: Government Press, 1870), p. 8.
- <sup>63</sup> Green, *Report*, p. 13.
- <sup>64</sup> Watson, *North-Western Provinces Returns of Vaccination*, p. 5.
- <sup>65</sup> Naraindas, "Care, Welfare, and Treason", p. 70.
- <sup>66</sup> C. W. Dixon, *Small Pox* (London: J. & A. Churchill Ltd, London, 1962), p. 287.
- <sup>67</sup> Pringle, "Small Pox", p. 13.
- <sup>68</sup> *Ibid.*, p. 13.
- <sup>69</sup> E. J. Hoskins, *First Annual Report of Ranchee Circle for the year 1867-68*. (Calcutta: Government Printing, 1868), p. 2
- <sup>70</sup> *Ibid.*, 2.
- <sup>71</sup> *Ibid.*
- <sup>72</sup> *Ibid.*
- <sup>73</sup> David Arnold. *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India*. (Berkeley: University of California Press, 1993), p. 136.
- <sup>74</sup> Sanjoy Bhattacharya, Mark Harrison, and Michael Worboys, *Fractured States: Smallpox, Public Health and Vaccination Policy in British India, 1800-1947*, (New Delhi: Orient Longman, 2005), p. 68.
- <sup>75</sup> Michael Bennett, "Passage through India: Global Vaccination and British India, 1800-05", *The Journal of Imperial and Commonwealth History*, Vol. 35, no. 2, 2007, p. 210.
- <sup>76</sup> Hoskins, *First Annual Report*, p. 8.8.
- <sup>77</sup> *Ibid.*
- <sup>78</sup> Pringle, "Small Pox", p. 6.
- <sup>79</sup> *Ibid.*, 18.
- <sup>80</sup> *Ibid.*, 7

<sup>81</sup> *Ibid.*, 20.

<sup>82</sup> *Ibid.*

<sup>83</sup> In a letter to the editor of *The Lancet* dated December 4, 1880, Dr. W. J. Collins, B.Sc., M.R.C.S of St. Bartholomew's Hospital wrote: M. Pasteur's chief points are that chicken-cholera is a virulent disease, rarely, recurrent, due to a microscopic parasite and also of attenuation outside the body; the attenuated virus, when retro inoculated, producing a mild disease and securing from subsequent attack.

<sup>84</sup> Fenner et al (1988) <https://apps.who.int/iris/handle/10665/39485>

<sup>85</sup> The Economic Times March 24, 2020. The executive director of the World Health Organization, Michael Ryan, said India, the world's second most populous country, has a tremendous capacity to deal with the coronavirus outbreak as it has the experience of eradicating the small-pox and polio through targeted public intervention.

<sup>86</sup> <https://www.indiatoday.in/coronavirus-outbreak/story/coronavirus-vaccine-update-brazil-protests-bharat-biotech-covaxin-launch-news-1737142-2020-11-02>.

## *The Use of Folklore in the Media World : A Folklorographic Study\**

Sarmistha De Basu

### **Abstract**

In the modern period, co-existence of the online world, internet, various social media and the construction of blogs expands the reader's experience of stories and cultures. It has its effects on the children's literature, and the practical approach to folklore is growing up its interest with all types of media activity.

For several decades the practical approach to folklore has turned away from the classic study of the motifs and structures of folktales to emphasise the situations in which the tellers produce folk narratives. From a child's pedagogy to general knowledge and entertainment we are depending on media and always folklore is commonly used by media in every sphere of its activity.

**Key words :** children's activity, media, practical approach in folklore.

### **Introduction**

*Fairy tales are informed by a human disposition to action — to transform the world and make it more adaptable to human needs, while we also try to change and make ourselves fit for the world.*

(Zipes, 2012, 2)

In the book *The Routledge Companion to Media and Fairy Tale Culture*, the editors quoted the above mentioned text from *The Irresistible Fairy Tale* by Jack Zipes to describe the fairy tale by using the metaphor of

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a land whale, a mammal that “constantly adapted to its changing environment”<sup>1</sup>.

In the modern age India, we can find a co-existence of the online world (the internet, various social media) and the dynamic world of fairy tales. The 7D and 10D films on fairytales still attract the children. The accessibility of these sites with content management systems like Blogger and Word Press means that it is user-friendly. Anyone can live within a story by reading it over and over again and can take that desire one step further by making regular posts and contributing to the ever-growing online discourse about the form.

### Hypothesis

Children’s literature in India is rich as children’s picture books and illustrations are produced in English and all other regional languages. So, the print media or picture books serve attractive imagery and illustrations to the young ones with attractive detailing.

In the contemporary European and North American popular experience of fairy tales, Disney and fairytales are now practically synonymous and to affect Disney’s imagery is same to affect the young generation as they think about the fairytale itself. The oral narrative emphasises the way of structure and performs the conventions that are modified to meet the specific demands of regular tale-telling. Primarily in India, we can find digitised versions of *Amar Chitra Katha*. Pai did revolutionary work for children’s entertainment and encouraged their interest in Indian myths depicted in Puranas and epics, legends and folklores with their glory of excellence and virtue.

Now, we proceed to find out how the media world of India has developed and evolved itself with the modern technology. Folklore is a living subject at this present time of technological development.

### Media for children’s entertainment in the last part of the 20th century

After the heroes of *ACK*, Indian children discovered superheroes like Spider-Man or The Flash. The children didn’t care about the white-skinned foreign characters. They were unaware of the broader,

ongoing effort by Hindu nationalists to define a doctrine devaluing lower castes, women, tribal populations and religious minorities. A child’s brain was just reading about heroes who made him feel stronger than he was and who would teach him to be a great Indian.

Following the path of *Amar Chitra Katha* Indian media prepared various audio cassettes of different folk tales from popular books. We can find the excellent book for children by Oscar Wildes’ *Selfish Giant* based on the collection of stories for children *The Happy Prince and Other Tales*, in the audio long-playing record and then in audio cassette in Bengali. The audio record was first dramatised as a musicals by Robin & Delwyn McKenzie in England. Here in India this musical drama was first released by the HMV in a long-playing record in Bengali and later on in other regional languages. At the same time, the Indian epic Ramayana was also released in regional language first in Bengali and then in other regional languages also. Here I am showing you the cover photos of the long-playing record and cassette released in the Bengali language:



Figures 1a and 1b; Photos by Sarmistha De Basu from her personal archive.

Note: The covers of the Long Play 33; R P. M. Record of *Chotoder Ramayan* [Ramayana for children] based on the epic of Maharshi Valmiki. It was released by Stereo EMI (POPULAR) Gramophone Company of India Ltd. in 1976.



Figures 2a and 2b; Photos by Sarmistha De Basu from her personal archive.

Notes: The Long Play 33; R.P.M. Record Covers of *Hingshute Daitya* (The Selfish Giant), a musical drama for children. It was released by EMI, The Gramophone Company of India Ltd. in 1977.



Figures 3a and 3b; Photos by Sarmistha De Basu from her personal archive.

Notes: The record was released in 1978 by The Megaphone Company, Calcutta. It was a mega-hit musical drama composed by Pulak Bandyopadhyay, music by Shailen Mukhopadhyay, in instrumentation Dilip Ray.





Figures 4a and 4b Photos by Sarmistha De Basu from her personal archive.

*Notes:* These record covers are examples of the long-playing record of Bengali Nursery Songs released in the '70s. The songs were rendered by the eminent singer Japamala Ghosh and there were many records of such nursery rhymes of West Bengal during this period and afterward.

Thus we find a number of such folk literatures selected for audio recording in cassettes and CDs such as *Byangama Byangami*, *Neel Kamal* or *Laal Kamal*, *Saat Bhai Champa*, etc.



Figure 5; Photos by Sarmistha De Basu from her personal archive.

*Notes:* These are some samples of audio cassettes of Bengali rhymes for the children. The first one is *Byang BaRo Rasia re* (Humorous Frog), the second one is of songs and rhymes *Teler ShiShi Bhanglo bole* (We get mad at a little girl for breaking an phial of oil pot), the third one is *Ekje chilo Raja* (Once there was a king), the fourth one is *BhondoRer biye* (Marriage of a civet cat) and the fifth one is *Baburam SapuRe* (Baburam Snake-charmer). These were released from HMV, Asha Audio, Bhavna Stereo, etc. from 1985 to 1999 and 2003.



Figures 6a and 6b; Photos by Sarmistha De Basu from her personal archive.

*Notes:* DVD of Gopal Bhanr, Bengali Cartoon Animation (Dolby Digital). Originally these comics of Gopal the Jester are a part of the popular folk culture of Bengal. Historically Gopal was a very well-trusted court jester one of the nine associates of King Krishnachandra of Nadia District of West Bengal of the 15th century but his stories were based on myths.



Figures 7a and 7b; Photos by Sarmistha De Basu from her personal archive.

Notes: Front and back covers of the DVD *Thakumar Jhuli* with 70 stories released in 2003.



Figure 8a and 8b; Photos by Sarmistha De Basu from her personal archive.

Notes: The book covers of the book *Thakumar Jhuli*, written by Dakshinaranjan Mitra Majumdar and published by Mitra & Ghosh Publishers, Calcutta, which was first published in 1907.



Figures 9a and 9b; Photos by Sarmistha De Basu from her personal archive.

Notes: VCD, *Alibaba*, a Drama by Pranab Ray with Music by V. Balsara.



Figures 10a and 10b; Photos by Sarmistha De Basu from her personal archive.

Notes: Bengali VCD *Lakshman Shaktishel*, released by Moserbear in 2005. The drama is written by Sukumar Ray in the nineteenth century based on the encounter of Meghnad, the son of Ravana with Lakshman, the brother of Lord Rama as depicted in *Ramayana*.



Figure 11; Photo by Sarmistha De Basu from her personal archive.  
 Note: VCD of *Vikram Betal*, release date 2006 directed by Sandip Das and edited by Ajay Santosh. The script was written by Soumen Mukherjee.



Figures 12a and 12b; Photos by Sarmistha De Basu from her personal archive.

**Notes:** Two comic characters *Bantul the Great* and *Handa-Bhonda*, were created by Narayan Debnath from Kolkata. Narayan Debnath was an *Indian comics artist*, writer and illustrator. He was the creator of the popular Bengali comic strips of *Handa Bhonda*, *Bantul the Great* and *Nonte Phonte*. He holds the record of longest-running comics by an individual artist for *Handa Bhonda* comic series which has now completed after continuous 53 years of publication. He was the first and only comic artist in India who had received a D. Litt. degree. The animated cartoon films based on his comics were released in 2005.



Figures 13a and 13b; Photo Credit Sarmistha De Basu from personal archive

**Notes:** One of the *Thakurmar Jhuli*, 'Byang Rajkumar' (the Frog Prince) was animated in Bengali.

#### Literary References of Children's Literature and Feature Films from the 20th century onwards

In the first half of the 21st century we found Indian children enjoying *Thakurmar Jhuli* in the form of CDs and DVDs. This traditional folktale series was adopted from West Bengal. Dakshinaranjan Mitra Majumdar first wrote this book in the 19th century with the basis of local folktales orally propagated among Bengali people. Then came Upendra Kishor Ray Choudhury fantasy *Goopi Gain Bagha Bain* was published in 1915 (based on which Satyajit Ray, one of the greatest filmmakers of world cinema, made his highly praised of the children's

movie of the same name in 1969), followed by *Tuntunir Boi* and the children's versions of the two epics — *Chheleder Ramayan* and *Chheleder Mahabharat*.<sup>2</sup> Both Upendra Kishor Ray Choudhury and his grandson Satyajit Ray did most of the illustrations of their books themselves. Sixty years after the death of the author Upendra Kishor Ray Choudhury, the book *Tuntunir Boi* was published by Dev Sahitya Kutir Private Limited in 1968 from Kolkata.<sup>3</sup>

In India we can find a huge inclusion of fairytales, legends, animal tales and tales on supernatural characters. Some genius filmmakers like Satyajit Ray, Tapan Sinha, Nripen Ganguly, Jijo Punnoose, P. S. Prakash, Shankar Nag, Gopi Desai, Santosh Sivan, Raja Sen and others made legendary films for children but those are not based on any folk or fairytales. We find more and more folk elements in children's literature in the 20th century. The writers used folktales for references in school books also. In the 21st century too we find some references from animal tales and other legends in children's reference books. Children feel easy and friendly with animals, and to attract their curiosity and interest in media world (games, fantasy movies, cartoons, shows, etc.), film makers and game developers fix and co-modify nature with the help of animal tales to change the emergent characteristics of tale-telling. Be it an oral folktale, or a film, both express the social relations which are broadly conceived from its constructed time frame.

Many other writers of the 20th and 21st centuries also created and enriched the children's literature of India. *Handa Bhonda / Hada Bhoda* is a Bengali comic-strip (and later comic book) created by Narayan Debnath, which was originally published in the children's monthly magazine *Shuktara*. The comics have been published in book form later. A popular animation series based on the characters has also been filmed.

#### **Animation in Indian Movies to modern Cartoons and Animated Films**

'The Pea Brothers' was the first Indian animated work by New Theatres Limited, directed by Gunamoy Banerjee, released in Calcutta

on 23rd June, 1934. In feature films the idea of 2D animation, 3D animation and visual effects was taken from the Indian Animation Industry. In 1956, Disney Studios animator Clair Weeks was invited to the Films Division of India in Mumbai to train and establish the first animation studio in India. That mission was a part of the American technical cooperation. The first trained core group of Indian animators produced a film *The Banyan Deer* in 1957. The veteran animator Ram Mohan started his Films Division's Cartoon Unit career at the. The first Indian animated series *Ghayab Aaya* was released in 1986. It was directed by Suddhasattwa Basu.

If we look towards the history of animation in India, we can find the precursors to modern animation from the early 20th century, like shadow puppets and slide shows. Pioneers like Dadasaheb Phalke, Gunamoy Banerjee, K. S. Gupte and G. K. Ghokle kept the tradition of animation alive during the first half of the 20th century. They were inspired by tradition and foreign cartoons, and invented their masterworks by their merit.<sup>4</sup>

There was another means of entertainment very close to the movie picture technique, used by the local folk people before the age of cinema, called *the Shambharik Kharolika*. In this circus show, people used to project a series of hand-painted glass slides by using an apparatus called the 'magic lantern'. At first, Mahadeo Gopal Patwardhan and his sons were responsible for popularising this medium in some parts of India in the late 19th century. They added dialogue, narration, lyrics and background music into this circus show and changed it to a theatre show. In 1932, Dadasaheb Phalke released his last silent film *Setu Bandhan*, and in 1934 the first Indian animated film with a soundtrack *On a Moonlit Night* was released. R.C. Boral was the composer and orchestra leader.<sup>5</sup>

From the early 2000s, many Indian cartoon channels started producing their animated shows without any dependence on American and Japanese animated shows. For example, the Indian production cartoon series *Chhota Bheem* is not only famous in India but also



famous in Sri Lanka and Pakistan. Since *The Banyan Deer* was released in 1957, over 130 animated movies have been produced in India.<sup>6</sup>

Cartoons and animated films, short films or series like *Chhota Bheem*, *Dholu Molu*, *Gopal Bhaar*, *Molla Nasiruddin*, *Arabian Nights*, *Chandrakanta*, *Maa Manasa*, and many others are taken from Puranas and legends. Bedtime stories told by grandmothers and mothers have been converted into favourite tales on TV or in CD, VCD and DVD. From the first half of the 21st century, mobile phones and then smart phones gradually became parts of our lives and parents of nuclear families found an easy way to engage their kids with the help of smart phones. National or regional folktales are now losing importance in the media. As the media is generally operated internationally we find that the most popular stories are in Japanese or Korean languages with English and regional subtitles everywhere. The kid's channels on television are also encouraging these stories to continue series. But in exceptions are also noticed. The young narrators are doing new research on the tales of Vedas, Puranas and legends like *Panchatantra*, *Hitopadesha*, *Eshop's fable*. On YouTube kids, the 'shows' section feature clips and full episodes of popular childrens programme like — *Winnie the Pooh* and *Thomas and Friends*, the 'Music' clips include classic and contemporary kid's songs. The 'Learning' section gives access to education-focused clips from sources like Khan Academy, PBS Kids, like TED-Ed, and the "Explore" section features a sprawling range of user-created content, toy-related videos (including many 'unboxing' clips), and a more random array of kid-friendly content, as well as channels created by brands such as McDonald's.

I should mention here about the well-known Indian mythologist, researcher, narrator, illustrator, writer and talk show artist of India: Devdatt Patnayak. He selected the most debatable parts of each mythical incident and folk-based belief, analysed those parts with a scientific and modern outlook, and disclosed his new vision through different YouTube channels, talk shows and books. From this type of new researches, we can look at the basis of our folk beliefs and motifs

with a new outlook. Some of his books are *The Book of Ram*, *My Hanuman Chalisa*, *Myth=Mithya*, *Gita*, etc.

Another feature of modern media is Manga. Japanese Anime Manga became famous in India in the 21st century. Anime originated from Japan in the early 1900s, as a hand-drawn or computer-animated medium of art and storytelling. People started to enjoy Japanese Anime for its detailing in the plot which was more realistic than cartoons. Japanese Manga is based on their traditional stories, legends and myths. Initially, in India, it was believed that Anime is made for children only. But presently in the West or East, this concept of using animation to establish complex stories has become popular. In India, Anime is popular now, but not so much as its Western counterparts. In India, Cartoon Network, Pogo and Nickelodeon were more popular Anime among kids. Here the trend of Animes started with *Dragon Ball Z*, *Pokemon*, *Doraemon*, *Sinchan* etc. that were popularised on television, all Western cartoons. Presently the craze of viewing Western anime among kids on TV or YouTube is waning with lower interest but kids are still watching *Chhota Bheem* with full energy. The teenagers have begun to take interest in watching *Kissanime* and *Crunchyroll*. The invention of internet changed the world, and people can enjoy any show without any restrictions (for adults or kids).<sup>7</sup>

### **Indian Anime and Manga**

YouTube has become a thing since 2010. With the introduction of smartphones, it became unstoppable to continue the Anime in India. Indian Anime You Tubers like *Anime TM Talks*, *Indian Otaku*, *Anime Mirchi*, *Pokeverse X*, *Screen Point*, etc. have hyped Anime in India to another level. They promote news, reviews, spoilers, discussions on Anime, and most interestingly with little *desi tadka*. So, now the myth has been broken that Anime is only for kids. Millions of fans are there in India of Anime and Manga, but the Indian entertainment industry has not yet acknowledged the value of the medium. In other words, it can be said that the industry is well aware of its huge scope but

deliberately wants to stifle its voice. But in India people have started to make their own versions Anime and Manga. Ramayana: The Legend of Prince Rama was a collaboration between Japanese and Indian creators under the banner of Nippon Ramayana Film Co.

These Mangas are predominantly or completely based on people and events of India like Buddha, Senaka Kara Daite, Futari no Maharaja, Kono ki Wa Himitsu<sup>8</sup>, Blust, Butsu Zone, Mugen Garan, Mother Teresa: Mazushii Hitobito ni Tsukushita Ai to Yuukl no Seijo, Comic-ban Sekai no Denki: Mother Teresa, Virgin for the Billionaire's Taking<sup>9</sup> etc.

The first Indian regional character in Manga comics is Ravi, who is a warrior of *Kalaripayattu*.<sup>10</sup> It is an ancient traditional martial art form from Kerala, India. *Kalaripayattu* art form is used here and the artists are all from Bangalore. It has come out first in Japanese and English and then in several regional languages such as Kannada, Tamil and Hindi. In Google Play Store we can find this basic idea. Like, Kalari (Art & Design), Ninja warrior: Legend of Adventure (Action), Kalaripayattu PRO Material Arts (Health & Fitness) and so on.

#### **A General Outlook Towards the Role of Media-generated Folklore in India**

The dynamic role of media-generated folklore is evolving towards building a collective conscience. An Instagram community has emerged on the internet through humorous doodles, scribbles, memes to create a folkloristic, collective body of opinion on current affairs. The role of internet folklore is creating a big difference in enlarging corporate social responsibility beyond isolated welfare initiatives for shaping public opinion. Presently we notice a decline of comic industry under the pressure of various programmes of the competitive satellite TV channels for children, and the gaming industry. The classical worship of Devi Durga is not a very ancient heritage but a recent culture. By practicing this mega culture and festival people get involved with different types of employment, artisans can manage their job and involve with recycling materials and rare experimental

technologies. This culture is also a part of modern folklore where people are involved with their existence both in the villages and cities but their engagements are dealing with the public interest and not connected with violent abusive tribal practices. This festival is based on a myth and presently practised as mega media publicity of heritage festival.

The computer games such as Resident Evil and House of the Dead have been turned into movies, while TV shows, serials explore the new motives of ghosts and the supernatural world by mixing the ideas from Tantra, folkbeliefs, lives and experiments of saints and their works. This trend is taking Indian television towards a new folk religious motivation. Children are not directly connected to it but indirectly the stories put an impact on them as some families are involved with watching serials.

#### **The Importance of PC for Popularising Media World to the Children**

After 1970s, the PC has become a gaming platform and it helps the digital distribution of video games like Steam, Origin, Uplay and we can enjoy the free MMO games models.

Hades: Battle Out of Hell was a production of the talented Supergiant Games studio, which has given us titles such as Bastion, Transistor and Pyre. The creators prepared a spectacular, rogue-like dungeon crawler, set in a world known from Greek mythology. It was a trending action in 2020. On August 31, 2016, a new edition of Titan Quest was released. The plot takes place in ancient times and is based on stories from Greek, Egyptian, Babylonian, and Chinese mythologies. Here the players become the hero and try to imprison the demon Titan who has escaped from prison and is now causing mayhem and destruction on Earth. The rendition was developed as a joint venture between the original developers - Iron Lore Studio and THQ Nordic. There are 1261 changes we can find in the total Titan Quest Anniversary Edition including various classes balanced with each other with their abilities, gorgeous weapons and varieties of items. Apart

from that, there are large groups of enemies and bosses who are the new generation challenging bosses of this metaphoric world. The visuals underwent only symbolic changes but they are still eye-catching, despite the passage of time. Another economic strategy game by impressions Games, specialised in historical strategy game, released was *Lords of the Realm* and the *Caesar* series in 2000. The production has been set in ancient Greece and the player who is the leader of a city has not only develop his/her domain but also care for its citizens and appease the gods overseeing the region. *Zeus: Master of Olympus* features high-quality visuals, with detailed building models and ever-present citizens, carrying out their daily lives.

In 2011, *Beyond the Legend: Mysteries of Olympus* a casual adventure with "hidden objects" puzzles, was produced by Teyon, a Krakow-based development studio. Here the player is the Theron himself, the hunter and the lover of the goddess Artemis. The interesting part of the game is that the heroes want to prove to the ancient gods that he is worthy to take a place among them at Olympus.

#### **Computer Games: A New Form of Cultural expression**

Computer games can generate groups with the new identified people from the built texts. Here, for online mode of use, all the stories must be very impressive and should be selected as applied folklore stories : a fresh reproduction of our known storyline. Today visual technologies have a significant effect on our lives. However, it seems that the visual effects can change our thinking and lifestyle by the power and magic of the statement. The reproductive technology transfer, cultural background and creativity of art are the main types of equipment of the computer games. UNESCO members signed two contracts in 2003 and 2005 to emphasise this kind of technology transfer. However, parallel to technological developments, the sources of the games are selected from various cultural backgrounds and used to develop the technology. Following this manner, we can discover Turkish mythology in its new form in the game of *Umaykut Efsanesi*.

Moreover, it carries forward visual icons and symbols of many mythological elements to the present day.

Computer games are evolving from everyday life by depending on technological developments. Nowadays these technologies are adopted in pedagogical settings, and teachers use them in classrooms to motivate students and provide them an interesting world of possibilities. Now in all social media and educational fields, the use of one special computer technology is most popular, that is Avatar, a human-body representation in the virtual world. Here are some examples which I have collected from the internet:

*Broken Sword: The Shadow of the Templars*

Developer: Revolution Software, 1996

A tourist investigates the bombing of a Parisian cafe and gets tangled up in a conspiracy involving a sinister cult and an ancient order of knights.

*Batman: Arkham Asylum*

Developer: Rocksteady Entertainment, 2009

A classic Batman tale, that takes the fictional world and creates something fresh and exciting with it.

*The Witcher 3: Wild Hunt*

Developer: CD Projekt Red, 2015

Inspired by eastern European folklore, The Witcher's fantasy world is distinct from other Role-playing games (RPGs). But what makes it special is how it uses familiar stuff like curses, monsters and vampires to tell human stories.

In India Prime Minister Narendra Modi has shown his interest to support India's games industry. An official statement was published on the Prime Minister's website in August, 2020, addressing the potentiality of India's toy industry with foens on a broad category of video games. Mr. Modi recognised the need for involving young people and students, to encourage innovation in the country's games industry.

He also emphasised that India should lead the international digital gaming sector by developing games that are inspired by indigenous folk culture and tales. This aim is under a broader strategy of 'Ek Bharat, Shreshtha Bharat'. A recent example of a game based on Indian folklore is *Raji: An Ancient Epic*, developed by the Pune-based studio Nodding Heads Games and launched on Nintendo Switch. Presently the video game *Raji* is available online. Therefore it's a national product focusing on Indian culture and traditions. Now GamesIndustry.biz is a successful name of the emerging Indian games industry.

In 2015 Gamya Inc. launched a video game based on Ramayana named Gamaya Legends. Gamaya Inc. is a California-based video game and connected toys startup in the Indian Territory. Gamaya that forayed Legends introduced a distinctive combination of the real and the virtual worlds by connecting the folktales and past heritage with the present day life. The toys of this game are very beautifully crafted that are the physical manifestations of their virtual Avatars. These toys when placed on the gaming console activate the characters in the video game. 3D animated cartoons and toys that come alive in a video game open up a new world of folklore for the kids like never before.

Besides Steam it is available on XBOX, PS4, Nintendo Switch and Epic Games.

In India, other games like Fearless And United : Guards (FAU-G) series, J.O.S.H, Fauji Veer, etc. have been launched which can be enjoyed like PUB-G or Fortnite. The games are now available on Google Play Store and the Apple App Store. These games are based on real scenarios encountered by the Indian Security Forces to deal with both domestic and foreign threats.

### **A New Indication of Folklorography**

Through this discussion I want to point out that not only in print media but also in soft media the use of folklore has shifted from its conventional way. We cannot treat this subject as it was invented in the 19th century. As the society is progressing towards urbanisation,

modernisation in every corner of the world, so the people are also reshuffling their way of living to face the new challenges. Therefore we cannot find the same traditions which were very much in practice in the 19th century prevailing in this period without any change. We have to think over how our traditions have been changed day by day. Rituals, customaries, way of thinking, cultural and economical status, political perspectives are changing their nature. We can quote here, 'Culture can be conceptualized as a space within which struggles between social forces are conducted' (Hall, Stuart. 2002: 81).

In folkloristics, people to people communication is the main issue. And if we investigate the methods of communications through ages we can find it has changed its pattern in every sphere like in, narratology, historiography, the intertextuality between different types of oral and literary texts, structuralism, discourses, hegemony, power, public sphere, popular culture, culture industry, folklorismus or folklorism, hermeneutics, heteroglossia, dialogue, otherness, post modernity, late or hyper capitalism, urbanisation, globalisation, etc. So, the study of Folkloristics is not only the study of our past heritage and the culture of our village folk but the day to day struggle and passion towards our life. We have to study Folkloristics as folklorography, as historiography and it will help us to point out the present scenario. This way of thinking among the folklore researchers has started from the second half of 20th century and presently it has expanded in India. In West Bengal Dr. Soumen Sen had pointed out this theory to the modern folklorists (Sen, Soumen. 2004: 17).

Change and evolution of every society is a practical reality. Media culture is a part of it. 'Traditions which appear or claim to be old are often quite recent in origin and sometimes invented. It is the contrast between the constant change and innovation of the modern world and the attempt to structure at least some parts of social life within it as unchanging and invariant, that makes the invention of tradition so interesting.' (Hobsbawm, Eric. 1983: 1, 2)

There are interconnection between culture, folklore and mass culture. We are not bothered today about their purity. Globalisation



brings the world nearer. The rhymes which are now accessible in market as VCD or DVD or in pen drive; cannot be expected to create the same reaction and vibes among the children which can be achieved by hearing those rhymes from their own grandparents. When those rhymes are used in any comic series or film the sequences of its presentation change. Application of musical drama and visual representation limit our power of imagination and dictate us to foresee something which is supposed to be believed. The oral narratives have changed from its original form through generations and at present those are accepted by our modern generation in the form of cartoon films or anime or manga. These changes have happened both in cities and villages, in slum areas and in small towns. The social system, cultural background and economic status of people have changed throughout the world and through globalisation it is progressing rapidly.

The use of folklore in media is an outcome of the idea and intellect of the modern folklorist. The modern world of entertainment, knowledge of social structure, pedagogical experiments and the conventional way of life has adjusted its way to the demand of regularly changing cultural sense of the people. The socio-cultural revolutionary actions and reactions, the increasing importance of personal space in life and expanding ways of self recognition have changed the known world of entertainment of both the children and the adults.

The tribes in India and throughout the world also changed their life style and adopted the so called civilised culture for the sake of surviving. The synchronic and diachronic research experiments through field survey can show us the proper picture.

### **Conclusion**

Folklore in a broad sense is affecting the media and the Indian children, including the Bengali are immensely media-friendly. Therefore, from the day to day activity to prepare their school project or spending their leisure time they always depend on media and folklore is commonly used by media in every sphere of children's

activity. We have to locate folk elements in media with our mythical knowledge background, day-to-day lifestyle, heredities like food habits of any community, special arrangements of any social function or the typical beliefs of native people which they have been following through generation after generation. When in computer games or memes we find this kind of beliefs it strikes our own identity, and as an Indian, we follow our own beliefs in new creativity. The same should be followed by others. In this way through science and rapidly changing new society, we can live as true Indians to our future generation also. We should save our own culture in this digital age more easily and mark it as our own identity to the outer world.

#### Notes

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- <sup>2</sup> Upendra Kishor Ray Choudhury: [https://en.wikipedia.org/wiki/Upendrakishor\\_Raychowdhury](https://en.wikipedia.org/wiki/Upendrakishor_Raychowdhury) (retrieved on February 2021).
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- <sup>6</sup> <http://digitalcommons.usu.edu/cgi/viewcontent> (retrieved on May 2021)
- <sup>7</sup> Indian anime: <https://animehunch.com/2021/08/is-anime-popular-in-india/> (May 2021).
- <sup>8</sup> The Manga site: <https://mangakitsune.com/manga/kono-koi-wa-himitsu/>
- <sup>9</sup> Mother Teresa, Virgin for the Billionaire's Taking <https://books.apple.com/us/book/virgin-for-the-billionaires-taking/id1440238535> (retrieved on May 2021).

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## *Evolution of Zoological Gardens in the World at large*

Doel De

### **Abstract**

Carl Sagan, the famous American astrophysicist, said most of us go through life, as if there is no external world. We do not stop to observe the myriad creatures that share this earth with us.

The zoo provides us with this scope to know the unknown, through the known human world.

Thus the present article will reflect a part of my project : History of Zoological Gardens in Colonial Bengal (1800-1947), where the chronological development of zoological gardens in the world, from inception to subsequent growth and human psychological involvement is studied.

The frog does not drink up the pond in which it lives.

Sioux Native American Proverb

This very thought expresses the basic common sense that natural world never annihilates its own place of sanctuary as we humans do. Moreover, we are in amnesia that we are internal to natural world, not external to it! All the previous extinctions were naturally occurring phenomenon but the present state of our planet can most appropriately be termed, "Anthropocene", a term popularized by Noble Laureate, Paul Joseph Crutzen, a Dutch atmospheric chemist. It explains that current state of our planet is due to human over activity, to say simply.

This explanation will take us to the origin of Zoological gardens in the world at large. For this one may remember, Lauren E. Oakes, a conservation scientist at the Wildlife Conservation Society, said :

“Our separation from nature stems from our early efforts to protect it. And that separation is the cause of our problem today”.

Thus this clarifications will lead us to the bottom of the psyche of the evolution of zoological garden in the world at large by two basic concepts:

First, David Pepper’s view that there is difference between real and perceived environment, which vary with human cultures, as it changes with time and country.<sup>1</sup>

Second, Thomas Keith’s view that human civilisation and conquest of nature are interlinked fact.<sup>2</sup>

According to Swiss biologist, Heini Hediger from Zurich, man’s efforts to tame animals, domestic them and keep them in captivity is as old as man himself. It is a moot point which civilisation Chinese or Egyptian was first to make animals captive, but both peoples certainly kept menageries from very early time.<sup>3</sup>

This brings us to the five periodical demarcations of the development of the zoos by French zoologist, Gustav Loisel:

Prehistoric Period;

Paradise Period;

Menagerie Period;

Classical Period;

Modern Zoological Park Period;

as already stated in my previous paper of mine, in the “Journal of Asiatic Society” (vol:LXII, No 1,2020).

Now, Lord Zukerman in his analysis on zoos, put the evolution process of zoos in different phased manner:

First Phase: Reverence and Brutality: In ancient Egypt, Greece and Rome;

Second Phase: The Mark of Splendour: In medieval Arab and Europe;

Third Phase: Science and Education: In the new scientific development of France and England and many European countries;

Fourth Phase: A period of decay from 1918-1939. Its a period of interval between two World Wars but development of zoos remained stuck in scientific decay;

Fifth Phase: Conservative and Commerce: In the period after the Second World War opened the present phase of evolution of zoos.

Though the European zoos suffered severely, but public interest on zoos increased and the public attitude to the exploitation of wild animals, were also changing concern about environmental matters and wild fauna of the world.<sup>4</sup>

Keeping wild animals in captivity over many generations led to a biological process now known as 'domestication'. Although a few species became domesticated for utilitarian purposes, other species are also kept, some becoming tame and some remaining wild. These captive animals formed what might have been protocollections; however, there is known evidence for this hypothesis.<sup>5</sup>

Still the earliest evidence of animal keeping appears to be the illustrations lining on the tomb of wealthy Egyptian nobleman Ti Ni Saggara (5th Dynasty, 2495- 2345BCE). A neighbouring tomb contains wall sculptures that appear to be illustration of a zoo where antelopes are tethered to the mangers and some as being fed by attendants or led by their horns. The earliest wild animal keeping may have occurred for religious reasons. The Egyptians regarded many species as sacred. Tame lions were kept by pharaohs and some animals are mummified. There was an ancient zoo at Alexandria, found by Ptolemy Philadelphus but little is known about it.<sup>6</sup>

King Shulgi of the 3rd Dynasty of Ur in Mesopotamia (2094-2047BCE) probably owned the first zoo that kept large carnivorous like lions. It was in Sumer (Iraq) that clay tablets found in several Sumerian cities record the receipts and distribution of livestock. Wild animals as gifts by many Babylonian and Assyrian kings.<sup>7</sup>

There were many ancient records of substantial numbers of wild animals being kept by men in the Middle Ages. In 879BCE Assurnasirpal II , King of Assyria, collected entire herds of elephants and kept them in a Zoo.<sup>8</sup>

By the 4th century BCE, most of the cities of Greece probably had their own animal collections. Alexander the Great sent many specimens back to Greece from his military campaigns. In his 'History of Animals'

Aristotle, Alexander's tutor described many species that were not native to Greece, suggesting that he must have visited many of these menageries.<sup>9</sup>

The Romans slaughtered very large animals in the Colosseum and other similar stadia. However, animals were simply displayed. Augustus exhibited a rhinoceros, a tiger and a large snake to the public.<sup>10</sup>

In ancient China, Emperor Wen Wang created an 'Intelligence Park' but little is known of this apart from a description in a collection of ancient Chinese poetry. Although, the park created by Emperor Chi-Hang- Ti of the Thsin Dynasty was filled with animals and trees all over his empire.<sup>11</sup>

In Europe from medieval times, large exotic animals tended to be the property of kings. They were often given as gifts from one monarch to another. The animals were kept in deer parks or menageries. King Charlemagne of France received an elephant from the Caliph of Baghdad in 797 CE. Monks also sometimes had menageries, such as one at Saint Gall in Switzerland, where bears, badgers herons and silver pheasants are kept.<sup>12</sup>

Persian and Arab societies (546BCE -1492 CE) also had gardens containing wild animal collections.<sup>13</sup>

In England, about 1100, Henry -I had a menagerie at Woodstock that contained lions, leopards, lynx, camels and a rare owl. This was later moved to the Tower of London, probably by Henry -III. In 1251 Henry- -III received a polar bear that was allowed to fish in the river Thames. Three years later he received an elephant from the King of France Louis-IX. The elephant was first in England and was put on display in public.<sup>14</sup>

In medieval Europe royalty and nobility often kept animals in deer parks. At this time 'deer' probably meant 'animal'. King John (1199-1216 CE) possessed about 800 parks.<sup>15</sup>

In the thirteenth century Marco Polo saw lions and tigers wandering freely through the rooms in a Chinese imperial palace. Around this time Kublai Khan, the fifth Great Khan of the Mongol Empire, had



animal parks that were used for hunting, and he also kept lame cheetahs, tigers and falcons.<sup>16</sup>

Philip VI of France (1328 -1350CE) kept lions and leopards at the Louvre. French 15th century tapestries show monkeys and apes kept in royal courts, and parrots were popular in the Vatican around this time. The Vatican menagerie expanded under Pope Leo-X(1513-1523CE).<sup>17</sup>

When Hernàn Cortès, conquered Mexico from Spain between 1517 and 1521 he discovered a magnificent zoo owned by the Aztec Emperor Montezuma-III at his capital Tenochtitlan. It contained llamas, antelopes, snakes, waterbirds, a large collection of birds of prey, an aquarium, large cats and other carnivores. It also contained human albinos and deformed humans. The zoo appears to have had several hundred keepers and some of the birds appear to have been kept for their feather. Similar menageries existed in other Aztec cities, including a large collection at Texcoco.<sup>18</sup>

In 1552 Crown Prince Maximilian of Austria created a deer park and menagerie around the castle at Ebersdorf, near Vienna. He brought exotic animals to his park, including an Indian elephant. Maximilian established another park at Katterbury containing deer, birds and fish, and a menagerie at the castle of Neugebäude. After his death, Katterbury was absorbed in to the imperial palace of Schonbrunn, and in 1752, Franz Stephen- the husband of Empress Maria Theresa, founded the first modern zoo here. It was essentially a private collection, although the public was admitted occasionally. Enclosures were arranged around a central rococo pavilion which were kept behind high walls. Later, Joseph -III established a Society for the Acquisition of Animals and he financed collecting expeditions to Africa and America. In its days Schonbrunn was the best animal collection in Europe and the zoo still exists as Tiergarten Schonbrunn or Zoo Vienna.<sup>19</sup>

In the 17th century France, Louis-XIV, built a menagerie in the grounds of his palace at Versailles.<sup>20</sup>

The evolution of the public zoo really got its start in France under Louis-XIV. In the art of animal architecture or zoo design he embarked

on a tremendous project at Versailles. The French historian on zoos, Loisel, was of the opinion that the Versailles merits the title of the first Zoological garden ever known (at least in Western World). Versailles's animal enclosures were wedge shaped and radiated like the sections of the fan from château's octagonal courtyard. A stout wall enclosed the whole "evantail". The interior of the little palace was as pretty as outside, with paintings of birds and beasts on the walls, and tapestries, chair covers and porcelain carrying the same theme. It was approached by waterways where the banks are covered with flowers, arched over here and there by climbing roses.

The Versailles complex château and menagerie, became famous in the great world, and played an important part in diplomatic exchanges, but Louis-XIV slowly lost interest in Versailles and animal garden. But it was due to interest of Princess Adelaide, Princess of Savoy and wife of Louis-XIV's son Duke of Burgundy, that it rekindled his interest in the menagerie and Versailles after seven years it opened. But after the death of Adelaide and Louis-XIV, menagerie fell to despair and closed in 1792.<sup>21</sup>

The remaining animals were offered to the former 'Jardin du Roi' in Paris, which was named 'Jardin des Plantes'. In 1793 the 'Jardin was incorporated into the 'Museum National d' Histoire Naturelle' and in 1803 the zoologist George Cuvier assumed responsibility for the menagerie. The 'Jardin des Plantes' had broad walkways from which ordinary people would view the new exhibits, unlike Schonbrunn where only privileged occupants of the pavilion had a good view of the animals. Unfortunately, in 1870 the Prussian army laid seige to Paris and all of the edible animals were slaughtered for food.<sup>22</sup>

Thus what we viewed up till now is when zoological gardens were in a nascent stage. But its real birth is taken as with Zoological Society of London though it is not the pioneer, the Barrackpore Menagerie was the pioneer even in terms of scientific base and also for the first Children's Zoo there along with the main menagerie.

The Zoological Society of London (ZSL) was founded in 1826 by Stamford Raffles. In 1826 London Zoo- in Regent's Park opened to

Fellows of the Society, and paying visitors were admitted in 1847. London Zoo was the first scientific zoo in the world and its first superintendent was Abraham Dee Bartlett. The Zoo opened the first reptile house (1849), the first insect house (1881) and the first Children's Zoo (1938). In 1931 the ZSL opened Whipsnade (Whipsnade Park Zoo), in Bedfordshire, in order to keep and study large animals in more natural surroundings. In 1960 the Society established the Institute of Zoology where scientists are employed to conduct zoological research.<sup>23</sup>

One cannot forget Stamford Raffles the founder of Singapore and London Zoos visited India at the Barrackpore Menagerie.

Although London Zoo was extremely popular with the public it is important to remember that the only people who could visit it in its early days had no means of travelling long distance for a day out. When most people were unable to travel to zoos to see animals, travelling menageries were popular. Perhaps the best known of these was Bostok and Wombwell's Royal Menagerie which travelled widely in Britain and abroad from 1805 until 1932, when the animals were sold to London Zoo. The menagerie included a wide range of animals including elephants, camels, lions and tigers.<sup>24</sup>

From around 1875 P.T. Barnum's Great Travelling Museum, Menagerie, Caravan and Hippodrome exhibited animals across the United States. This eventually evolved into The Ringing Bros and Barnum and Bailey Circus ("The Greatest Show on Earth") which still exists today. In 1882 Barnum and Bailey purchased the famous elephants 'Jumbo' from London Zoo.<sup>25</sup>

The founding of the Zoological Society of London by the establishment of a large number of other major zoos around the world, particularly in Europe, the USA and Australia, including the Royal Melbourne Zoological Gardens in 1872 and the National Zoological Park which opened in 1891 in Washington DC. These zoos became an important focus of civic pride and in United States a city was not considered to have a 'real' zoo unless it possessed an elephant.<sup>26</sup>

Without doubt the greatest influence on the future development of zoos was the creation of a new type of zoo in Germany at the beginning

of the twentieth century. In 1907, Carl Hagenbeck, an animal trainer and trader, founded Tierpark Hagenbeck in Hamburg, Germany.<sup>27</sup>

'God Almighty', wrote Bacon, 'first planted a garden'; He created the first nature reserve - that earthly paradise so charmingly and whimsically re-created for us in the paintings of Jan Brueghel the Elder and other Flemish artists.<sup>28</sup>

It was Noah who assembled the first menagerie, and conditions in the Ark must have been not unlike those obtaining in many a nineteenth-century zoo; there may or may not have been cages, but there must certainly have been overcrowding. The long fascinating, but at times distressing story of keeping of animals in captivity from the days of Noah onwards may be read in three stout volumes of Gustav Loisel's *Histoire des Ménageries de l' à nos Jours*, published in Paris, 1912.<sup>29</sup>

The word 'mènagerie' comes from the French *mènager*, a term which comprehends a number of activities related to the management of a family and the care of a household. Until the middle of the nineteenth century, a *mènagerie* was merely an enclosure presumably part of a *château*, where livestock were kept and fattened for the table. Louis XIV then decided to transform the *mènagerie* which was attached to his palace at Versailles into what today certainly would be called Zoo.<sup>30</sup>

In this whole world view on zoological garden, one thing is clear, two concepts dominate the history of the zoological gardens:

One, conservation effort (whatsoever be the reason);

Second, detailed scientific observation of nature and its documentation.

These are the core idea of a zoological garden where nature is managed either for entertainment or for human welfare.

In India we have these very basic concepts, from earliest to Mughal times, but there is a psychological turning point during Colonial period. Detailed analysis of Indian part, will be made by me, in some other paper, in future.

From earliest to Mughal times, there was prevalence of the 'Arcadian' view of nature but by colonial period, it took to 'Imperial' view of nature.

We are seeing nature through a 'culture filter' so we try to control nature for our own human welfare only!

In all these world view, where we Indians, stand, let me give a short view, as we are pioneer in the field, especially during colonial period.

The Barrackpore Mènagerie (1801-1879), located north of Calcutta, was a highly prestigious and important government facility in British India that filled a serious scientific purpose as well as a social and recreational function. Although it did not evolve as its prestigious origin might have led to some to predict it would, the mènagerie continued in a modified form as a wild-animal way station and park for more than seventy-five years.<sup>31</sup>

The Barrackpore Mènagerie was originally the animal holding facility of the ambitious Natural History Project, which was initiated in 1801 by Lord Arthur Wellesley, when he was the governor general of Bengal under the British Crown. Barrackpore is significant as a "transitory" institution, as it probably influenced the direction in which modern zoos would develop, as opposed to royal collections, which had been in fashion for centuries.<sup>32</sup>

The Barrackpore Mènagerie came about as a result of a scientific inventory of the zoological wealth of India and South Asia (in effect, India's first biodiversity project). This project was a component of a plan to create a natural history institute within an enlightened college of Indian culture and science meant for English civil servants. This college was the dream of Governor Wellesley, who thought, rightly, that the English lack of understanding of this alien culture was not conducive to good government in the districts. Wellesley's vision was not shared by his superiors, however, and the college was not approved, although he did convince the Board of Governors that scientific research, including that of natural history, would result in financial benefits for the British East India Company.<sup>33</sup>

Francis Buchanan - Hamilton was a surgeon, as well as a botanist by avocation, who had undertaken large - scale surveys of vast regions

of India, the reports of which were admired by the government. He was selected by Wellesley to initiate an "official study" of Indian natural history at Barrackpore. There, "quadrupeds and birds" were to be collected and kept for Buchanan - Hamilton so that his artists could draw them from life and Buchanan - Hamilton could write scientific descriptions from them. This endeavor to describe, draw and classify the birds and quadrupeds of South Asia was the first systematic attempt to do so and very much ahead of his time. Neither the Zoological Club of the Linnean Society nor the Zoological Society of London had been started at this time (and would not yet come about for another two decades).<sup>34</sup>

The American Historian, Lynn White Jr.'s article of 1967, described Christianity in its western form as the most anthropocentric religion in the World.<sup>35</sup>

But Thomas Keith points out, that recent critics of White's thesis, have observed that the ancient Romans of the pre-Christian world exploited the natural resources more effectively than the Christians of medieval world; and that in modern times the Japanese of nature has not prevented the industrial pollution of Japan. Ecological problems are not peculiar to the West ... extinction of species have occurred in parts of the world where Judeo-Christian tradition has had no influence. Anthropocentrism was not peculiar to Western Europe.<sup>36</sup>

Besides, the Judeo - Christian inheritance was deeply ambivalent. Side by side with the man's right to exploit the inferior species went a distinctive doctrine of human stewardship and responsibility for God's creatures.<sup>37</sup>

It can indeed be argued that Greek and Stoic influence distorted the Jewish legacy so as to make the religion of New Testament much more man-centered than of the old.<sup>38</sup>

Human civilisation indeed was virtually synonymous with the conquest of nature.<sup>39</sup>

The scientists and economic projectors of the seventeenth century anticipated further triumphs over the inferior species. For Francis

Bacon, the purpose of science was to restore to man that dominion over the creation which he had partly lost at the Fall.

On the other, Robert Boyle in his correspondence with John Beale called for 'the empire of mankind'. To the scientists reared in this tradition, the whole purpose of studying the natural world was 'that - Nature being known, it may be mastered, managed and used in the services of human life'.<sup>40</sup>

So on such a basis, the study of Zoology began with practical and utilitarian basis. The Royal Society encouraged its study of animals with a view to determining whether they may be of any advantage to mankind as food or physic; if so, then how could they be further improved.<sup>41</sup>

In conjectural history which became increasingly popular during the European Enlightenment of the eighteenth century, man's victory over other species was made the central theme. The true origin of human society, it was said, lay in the combination of men to defend themselves against wild beasts. Then came hunting and domestication.<sup>42</sup>

Our ascendancy over nature seems nearly complete ... but in the Tudor and Stuart age the characteristic attitude was one of exaltation in hard - won human dominance.<sup>43</sup>

Inhibitions about the treatment of other species were dispelled by the reminder that there was a fundamental difference in kind between humanity and other forms of life. The justification for this belief went back beyond Christianity to the Greeks. According to Aristotle, the soul comprised three elements: the nutritive soul which was shared by man with vegetables; the sensitive soul, which was shared by animals; and the intellectual soul or rational soul, which was peculiar to man. This doctrine had been taken over by medieval scholastics and fused with the Judeo-Christian teaching that man was made in the image of God. Instead of representing man as a merely superior animal, it elevated him to wholly different status, halfway between the beasts and the angels. In the early modern period it was accompanied by a great deal of self-congratulation.<sup>44</sup>

Man, it was said, was more beautiful, more perfectly formed than any other animals .... Even so, there was lack of agreement as to just where man's unique superiority lay. The search for this elusive attribute has been one of the enduring pursuits of Western philosophers like political animal (Aristotle); a laughing animal (Thomas Willis); a religious animal (Edmund Burke) etc. What all such definitions have in common is that they assume a polarity between the categories of 'man' and 'animal' and they invariably regard animal as the inferior.<sup>45</sup>

Three human attributes are particularly stressed. The first was speech, a quality which John Ray described as 'so peculiar to man that no beast could ever attain'.

The second distinguish quality was reason. As animals had elementary powers of understanding but they lack speculative thinking as man. Above all, man could choose, whereas animals were prisoners of their instinct, guided by appetite and incapable of own free will.<sup>46</sup>

This distinctive human capacity for free agency and moral responsibility led on to the third, ... most decisive difference. Unlike animals, man had a conscience and a religious instinct. He also had an immortal soul, whereas beasts perished were incapable of afterlife. It preserved human dignity of human nature, by showing an essential difference between the spirit of man and souls of animals.<sup>47</sup>

In the seventeenth century, the most remarkable attempt to magnify this difference was a doctrine originally formulated by Spanish physician Gomez Pereira in 1554, but independently developed and made famous by Rène Descartes from 1630s onwards. This was the view that animals were machines or automata, like clocks, capable of complex behaviour, but wholly incapable of speech, reasoning, or, on some interpretations, even sensations. For Descartes, the human body was also an automation. But the difference was that within the human machine there was a mind and therefore a separable soul, where as brutes were automata without minds and souls. Only man combined both matter and intellect ... This doctrine anticipated much later mechanistic psychology and contained the germs of the materialism



of La Mettrie and other eighteenth century thinkers. Cartesian doctrine had the effect of further downgrading animals by comparison with human beings ... For him essential point was they lacked the faculty of cogitation.<sup>48</sup>

But the most powerful argument for the Cartesian position was that it was the best possible rationalisation for the way man actually treated animals. The alternative view had left room for human guilt by conceding that animals could and do suffer.

Cartesian, by contrast, absolved God from the charge of unjustly causing pain to innocent beasts by permitting humans to ill-treat them; it also justified the ascendancy of men, by freeing them, as Descartes put it, from 'any suspicion of crime, however often they may eat or kill animals. By denying immortality of beasts, it removed any lingering doubts about the human right to exploit the brute creation. Descartes's explicit aim had been to make men 'lords and possessors of nature'.<sup>49</sup>

In so doing he created an absolute break between man and the rest of nature, thus clearing the way very satisfactorily for the uninhibited exercise of human rule.<sup>50</sup> Yet Descartes had pushed the English and European emphasis emphasized on the gulf between man and beast to its logical conclusion.<sup>51</sup>

This fundamentally distinct attitudes led to the foundation of zoological gardens from pre - modern to modern age in Europe.

In drawing a firm line between man and beast, the main purpose of early modern theorists was to justify hunting, domestication, meat eating, vivisection and the wholesale extermination of vermin and predators. But this abiding urge to distinguish the human from the animal also had important consequences for relations between men. For, if the essence of humanity was defined as consisting in some specific quality, then it followed that any man who did not display that quality was subhuman, semi-animal.<sup>52</sup>

The seventeenth and eighteenth centuries saw many discourses on the animal nature of negroes, American Indians, Irish, women<sup>53</sup> & once Britishers' had brought Nicobarese as exhibits at Alipore zoo, India.

The idea of human ascendancy, therefore, had its implications for men's relations to each other, no less than for their treatment for their natural world ... It was, therefore, a serious matter when controversialists tried to dehumanize their opponents.<sup>54</sup>

In early modern England it was conventional to regard the world as made for man and all other species as subordinate to his wishes. This assumption was gradually eroded by a combination of developments, as growth of natural history, the scientific study of animals, birds and vegetation.<sup>55</sup>

Thus clarifying the view, that 'natural world had a life of its own independent of human need.'<sup>56</sup> This very thought had the idea of zoological garden as a 'observation centre' for zoological species in modern times.

Taking the key from the Aristotle's system of beasts classification, early zoologists, classified them on anatomical structure, habitat reproduction and their mode of reproduction. But they also considered their utility to man, value as food, and medicine and as moral symbols. To the eighteenth century French naturalist Buffon, was according to their relationship to man. He explained unabashedly that his main purpose was to show which beasts were the friends of man; which could be trusted; which could be eaten. Essentially, there were three types of distinction made as edible-inedible, wild-tame, useful- useless.<sup>57</sup>

The whole natural history world indeed was conventionally assumed to be ordered in a hierarchical scale.<sup>58</sup>

From about 1810 or so the Linnean system in turn gave way to other, more natural schemes.<sup>59</sup> The scientists thus rejected the man centered symbolism which had been so central to earlier natural history. Francis Bacon had observed that the emblematic meanings conventionally given the creatures were not inherent in them, but only human inventions. But it was John Ray and his friend Francis Willough by who were the first English naturalists to emancipate themselves explicitly from the emblematic tradition.<sup>60</sup>

The Aristotelian view that 'something, beautiful in every creature which meant, natural objects of all kinds should be without inhibitions

or tastes, became the watchword of Elizabethan period.<sup>61</sup> Armed with these principles the naturalists struggled to contemplate the whole animal world with a natural curiosity.<sup>62</sup>

In the late seventeenth century was thus a decisive period in the separation of popular from learned views of the natural world as gulf was further widened by the introduction of a new latin terminology to supersede the vivid vernacular names.<sup>63</sup>

In early modern England human relations with domestic animals were much closer than official religion implied, as the pet were the privileged species who were kept in houses, given names, and not eaten.<sup>64</sup>

It is against this pet keeping background that scientists and intellectuals broke down the rigid boundaries between animals and men which earlier theorists had tried to raise. The attack on conventional orthodoxy came from two separate directions. There were those who believe, man were no better than animals, possible even worse, and there were those who said that animals were intellectually almost as good as men.<sup>65</sup>

In the eighteenth century this heretic slaughter on man's supposed uniqueness was powerfully reinforced by the materialism of French thinkers. Until the nineteenth century they remained a minority. On the other far more people were prepared to concede that animals did not fall very short of man. Thus the difference was one of degree not of kind.<sup>66</sup>

The widely held notion of the great chain of being was actually ambiguous. On the other hand it postulated a clear hierarchy of creation with man well above the beasts and well above the angels. On the other, it suggested that there were no breaks in the chain, but each species imperceptibly moved into the next so that the line dividing men from animals was highly distinguished.<sup>67</sup>

In the mid eighteenth century, David Hume, conceded the power of experimental reasoning in animals. David Hartley similarly thought that brutes have more reason than man's ignorance of their language, which was already in believe among uneducated folks.<sup>68</sup>

At this time, the implication of Linnaeus's inclusion of man among the animals were resisted by many contemporary scientists who like Buffon, continued to accept the doctrine of absolute discontinuity between humans and non-humans.<sup>69</sup>

The growing belief in the social evolution of mankind thus encouraged the view that men were only beasts who managed to better themselves, thus breaking the notion of human uniqueness.<sup>70</sup>

By the later seventeenth century the anthropocentric tradition itself was being eroded. The explicit acceptance of the view that the world does not exist for man alone, can be fairly regarded as one of the great revolutions in modern Western thought, though it is one to which historians scarcely done justice ... Thus the destruction of old anthropocentric illusion was begun by astronomers, botanists and zoologists.<sup>71</sup>

The only answer to that question now was the one given in the mid-seventeenth century by Thomas Hobbes. Man, like any other living being, was entitled by the right of nature to take those steps which he thought necessary for his preservation and subsistence ... Human rule, therefore, reflected merely the naked self interest of human species.<sup>72</sup>

From the later seventeenth century onwards it had thus become an acceptable Christian doctrine that all members of God's creation was entitled to civil usage.<sup>73</sup>

What this mode of thinking implied was that it was the feeling of the suffering object which mattered, not its intelligence or moral capacity.<sup>74</sup>

There were also hints that the rights of animals extended to something more than mere protection.<sup>75</sup>

The triumph of the new attitude was already linked to the growth of towns and the emergence of an industrial order in which animals became increasingly marginal to the production process.<sup>76</sup>

By 1800, many species of wildlife were disappearing from English landscape ... the overall effect of human action, whether deliberate or inadvertent.<sup>77</sup>

The need for artificial measures to preserve those wild species on which men depended for food or sport had long be appreciated. Since medieval times royal forests and private parks were used as animal protection areas, but very soon they were managed like domesticated beasts. From the thirteenth century there had been numerous statutes, proclamations, or forest laws to prescribe a close season and to protect the breeding period.<sup>78</sup>

The first stirrings of the view that wild creatures should be preserved of wildlife even if they had no utility. Already some species are protected for curiosity or prestige.<sup>79</sup>

Since the twelfth century, kings of England had collected, exotic lions, leopards and other ferocious beasts; and their mènagerie at Tower lasted till 1834. The royal mènagerie symbolised it 'owner's triumph over the natural world... Later the zoo became the symbol of colonial conquest, wealth, status, but it also provided the aesthetic satisfaction.<sup>80</sup>

With the growth of European exploration and discovery, the import of rare species from every part of the world for private mènageries assumed unprecedented dimensions ... Among the general public interest in viewing unfamiliar animals and there were commercially minded individuals ready to exploit it.<sup>81</sup>

More novel, however, was the growth of inhibitions about eliminating any wild animal, whether ornamental or not. The continuation of every species was surely part of the divine plan.<sup>82</sup>

The modern idea of balance of nature thus had a theological basis before it gained scientific one. It was belief in the concept of God's design which preceded and underpinned the concept of the ecological chain, any link of which it would be dangerous to remove. The argument for design contained a strong conservationist implication, for it taught that even the most apparently noxious species served some indispensable human purpose. In the eighteenth century most scientists and theologians accordingly maintain all created species had a necessary part to play in the economy of nature. At the same time some of them had become increasingly aware that man's

persecution really could eliminate animal species, a possibility of which earlier generations had always denied.<sup>83</sup>

A mixture of theology and utility lay behind the increasing feeling that wild creatures ought, within limits, should be preserved. When the movement to protect wild birds gathered force in the nineteenth century it would lay much emphasis on the indispensable functions performed even by those species thought most pernicious.<sup>84</sup>

By the eighteenth century, a growing number of people had come to find man's ascendancy over nature increasingly abhorrent to their moral and aesthetic sensibilities. This was the human dilemma: how to reconcile the physical requirements of civilisation with the new feelings and values which that same civilisation had generated.<sup>85</sup>

The early modern period had thus generated feelings which would make it increasingly hard for men to come to terms with the uncompromising methods by which the dominance of their species had been secured. On the one hand they saw an incalculable increase in the comfort and physical well being or welfare of human beings ; on the other they received a ruthless exploitation of other forms of animate life. There was a growing conflict between the new sensibilities and the material foundations of human society. A mixture of compromise and concealment has so far prevented this conflict from having to be fully resolved. But the issue cannot be completely evaded and it can be relied upon to recur. It is one of the contradictions upon which modern civilisation may be said to rest. About its ultimate consequences we can only speculate.<sup>86</sup>

Thus the beginning of a journey of human psyche, which gave birth to the concept of zoo, in the world at large. Its an iota of the story to be revealed later.

So to end the story at this juncture, I would like to sum up with William Wordsworth's quote - "The World is too much with US" :

'The world is too much with us ; late and soon,  
Getting and spending, we lay waste our powers:

Little we see in Nature that is ours; We have given our hearts away,  
a sordid boon!'

### Notes

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- <sup>3</sup> Hahn Emily, *Zoos* (London: Seeker And Warburg, 1968). 21.
- <sup>4</sup> Zukerman Solly (Baron) ed., *Great Zoos of the World: Their origins and significance* (London: Zoological Society of London, 1980). 3-21.
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- <sup>6</sup> Rees E. Paul: *An introduction Zoo Biology And Management* (UK: Wiley and Blackwell, 2011). 32.
- <sup>7</sup> *ibid.* p. 32.
- <sup>8</sup> *ibid.* p. 32.
- <sup>9</sup> *ibid.* p. 32.
- <sup>10</sup> *ibid.* p. 32.
- <sup>11</sup> *ibid.* pp. 32-33.
- <sup>12</sup> *ibid.* p. 33.
- <sup>13</sup> *ibid.* p. 556.
- <sup>14</sup> *ibid.* p. 34.
- <sup>15</sup> *ibid.* p. 34.
- <sup>16</sup> *ibid.* p. 34.
- <sup>17</sup> *ibid.* p. 34.
- <sup>18</sup> *ibid.* p. 34.
- <sup>19</sup> *ibid.* p. 34.
- <sup>20</sup> *ibid.* p. 34.
- <sup>21</sup> *ibid.* p-34
- <sup>22</sup> *ibid.* p. 34-35.
- <sup>23</sup> *ibid.* p. 35.
- <sup>24</sup> *ibid.* p. 35.
- <sup>25</sup> *ibid.* p. 35.
- <sup>26</sup> *ibid.* p. 35.
- <sup>27</sup> *ibid.* p. 35
- <sup>28</sup> Blunt Wilfred, *The Ark in the Park: Zoo in the 19th century* (Hamilton: Troy Gallery 1976). 15.
- <sup>29</sup> *ibid.* p. 15.
- <sup>30</sup> zuckerman, op. cit. 3.
- <sup>31</sup> Bell, op. cit. 95.
- <sup>32</sup> *ibid.* p. 95.
- <sup>33</sup> *ibid.* p. 95.
- <sup>34</sup> *ibid.* p. 95.
- <sup>35</sup> Keith. p. 22-23.
- <sup>36</sup> Keith. p. 23.
- <sup>37</sup> Keith. p. 24.
- <sup>38</sup> Keith. p. 24

- <sup>39</sup> Keith. p. 25.  
<sup>40</sup> Keith. p. 27.  
<sup>41</sup> Keith.p. 27.  
<sup>42</sup> Keith. p. 28.  
<sup>43</sup> Keith. p. 28.  
<sup>44</sup> Keith. p. 30.  
<sup>45</sup> Keith. p. 31.  
<sup>46</sup> Keith. p. 32.  
<sup>47</sup> Keith. p. 32-33.  
<sup>48</sup> Keith. p. 33.  
<sup>49</sup> Keith. p. 34.  
<sup>50</sup> Keith. p. 34-35.  
<sup>51</sup> *ibid.* p. 35.  
<sup>52</sup> *ibid.* p. 41.  
<sup>53</sup> *ibid.* p. 42-43.  
<sup>54</sup> *ibid.* p. 46-47.  
<sup>55</sup> *ibid.* p. 51.  
<sup>56</sup> *ibid.* p. 51.  
<sup>57</sup> *ibid.* p. 53.  
<sup>58</sup> *ibid.* p. 60.  
<sup>59</sup> *ibid.* p. 66.  
<sup>60</sup> *ibid.* p. 67.  
<sup>61</sup> *ibid.* p. 68.  
<sup>62</sup> *ibid.* p. 69.  
<sup>63</sup> *ibid.* p. 80.  
<sup>64</sup> *ibid.*p. 93-115.  
<sup>65</sup> *ibid.* p. 122.  
<sup>66</sup> *ibid.* p. 123.  
<sup>67</sup> *ibid.* p. 124.  
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<sup>69</sup> *ibid.*p. 130.  
<sup>70</sup> *ibid.* p. 132.  
<sup>71</sup> *ibid.* p. 166.  
<sup>72</sup> *ibid.* p. 171.  
<sup>73</sup> *ibid.* p. 173.  
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<sup>75</sup> *ibid.* p. 178.  
<sup>76</sup> *ibid.* p. 181.  
<sup>77</sup> *ibid.* p. 275.  
<sup>78</sup> *ibid.* p. 276.  
<sup>79</sup> *ibid.* p. 276.  
<sup>80</sup> *ibid.* p. 277.  
<sup>81</sup> *ibid.* p. 277.  
<sup>82</sup> *ibid.* p. 278.  
<sup>83</sup> *ibid.* p. 278.  
<sup>84</sup> *ibid.* p. 278.  
<sup>85</sup> *ibid.* p. 300.  
<sup>86</sup> *ibid.* p. 302-303.



## *Emerging Patterns of Sacred Complex at Amarkantak*

D. V. Prasad

### **Abstract**

Amarkantak is a origin place for three major rivers such as Narmada, Sone, and Johilla attracting pilgrim tourists from different parts of India. It is located on Maikal hills of Vindhya Satpura range in the plateau regions of Anuppur district of Madhya Pradesh. Out of three rivers, Narmada is a most revered one since it is considered as daughter of Lord Shiva as well as lifeline to three States such as Madhya Pradesh, Maharashtra and Gujarat. It is one of the west flowing rivers in India originated in central India and join Arabian sea at the Gulf of Kambhat. Location of these three rivers made Amarkantak as one of the prominent Hindu pilgrimage centre which in due course developed as a sacred complex attracting specialists i.e., *pandas*, *sadhus*, and *sants* from different parts of India. Interestingly Amarkantak is situated in tribal dominated area i.e., Baiga, Gond, Panika, Agaria, Kol, etc. Majority of them visit Amarkantak and offer worship to goddess Narmada and Lord Shiva during Makarsankranti, Mahashivaratri, Dusserah, Narmada Jayanti along with Hindu pilgrims. Various cultural performances such as recitation of *pravachan* from Puranas, Ramayana, Bhagavatkatha, Narmadautsav, and *mela* (market) witness mass gatherings facilitating continuous interaction of great and little traditions that made inroad into interior tribal villages of Amarkantak. Due to its reference in Hindu mythology, Amarkantak emerged as sacred place with the development of new temples, *ashrams*, monasteries, and other devotional centres surrounding to Narmada *khund*. It further led to urbanisation in the form of developed infrastructure such as roads, amusement parks, hotels, resorts, etc., and catalytic in creation of livelihoods to the local people throughout the year on the service of pilgrimage.

With this backdrop, the present paper made an attempt to document the emerging patterns of sacred complex at Amarkantak and tried to examine the continuous interaction of great and little traditions. With the primary data, the present paper also highlighted the spread of great traditions into tribal areas in the form of observance of *shradha* ceremony, Lakshmipuja, Govardhanpuja, Navratri, and so on. For the present paper, data from primary and secondary sources are collected with intensive fieldwork. Traditional anthropological methods like observation, formal and informal interviews, questionnaire, and focus group discussions were employed in collection of empirical data. Secondary sources are collected from the *Nagar Parishad*, *ashrams*, census records to support the primary data.

Keywords : Amarkantak, sacred complex, performances, specialists, rites and rituals, tradition, Narmada, *khund*, *parikrama*.

### Introduction

The globalisation process not only impacted the world economies, but also facilitating interaction of diverse traditions and mutual exchange of ideas and cultures. This transculturation process led to a new kind of syncretic living across the nations, urban centres, and places of religious significance. The origin sources of rivers, pristine forests, hill valleys, and other natural landscapes emerged as sacred centres in due course and creating a composite culture paving way for peaceful coexistence of diverse beliefs and traditions. However, the native identities are still maintained by continuous practice of respective rites, rituals, and other sacred activities by popularising certain sacred centres. It is evident from the observance of elaborate ceremonial and ritual performances at various Hindu temples including organisation of car festivals, circumambulation to pilgrim centres, celebration of *utsavas*, *jatras*, *melas*, etc. Thus, Indian civilisation and culture is understood through the continuous interaction of great and little tradition which is in turn creating national identity. Vidyarthi's (1961) concept of sacred complex is catalytic in highlighting various facets of Hindu spiritual life including source of livelihood to dependent communities through trade and tourism in India. It is also catalytic in spreading the message of cultural ethos to even remote

places including indigenous communities through cultural performances. While protecting the identity of sacred centres, they were popularising through adoption of modern innovations in its wider form of adjustment to the ever-changing situation through networking of diverse ethnic groups in India.

The scientific studies of sacred complex in India were initiated in post Independent era through application western methodological perspectives to understand the multifaceted network of social relations at Hindu pilgrimage centres. Based on the conceptual framework of Robert Redfield and Mckim Marriott, Vidyarthi (1961) initiated systematic study of these centres by using ethnographic description for the inclusive understanding of the Indian civilisation. According to Vidyarthi, sacred complex is a synthesis of sacred geography, performances and specialists which is crucial to delineate the organisation of the centres and its people. Wherein sacred complex symbolizes unity in diversity as it is the meeting place of people from diverse cultural backgrounds and traditions. Further, these centres also generating livelihoods, improved transport facilities, and adjusting with the changing scenario through innovations from time to time. Through his methodology and empirical data, Vidyarthi scrutinised the western scholar's concepts like little and great tradition, cultural specialists, performances, media and reframed them in Indian context. Later on, many scholarly works were undertaken by western as well as Indian scholars testing the theoretical concepts of sacred complex.

Initially, the need of sacred systems and centres in the integration of diverse traditions of Indian civilization was attempted by Cohn and Marriot (1958). In the course of time studies on sacred complex were undertaken by Makhan Jha (1971), Saraswati (1975), Sahay (1975), Patnaik (1977), Goswami and Morab (1975), Chaudhury (1981), Narayan (1983), Dinesh Kumar (1991), Samanta (1996), Behra (2003), Mishra (2004) etc., at various Hindu temples and analysed the undercurrents of sacred complex of different pilgrim centres. The studies of Sahay (1974), Upadhyayaya (1974), and Patnaik (2006) pinpointed the

significance of emerging sacred geography at sacred complexes which is base for secondary urbanisation. Further, the empirical studies made by Bose (1967), Freeman (1971), Preston (1980), Goswami and Morab (1970) highlighted the occupational and religious change due to the impact of emerging temple traffic at the Hindu temples in India. Out of these, some temples are responsible for secondary urbanisation and others are just increasing the temple traffic. Whatever the case, these centres facilitating the continuous interaction of diverse traditions which reflects the complexity of Indian civilisation.

Similarly, Amarkantak with the origin of three pious rivers emerged as sacred complex that attracts multitude of devotees, pilgrims, and tourists from different parts of the country. With the increasing temples and population, Amarkantak is also declared as *Nagar Parishad* by district administration which in turn responsible for creation of infrastructure, roads, communication facilities, etc. Though it is not expanded in terms of other popular sacred centres like Kashi, Puri, and Ujjain, but the floating population *sadhhus*, *sants*, pilgrims, ascetics, and *parikrama* devotees made Amarkantak unique place in Hindu pilgrimage. In due course, these floating population attracted the attention of state government that in turn led to a movement towards protection of Narmada river.

Under these circumstances, this study attempted to know the emerging patterns of sacred complex of Amarkantak which is located in Vindhya and Satpura range in Madhya Pradesh which is popular with the origin place for rivers. With the belief systems in Hindu mythology, devotees observe the world's longest *parikrama* (river circumambulation) by foot reveals the significance of rivers in daily life. Besides, the tribal groups such as Gond, Baiga, Panika, Agaria, and many other communities do visit the sacred place and offer worship. With the expansion of pilgrims, *ashrams*, monasteries of different denominations such as Hindu, Jain, Sikh interacting with local communities and spreading the message of great tradition to their hinterlands. Prior to understand this interaction of traditions, it is

essential to understand the sacred geography of Amarkantak with its location, historicity to understand the factors responsible for the development of sacred complex and its role in maintaining the syncretic tradition of mutual existence of diverse cultural ethos in the region.

### Study Area

The Amarkantak is located at 22.67R"N and 81.75R" E which is situated on the eastern extremity of Maikal hills of Vindhya Satpura range at an average elevation of 3,438 feet from the mean sea level. In 1995 Amarkantak was recognised as *Nagar Parishad* by Anuppur district administration and well connected by road route running through Rewa, Shadol, Anuppur, Jabalpur, Katni. Pendraroad and Anuppur are the nearest railway stations where pilgrims are guided to unboard and transported by road. It is sharing boundary with Chhattisgarh state in few kilometres distance (*map 1&2*).

According to 2011 census, total population of Amarkantak enumerated as 8,416 consists of 4,514 male and 3,902 female individuals with an average of 181 persons per square kilometers. Female sex ratio of Amarkantak was estimated as 864 which is less than state average of 931 per 1,000 male. It is having 80.2% literacy rate covering male 88.06% and female 71.02%. It is higher than state average literacy rate 69.32%. Gap in male-female literacy rate comes to 17.04%. But the gradual increasing population of Amarkantak demonstrates the sacred centres are responsible for urbanisation in Indian context.

**Table 1: Demographic Details of Amarkantak, 2020 (Ward-wise)**

Ward No	Name of the Ward	No. of Households	Shops	Total Population
1	Jaleswar	42	08	377
2	Vaitarani	93	06	1,283
3	Gandhi	69	05	457
4	Katjugram	36	02	325
5	Vivekanand	22	04	433
6	Gummaghathi	99	27	459

7	Kapildhara	55	19	468
8	Kapila Sangam	52	06	657
9	Markhandeya	110	18	875
10	Mekal	100	30	1,018
11	Indira	78	21	846
12	Rewa	42	35	374
13	Tikri tola	73	07	496
14	Narmada	60	15	568
15	Sonmuda	101	10	623
	Total	1,032	213	9,259

Source: Amarkantak Nagar Parishad, 2020.

As per 2020 census, total population of Amarkantak is increased by more than 10%. Besides, unofficial settlements are common by the floating population who made temporary shelters in isolated areas. Out of fifteen wards, ten wards (1 to 8 and 14 to 15) are dominated by Gond followed by Baiga and Panika. In the rest of wards (9 to 13), Hindus (95.51%) are predominant population followed by Muslim (1.28%), Christian (0.30%), Jain (1.21%), Sikhs (0.11%), and other communities (1.46%). Hindu population including indigenous tribes as well as castes such as Brahmin, Nai, Kewat, Ahir, etc. Thus, concentration of diverse households facilitating continuous interaction with different traditions. Another important feature of Amarkantak is that three linguistic zones such as Bhagelkhand, Gondwana, and Chhattisgarh are found at the main Narmada temple. Though Hindi is official language, *Chhattisgarhi* and *Bundelkhandi* and other tribal dialects are well versed in the area.

Amarkantak is not only the abode of Narmada, Sone, and Johilla rivers but also enrich with natural resources in the form of *Achanakmar* bio-sphere reserve. The Narmada originates at Amarkantak proper in Maikal hills at 22° 42' 00" north latitude and 80° 54' 00" east longitude. Whereas Sone river originates just one and half kilometers distance from the Narmada popularly known as *Sonebhadra* in the same Maikal hills at 25° 42' north and 84° 51' south. Johila river originates from

Jaleswar 23° 37' north and 81° 14' east popular as *Johiladevi*. It is a major tributary of Sone which flows north west to meet Sone at Bali in Umaria district.

Historically, the well-known poet Kalidas mentioned about this place as *amrakuta* with its lofty ridges crest in his famous work *Meghaduta*. It is believed that sage Markandeya and Yudhisthira started a debate on the origin of Amarkantak which in due course has become *Rewakhanda Purana*. Historical name of Amarkantak is *amrakut* which is mentioned as *Rikshaparvat* valley known as *mandhata* in *puranas*. It is believed that about 1000 years ago Suryavamshi Samrat gave the river name as *Narmada*. The popular oral stories regarding origin of the rivers reveal that while Lord Shiva meditated intensely that his sweat pooled at a tank and started overflowing in the form of river i.e., Narmada. Another legend says that two teardrops of Lord Brahma fell from the heaven that became Narmada and Sone. Likewise, Amarkantak has wide reference in *Matsyapurana* that mere sight of Narmada *khund* clear all the sins. Hence devotees throng this place for sacred dip and *darshan* of the Narmada *khund*. Since it is attracting pilgrims from all over India, a sacred complex is emerging and popularising the Hindu traditions through its *parikrama*, regular *harati*, celebration of *Narmadajayanti*, etc. To maintain the sanctity of Amarkantak, sale of alcohol and non-vegetarian food is strictly prohibited. Thus, reverence towards *ma* Narmada was evident throughout Amarkantak when people confront, they greet each other with '*narmadehar*' slogan.

#### **Methodology for Data Collection:**

The present study is basically a micro-level one that rely on primary as well as secondary data. For collection of primary data, fieldwork was done in the year 2020 along with personnel interviews with the visiting pilgrims, *sadhus*, *sants*, sacred specialists, and tourists who frequent to Amarkantak from time to time. Primary data was collected through traditional anthropological methods such as observation, case study, focus group discussions, informal interviews and discussions

etc. To understand sacred geography, a transact walk is made along with key informants such as *ashram* employees, students, teachers, etc., and collected the details of sacred geography in and around Amarkantak. Case studies were collected from the visiting devotees of *mundan*, sacred performances, *shradha*, etc. For collection of demographic details, records of Amarkantak *Nagar Parishad*, documents maintained by *pandas*, district administration, and the published and unpublished data of various scholarly works are used. The researcher interacted with *sadhus* and participated in the sacred performances at *ghats*, *ashrams*, and temples to understand the sacred performances, its process, and dynamics involved in it. Further, researcher also interacted with *parikramavasi*, pilgrims, and tourists to know the views of common people about the piousness of the place as well as its significance.

#### **Sacred Geography of Amarkantak:**

Lofty mountains, dense forest, and diversity of fauna attracting the pilgrims from different parts of the country to Amarkantak. Further, origin of pious rivers made this place as cultural conglomeration of great and little traditions. Due to this reason, many temples, *ashrams*, monasteries came up and these centres are testimony to the development of sacred complex. Expansion of religious centres and settlement area during the last few years made impetus for the development of new educational institutions, medical facilities, conveyance establishes the Amarkantak as melting pot for diverse cultural patterns of sacred complex. The immaculate architectures in group of temples such as Pateleswar, Shiv and Karana *mandir* combinedly popular as *prachenmandir*, *Mai-ki-bagiya*, *Sonmuda Sonbhadra khund* and Hanuman temple are the main sacred centres located near the main temple. Shri Mahameru Yantra Mandir, and Amareswar Mandir are newly come up centres with the significance of Narmada *khund*. Apart from these sacred centres, *Kalyanashram*, *Shivgopalashram*, *Mrityunjaya ashram*, *Shantikuti*, *Rajarajeswariashram*, *Jainashram*, *Kapilmuniashram*, *Chandrika ashram*, *Markandeya ashram*, *Sukdevanand ashram* (*Haati Maharaj*) are major *ashramas* contributing



a lot for growth of sacred geography surround Amarkantak. Existence of Gurudwara, Jain *mandir*, *Kabirdham*, and so on are testimony to the syncretic nature of Amarkantak which in turn paved the way for perpetuation of cultural pluralism at Amarkantak.

The premises of main Narmada temple consists twenty-four temples surrounding to *Narmada udgamsthal* i.e., *khund*. The *khund* is located at the centre of the temple complex where *Jatashankar mandir* is situated just opposite to it. At the right-hand side Sri Suryanarayana mandir and Lakshminarayana mandir, Rohinimata mandir closely attached to the *khund*. Just opposite to the main *khund*, Narmada mandir situated where an idol of Narmada deity is present exactly opposite direction of *sanctum sanctorum* Lord Amarkanteswar and Goddess Parvati idols. At the entrance of this temple is seated by the deities such as Annapurnamata, Sriram Durbar on right and the small *sanctorum* of Lord Karthikeya, Sri Narayan, Dakshineswar Hanuman, Sri Gorakhnath, Sri Vishnu, Sri Dasavatar, Sri Lakshmi Narayan temples also exists. A big *hawanmandap* is located in front of the main temple to carry out *yagna*. The temple complex is also comprising the temples of Tripurasundari, Durgamata, Sri Siddeswar Mahadeo Mrityunjaya mandir, Sriram Janaki mandir, RadhaKrishna mandir, Varaharudra Mahadeo mandir, etc., where separate priests were present and officiating worship on regular basis. After Narmada *darshan*, the devotees do visit all these temples since they are located in the same complex and offer prayers. A *banyan* tree is located at a corner of the temple which is worshipped by the devotees and tie the knots for fulfilling their vows. A *prasad* counter is also located inside the complex which is operated by Narmada Devasthan Board to sale *Prasad* and sacred service tokens to the devotees.

In front of the main temple, another *khund* is developed which is known as Gandhi *khund* where pilgrims take sacred dip at first instance and go for goddess Narmada *darshan*. Local people also take bath everyday in this *khund* and visit the temples as a part of their daily routine. A small Hanuman mandir is situated under a big *Peepal* (banyan) tree besides Gandhi *khund*. It is built in 2012-13 where a

priest officiating regular *harati*. Devotees tie *maulidaaga* (sacred thread) to this tree for the fulfilment of their vows as devotees believe that it is an abode of Lord Vishnu and hence every Saturday they light a lamp with *til* mixed *sarson* oil to get rid of the wrath of Lord Sani Bhagawan. On *Somvati Amavasya* day, a special *puja* is made under this tree to get the blessings of Lord Vishnu and goddess Lakshmi.

Just opposite to Narmada arch, a group of temples such as Shiv, Pateleswar, and Sri Karana *mandirs* popular as *prachen mandir* exists that are built by Kalachuri kings during 1041-1073 A.D. Adi Shankaracharya built Surya *khund* to specify the origin of Narmada at this temple complex. The famous *rangmahal* where *ma* Narmada take rest in night and play *chousat* is also located in its premises. The idols of Sri Omkareswar and Badri Narayan are worshipped regularly at *rangmahal*. To conserve the ancient structures, Archaeological Survey of India has been maintaining the *prachenmandir* and restrict the movement of general public through entry fee.

Within a kilometer distance from Narmada temple, Sri Mahameru Yantra *mandir* is situated which is still under construction by Guru Sukhdev Mahadanandji. Ma Tripuraji idol is established inside the *sanctorum* and outside 64 *yogini* idols are enshrined in temple architecture. *Sonemuda* is a origin place of two holy rivers namely Sone and Bhadra and water from these two *khunds* joined at this place to become *Sonebhadra*. There exists a famous tourist sunrise view point at an elevation to glance the dense forest view of Amarkantak. *Maa-ki-bagia* is a garden place where goddess Narmada childhood idol is present. It is believed that goddess used to play and collect flowers and fruits from this garden during her childhood. Out of the many varieties of indigenous varieties of flora of Amarkantak, *gulbakawali* flower is important one which is used for making indigenous medicine for treatment of eye. The idols of Shankar, Uttarmukhi Hanuman and other deities are also present in this complex. Sri Sarvodai Digambar Aadinath temple was initiated in 2000 and it is still under construction within a kilometer distance from Narmada temple.

A Gurudwara is established on the bank of Narmada where it is believed that Sant Kabir took rest after *darshan* of *ma* Narmada and later on proceeded to a secluded place and did *tapasya* which is popular as Kabir Chabutara. Due to this reason, a statue of Sant Kabir presents inside the Gurudwara. It is maintained by 'Guru Nanak Sewa Samiti'. *Kapildhara*, *Dudhdhara* and *Durgadhara* are the major waterfalls in Amarkantak area that attract not only the pilgrims but tourists across the state. *Dhunapaani* is a place where devotees of Narmada *parikrama* take shelter and sacred dip believing that by doing their sins are removed by *ma* Narmada.

An indigenous *Badadev* shrine is located in *mela* ground and Kapila Sangham visited by Gond from surrounding as well as distant places. On Makarsankranti day, Gond visit this place in large number from Dindori, Balaghat, Thakthapur for *darshan* and spend the whole day at *mela* ground where number of indigenous stalls were arranged and provide information regarding the origin tales, gods and goddesses, their glory and kingdom, significance of nature, etc. During *sawanpurnima*, *kheermahotsav* is celebrated at this place where *bhajan* and *kertan* takes place along with *Badadevpuja*. During Navratri, Mahashivaratri, Holi, and other Hindu festivals, tribes also lit *diya* and offer *puja*. Sunday is observed as main *puja* day at this place. During Mahashivaratri, tribal pilgrims take sacred bath at Narmada *khund* and proceed to Jaleswar on foot to offer pious Narmada water to Jaleswar *Phallu*. With the expansion of sacred geography, the *mohallas* surrounding to Amarkantak are also increasing day by day. At present, Balco area, Jamuna Daddar, Barati are come up in and around Amarkantak. Continuous *bhajans* and *kertans* were recited at Rathore *Samaj* who hailed from Dindori Ram *mandir* and established a temporary *ashram* in Kapila Sangham who installed the deities of Lord Sani, Kapil saint and Lord Hanuman.

In six kilometers distance from Amarkantak another sacred zone is located which is popularly known as *Jaleswardham* where three *phallus* are naturally exists in triangular manner whose reference was found in *Markendeya* and *Skandapuranas*. However, nearly thirty-five

years back Mahant Shri Naresh Phulji built an *ashram* and *goshala* (cowshed) in its premises and overview its regular *harati* and worship. An important feature of this centre is location of Johila *khund* in the form of well from where the concerned river originates and flows towards Anuppur. In front of Jaleswardham, *mata* Annapurneswari mandir exists which has very recent origin such as fifteen to twenty years onwards. Due to legal intricacies, the idols are not installed till date but now the case resolved in favour of trust and hence they decided to install the idols formally on 27th April 2021. Despite of this, regular offerings were going on at this temple and devotees tie *churni* (red sparkle cloth) to the temple and offer dry coconut. Devotees are given rice as *prasad* which is taken to their respective native places and offer *annadhan* by mixing the rice brought from this temple. In front of Annapurneswari temple, Shri Shri Ma Siddidhaatri mandir which is established by Shri Guru Dattatreya Sant Sewa Ashram and offering regular worship.

Within half-kilometre distance, Shri Amareswar *mandir* was constructed in 2009 by Swami Mahendranandji *maharaj* where a *phallu* having 11 feet height and 51 tonn weight made with *Jilheri* stone brought to Backhwa village near to Omkareswar is major attraction to pilgrims as well as tourists. In front of this mammoth *Shivaling*, twelve replica of *jjotirlingas* such as Bhimeswaram, Vaidhyatham, Omkareswar, Mahakaleswaram, Mallikarjunam, Somanathan, Gurumeswaram, Kedarnatham, Traimbakeswaram, Viswanatham, Nageswaram, Rameswaram were installed in two lanes. On rooftop the deities of Navkanya, Agrasen saint, Adi Sankaracharya, Lord Hanuman idols are also installed in the same sequence of twelve in two rows.

Devotees frequent to Jaleswara dham on Maha Shivaratri and *Sawan* month in large number to offer *abishek* to *phallu*. Observance of cultural performances such as Bhagawat *katha*, Ramayan *katha*, Satynarayana *katha*, *bhajans* and *keirtan* by *sadhu* and *sants* attracts not only local people but also the outside pilgrims at regular intervals. At present State government operating holiday home, guest houses of various

departments, private resorts, hotels came up to accommodate visiting officials and pilgrims.

Further Amarkantak is close to Achanakmar Bio-sphere reserve where indigenous tribes reside and worship Lord Shiva tridents along with *Badadeo* and *Buradeo* in the form of Sarai wooden poles. Tribal shrines in surrounding villages do witness the existence of *Phallu*, tridents, *kalash* and *chimta*. Billamgarh cave is a classic example of this syncretism which is located nearby Karangara village having six kilometers distance from Jaleswardham. It is inhabited by Baiga population. Earlier it is a sacred place of Baiga but slowly Gonds taken over it as they started worshipping *Phallu* i.e., symbol of Lord Shiva. A big *jatara* is observed every year in the month of February during Makarsankranti which is popularly known as *Madai*. Wherein Baiga, Gond, Kol and other non-tribal communities participate in *mela*.

Majority of the tribal villages of Gond, Agaria, Panika, Dhulia, and others are surrounded to Amarkantak do have *gaogossain*, a village shrine, which is located at adjacent of the *sarai* or *kammar* trees. Other tribal deities such as *thakurdeo*, *dhartimata*, *agnideo*, *ghamsandeo*, *dulhadeo*, *narayandeo*, and so on are worshipped by them during annual and agricultural festivals such as *bidri*, *haryali*, *jawara*, etc. Thus, emergence of sacred centres in and around Amarkantak led to celebration of various performances consists of both great and little traditions. These performances also a major attraction to pilgrim tourists who throng to this place on festive occasions to take part.

#### **Sacred Performances:**

Narmada Jayanti, Mahashivaratri, Basant Panchami, Navratri, etc., are major festive occasions celebrated at Amarkantak with lot of pomp and devotion. During these occasions, devotees throng to this place to offer prayers, vows, and perform life cycle rituals. Prior to *darshan*, devotees make the sacred dip at Gandhi *khund* at first instance and pay their vows in temple precincts. Later, they proceed for *darshan* of main Narmada temple and the surrounding gods and goddesses

located in the temple precincts. The rice, flowers, and coconut are the major items offered to goddess Narmada.

At Jaleswar, devotees offer *bhang*, *ganja*, *dhutura*, *bel* leaves, rice, hibiscus flower, *sami* (a variety of wild tamarind leaves), *raak* (ash), *bher* (wild fruit), *aam-ka-bhog* to *Phallu*. Since it is believed that Lord Shiva likes whatever people dislikes and thus devotees offer different varieties of flower or leaves. There is no restriction on offerings to him. Besides the devotees also render cow service at the cowshed located at the sacred zone.

To inculcate devotion, the visiting pilgrims or artists perform Ramlela, Ramayankatha, Bhagawatkatha, *bhajans*, and *kirtans* on free of cost at the temple precincts. The temple authorities offer free boarding at temple *ashram* and food is provided on behalf of the temple. Bhagawatkatha is being performed by *yajman* who are having vow on the premises of temple. Besides, the concerned *ashram* of the temple offer *annadaan* (free distribution of food), *bhandara* (*prasad* distribution) during Shivaratri.

Offer of *harati* is a regular phenomenon in Amarkantak such as *harati* at main Narmada *khund*, Ramghat, Kalyanashram, Mrityujayaashram, and so on. At Narmada *khund*, a special *harati* is regularly offered at 7 p.m. in the night in presence of pilgrims or devotees. Just prior to this event, ascetics from different *ashrams* recite *keertans*, *bhajans*, songs in praise of *ma* Narmada at the temple precincts. Further, a special *harati* is given to the river at Ramghat at 6.30 in the evening. At Gurudwara regular worship is offered by *Granthi* (priest) according to their religious tradition. Vaisakhi and Guru Nanak Jayanti is celebrated in grand manner at this centre where people irrespective of caste, creed and religion participate. During Mahashivaratri, a special *langar* (free distribution of food) is arranged for two days continuously to the visiting pilgrims.

#### ***Shradha* at Ramghat**

It is also known as *pretkarma* wherein *yajman* rush to Amarkantak on tenth day after the cremation to offer *pinda* to the deceased ones.

Both tribal and non-tribal communities performing *shradha* at Ramghat as per Hindu tradition whereas Gond community observe *shradha* at Puskardam ghat based on their own tradition.

Everyday people visit the *ghat* from nearby villages of Pendraroad, Pondki, Rajendragao, Budhar, Anuppur, etc., and even faraway places like Jabalpur, Udaipur, Indore, etc. Majority of them belongs to backward communities like Scheduled Tribes, Scheduled Caste and other Backward classes. As *panda* stated that *dwija* (twice born) visit Kashi for *asthivisarjan* and *shradha*. This ceremony was officiated by a priest who is known as *Maha Brahmin* or *Mahapatra* who perform the rites at Ramghat from early morning to the evening. The visitors may come at any time during the day time and hence the *panda* wait whole day at the *ghat*. After sunset, they left the place as it not auspicious to perform these rites at night. In case anyone comes late due to failure of vehicles, they were advised to stay in *ashram* or lodge and perform *shradha* on next day morning. *shradha* ceremony was initially took by a *panda* who migrated from Anuppur and at present his descendants (third generation) are practicing the traditional occupation on rotation basis i.e., 10 days for each family starting from 1st to 10th for one family; 11th day to 20th for second family, and finally 21st to 30th for third family. Sometimes, they go on field visits for doing rites at the respective villages where they offer brass vessels, cloths, *dakshina*, etc.

The *Maha Brahmin* was assisted by other specialists such as *nai* (barber), *safaiwala* (sweeper), *dhobi* (washerman), and *gomasta* (secretarial staff) at the place. Though no fixed *dakshina* (fee) is paid, they were given lumpsum of Rs. 150/- to 200/- per *yajaman* which is redistributed among themselves except Barber. The charges of barber is fixed at the rate of Rs.50/- which is shared equally by *Nagar Parishad* and barber. Even for *shradha* also there is no fixed amount is charged from the visitors, depending on their economic condition, the *yajaman* offer the *dakshina* ranges from Rs. 551/- to even Rs. 11,051/-. Besides this fee, *yajman* also contribute rice, *dal*, vegetables, coconut, *supari* to the Brahmin for *annadhan* and the accompanying relatives also offer

*dakshina* to *panda* and take blessings of the *pinda*. On the arrival of family members for *shradha*, shopkeeper enter the details in the register maintained by the concerned Brahmin and sell the *puja* material of *shradha*. Later on, concerned individual who offer *pinda* to the soul were asked to go for *mundan*. Thereafter, *pinda* was made by the performer with rice floor, milk or water. Thus, handmade *pinda* is offered to the dead as *panda* reveals that it is crucial for rebirth of the dead, otherwise soul becomes the ghost. After completion of the rites, *asthi* (ashes of dead) and *pinda* are immersed in river Narmada with the assistance of *dhobi*. There performer and the relatives take bath and cook food at nearby place which is consumed and distributed to destitute present at the event.

In case of other religious persons such as Jain, Sikhs, *Kabirpanths* die at Amarkantak, they perform *agnisanskar* (cremation) on the bank of river Narmada. But the last rites were performed as per their tradition at their respected residence, *ashram*, *mohalla*. Further, *mohallas* like Jamuna dadar and Kapila Sangam located on other side of the river and hence they cremate the dead near open place as crossing of river with dead body is prohibited. They perform last rites at Pushkardamghat on their side.

#### Performance of *Shradha* by Gond

Since 2000 onwards, Gond *samaj* is performing the *shradha* rites at Kapila Sangam Badadevmandir. In December 2020, *shradha* centre is shifted to *pushkar dam ghat*, where Gonds offering *pind* to their ancestors and immersing *asthi* after *puja* to Budadev installed under a *sal* tree. Actually, *Saaj* tree is considered as Badadev, chief deity. But due to non-availability of *Saaj* tree at the present place, they installed *Badadev* under *sal* tree. To officiate the last rites, three volunteers i.e., *bhumka*, *asthipujari*, and assistant are appointed by Gondwana Sewa Trust and giving monthly honorarium to the specialists. They also record the details of the visitors in a register and charge Rs.501/- fee for *shradha* ceremony. A receipt is also issued to the relatives on behalf of the trust.



On *dasgatra* (tenth) day, relatives of the deceased person comes to this place and perform last rites as per their tradition. Unlike engagement of barber at Ramghat, Gond bring their *nath* (affinal relatives of the dead) from their village who perform *mundan* to their *saga* (blood relatives) and accept *dakshina*, rice, *gamsha* (new cloth) for their services. However, *Thakur* (barber) also conducts *mundan* on payment basis in case *nath* is absent. After *mundan*, person who perform *shradha* prepare *pinda* with rice flour and water similar to Hindu tradition. Further, five leaf cups filled with turmeric rice, vermilion, *mahuwa*, *jawa*, *teel*, *dhoop* also kept besides the *pinda* and perform last rites by acknowledging Budadev, Badadev, and goddess Narmada. Though *shradha* is exclusively act of *saga* (blood relatives) members, *nath* (affinal relatives) members do accompany and offer worship to *asthi* and assist them at every stage. Afterwards, they immerse the *asthi* and *pinda* at Puskardam and all the members take bath in Narmada.

Once again, they offer *puja* inside the *shradha* centre in presence of the images of *Badadev* in the form of trident, goddess Narmada, Lakshmi, Lingo, Gondwana logo photo frames, tridents, *diya*, peacock feathers, etc. The *puja* material consists of *koyaphool* (dried *mahuwa* flowers), *haldichaval* (turmeric mix rice), *sindur* (vermillion), and *chandan* (sandal paste) were placed in front of the deities and offer *puja* by *asthipujari*. After completion of *penharati*, it is declared that process is completed. After completion of *puja*, they purchase a plastic tin to carry Narmada water, *daaga* (sacred thread), *Badadev* photo, *murra* (perched rice), *chironji* (sugar crystals), *pankhi* (bamboo made hand fan), Gondwana flag, peacock feathers, etc., from them. On the same day, they perform *puja* at their residence keeping these materials.

On *pitripaksha* day, devotees offer *pitridarpan* to their dead ancestors at Jaleswar Johilaghat. It is believed that the souls that becomes ghosts and not pacified with worldly things, they get pacify at Jaleswardham. Due to this reason, *yajaman* prefer this place who visits the place with priest and conduct rites. Later on, the *pinda* is immersed in Johila. For

this, they give some donation to the Jaleswarashram. Even people do carry *asthi* to Gurudwara for *antim hardas* (last rites) and after worship the ashes are immersed in Narmada.

### ***Jhalar Sanskar (Mundan or offering of First Hair)***

Generally, those who have vow at Amarkantak to offer first hair, *mundan* is observed from six days of childbirth to till eleven years based on economic condition of the family. During the study, a Gond family from Jaam Katchar near to tribal university brought a child who aged twelve months. They are accompanied by his *dadaji* (father's father). The child is taken into the lap of his grandfather and father sister holds the dough base specially made from wheat flour. While removing the hair, the barber collects the hair cautiously into dough base and avoid hair fall on the ground. After shaving the hair, the family members were asked to keep silver or one-rupee coin in the dough and carefully cover it like a ball. The hair full of dough pack is later disposed in the river.

It is believed that if child cries during *mundan* is auspicious as it ensures treasure to his maternal uncle. After cleaning the shaved head with *atta* bowl, oil mixed turmeric paste is smeared on shaved head. Then child is asked to take bath at *khund* and taken for Narmada *darshan*. Barber is given a honorarium of Rs. 102/-, half kilo rice, new cloth, silver coin, vegetables, etc. People throng on auspicious occasion to remove first hair of the child. Generally, *mundan* is observed on *triodasi* as *mundanmuharat*. People from Bihar, Uttar Pradesh, Chhattisgarh, and Madhya Pradesh also visit Amarkantak to offer first hair of their children.

### ***Circumambulation (Narmada Parikrama)***

It is one of the world's largest river circumambulation performed by Narmada devotees after taking *vrat* at Omkareswar temple. The *yatra* covers north and south coast of the Narmada river from its origin place Amarkantak to Gulf of Kambhat where Narmada merges in open sea. Originally *yatra* duration is meant for three years three

month three days by foot without any belongings carrying along with them (Paranjypte, 1991). But now the duration is reduced to a great extent such as within three months for walkers, twenty to twenty-five days for two and four wheelers. Devotees who willing to undertake *parikrama*, first goes to Omkareswar and offer *puja* and take *parikramadeksha* from the temple priest. Prior to initiation of *parikrama*, *mundan* is performed by the concerned individual and the local priest provide small water bottle (sacred river water), goddess Narmada photo, ritualised rice with small *Phallu* to them. The *puja* material such as *chandan*, *sindur*, *dhoop* sticks, *agarbatti*, match box, sugar crystals given by the priest are kept in a small cloth bag and perform *puja* daily in the morning and evening during the *yatra*. Besides this sacred material, *parikramavasi* carries *kamandal*, *lathi* (elongated stick), *dari* or sleeping mat, two pair white cloths, plate, tumbler, *parikrama* route map, etc., along with them. Further, they also carry a self-explanatory declaration *parikrama* letter wherein they take signature and seal of the *ashram* authorities where they take shelter located on both sides of the river coast as a part of evidence for successful completion of *parikrama*.

During their *yatra*, morning devotees offer *puja* and start walking throughout the day with intermittent halts for tea and *prasad*. In day break, they halt at *ashram*, school, village community hall and accept the food served by them. In case of no facility, they go for *biksha* (begging) from the villagers and take shelter in temple. At an average each person walks 35 to 40 kilometers per a day. *Parikrama* came to standstill during *chaturmas* (rainy season). Generally, devotees avoid rainy season or in case anyone enter the *chaturmas* during *parikrama*, the *yatra* is stopped and take shelter at the nearby *ashram*. Again, *parikrama* will be initiated after completion of *chaturmasa* from the place where they stopped.

During *parikrama* period, the devotees observe ascetic way of life and do not remove body and head hair, nails, etc. Throughout their marathon walking, they should not lie and do not indulge in theft.

Even whatever money is donated to them by the villagers, merchants, and philanthropists are spent on children on their way in the form of distribution of toffees. In connection with food, consumption of onion and garlic is strictly prohibited. Even the villagers are aware of it and hence prepare *prasad* accordingly and offered to *parikramavasi* where ever they take shelter. While doing *parikrama*, no two individuals should walk side by side while talking or gossip, playing jokes, vulgar language on their way. After completion of *parikrama*, they go once again to Omkareswar for *darshan* and offer *abhishek* with the water carried from Amarkantak. Again, they undergo *mundan* and returned to their native place. After reaching home, again they arrange *puja*, Satyanarayana *katha*, Brahmin *bhojan* at their home by inviting relatives, neighbors, and friends. It is followed by *bhandara* depending on their economic condition. Devotees believed that by doing this *parikrama*, family problems, the prolonged diseases will be meted out with the miracle of *ma* Narmada.

Pilgrims may also start this *yatra* from any place on the bank of river Narmada and finish by reaching the same place. Soon after they reach Ankaleswar in Gujarat where Narmada merges in open sea, the devotees cross it on boat after offering sari, flowers, *sindur*, and turmeric. Finally, the devotees return back to Omkareswar located in Khanduja district of Madhya Pradesh. In due course of time, many changes are taken place in *parikramavrat* that now pilgrims are undertaking this circumambulation in tour operated vehicles like buses, cars, mini vans and completing within twenty days. Poor people, *sadhus*, and individuals who had vows still opt the *parikramavrat* by foot in a separate route meant for such tedious journey. They do not carry any luggage except two pairs of clothes, one water container, and survive only on the alms provided by the villagers on their route.

#### **Narmada Sewa Yatra**

Due to the popularity of Narmada *parikrama*, Madhya Pradesh State government launched a massive river protection programme such as *Narmada Sewa Yatra* with a coverage of 3,350 kilometers on

both sides of the river. As a part of this, government has launched five-month duration *Narmada Seva Yatra* (NSY) from December 2016 to May 2017 from its southern coast and to Alirajpur of Soundava and return to *mai-ki-bagiya*, Amarkantak by a rally campaign to conserve river and environment. Under the supervision of Madhya Pradesh *Janabhiyan Parishad*, Economic and Statistical Department, and water board the *yatra* ended. The *yatra* begin with thirty members from different fields such as media, devotees, pilgrims. In first phase, they covered 1,100 villages in five months. For this *yatra*, altogether seven buses, two *raths*, 12 to 15 two-wheeler vehicles were used. They were accompanied by drivers, cooks, water tanker, one truck for goods carrier, moving toilets, tents, posters and banners, audio loaded rath, cars, etc. Wherever the *yatra* halts, they took the help of village *panchayat* i.e., *Sarpanch* or *panch* members for their accommodation in night halt.

As a part of this river protection groups i.e., *Narmada Seva Samiti* were arranged to assist the visiting pilgrims along the Narmada coast. It prepared a route chart with five months duration to cover 1,831 kilometers on southern coast and 1,513 kilometers in north coast covering 1,104 villages to treat sewage water before it discharge into the river, plantation along the coast, etc. The *yatra* holds religious, social and scientific importance of the river to create awareness about its conservation. This *yatra* also made awareness on various issues such as prohibition of immersion of cremated material, *puja* material of *hawan*, *yajna*, fruits, flowers, polythene, idols made with plaster of paris, etc., in the river. As apart of this, State government has undertaken plantation of fruit bearing and *neem* trees upto one kilometer in government lands of each village. Besides, government also encouraging the villagers on the banks of river to construct toilets under *Swachh Bharat Abhiyan* to avoid dirt in the river.

### Sacred Specialists

The priests of Amarkantak migrated from different places and settled in *ashrams* as well as in different wards who are catalytic for

worship and other sacred performances. The enormous growth of temples and *ashrams* attracted large number of specialists such as *pandit, sadhu, yogini, mahatma*, vendors, and other occupational groups like *nai, dhobhi, safaiwala*, etc. Every *ashram* maintains its own temple and official priest and offer regular *harati* and worship. The Brahmin of Amarkantak also rendering services in celebration of rites-de-passage at temple precincts as well as nearby villages, *yagnas* and recites sacred *kathas* during ceremonial occasions. Besides, the priests of Gond also present in Amarkantak to celebrate their annual calendrical festivals, agricultural and life cycle rituals from time to time. Some of the tribal people also engaged as *safaiwala* to clean *khund, ghat*, and temple premises. Further, tribal and non-tribal destitute are sitting in front of temple who accepts alms in the form of rice and money from the visiting devotees.

Initially, three Dwivedi families migrated from Rewa, Gobiri, and Khor Koti who at present offering regular *puja, harati*, and other sacred activities at the main Narmada temple. They divided the duties in shift basis according to the Hindu calendar. For example, one joint family continue the sacred services of the main temple for 120 days shift with division of 40 days as per Hindu calendar *Vaisakhi* followed by the respective individual families for 10 days, 40 days, 30 days within that joint family. Main priests located at *sanctum sanctorium* and its precincts followed by seven priests for *tertha* (field). Three priests are sitting at *udgamsthal* and one *hatisevak* (care taker of sacred elephant and horse) who guides the devotees to crawl under the belly of broken elephant stone statue for good fortune and accepts the offerings in lieu of it. Further, care taker also undertakes cleaning of temple, *prashad* utensils, etc. In case the main priest performing the duty, care taker hires the services of assistant priests to perform sacred rites at other places simultaneously.

*Pretkarma* or *shradha* ceremony performed by another sect of Brahmins who hail from Anuppur long back and divided the work in similar to main priests at the *ghats*. Three brothers of Tiwari joint

family performing last rites at Ramghat dividing ten days each per individual family. In case of shortage of days in the month of February are adjusted in other months. In case two brothers exists in a allotted nuclear family, again priest service is divided into five days each in a month. During their turn, other priests do not accept the rites at temple or ghat. During leisure period or priests those who are not having duty also engage in other works such as business, contracts, or private jobs. The priests at main temple do offer field services in and around Amarkantak since they had clients not only from neighbouring areas but from distant places like Udaipur, Jabalpur, Bhopal, Indore, etc. Priestly services are offered to the residents like officiating of Lord Satyanarayana *kathapan*, marriage and initiation ceremony, *karmakhand*, *rudrakhand*, *rudhrabhishek*, *grihapraves*, and other life cycle rituals.

At Pateleswar and Jaleswar, a Naga *sadhu* and *sadhvi* are offering sacred services at main *mandir* who are assisted by a *sadhvi*, assistant, and students who look after *bhandar* and *abhishek*. An Agarwal community member is appointed as priest at Annapurnamatamandir who is officiating regular *harati* and *puja*. At Amareswarmandir, three Brahmin priests are offering services who stay in the temple premises. As stated above, every *ashram* is having a sacred centre inside their premises and maintaining their own specialists both Brahmin as well as *sadhus*, *sants*, and *babas*. Some are paid minimum monthly honorarium and others are doing service on free of cost. For such type of specialists are provided food and shelter by *ashram* authority who in turn extend their sacred services to the pilgrims and accepting generous contributions.

#### **Extension of Great Traditions**

The surrounding villages of Amarkantak was inhabited by Gond, Baiga, Panika, Kol, and Agaria communities since ages. Though they are nature worshippers, the emergence of sacred complex at Amarkantak have had great influence on their socio-cultural and religious life. During *Navratri*, even indigenous people do observe fasting and take part in regular worship and performing puranic recitation at *pandal*. During Ramnavmi, they arrange *jawara*, a

traditional practice of dibbling the seeds of wheat in a basket which is filled with soil and every day water is poured and offer worship at the sacred place of respective houses. On ninth day, all the sprouted sapplings are taken to Narmada river for *visarjan* (immersion). During the celebration of *Durga Navratri* and *Ganesh Chaturthi* local communities also arranging pandal by installing the idols with the assistance of Brahmin by collecting donations from all the villagers. The worship is continued till its *visarjan* (immersion in water bodies) with regular chantings and *harati*. Sometimes *hawan* is arranged where in sticks from seven varieties of trees and seven varieties of millets are thrown as a part of worship. They do invite Brahmin priest from Amarkantak to officiate the sacred events. Throughout the *sawan* month, the villagers do offer *kanyabhojan* (feasting the girl child) where little girls were treated as goddess Durga and offer specially prepared food. The participant girl children may range between five, seven, or nine years old and finally take blessings by touching their feet.

During auspicious occasions, tribal dance forms like *karma*, *suwa*, *tapadi*, *jharpat*, *bilma* and *dassara* are performed at temple complex or *pandals*. Interestingly, both tribal and non-tribal communities do observe Lakshmi and Govardhan *puja* during *dewali*. On the day of festival, one adult member of the family kept *upavas* (fasting). In the evening when the cows return to village, they offer worship to Goddess Lakshmi and light the lamps in front of the houses. On next day of the festival, all the villagers assemble at one place where dried cow dung cakes are burnt and offer *puja* by giving *arati*. During this auspicious occasion no villager venture outside the village nor undertake economic activity. In midst of gathering, the cows and calves are decorated and the children below 12 years were asked to crawl under row. Thus, sacred performances of Amarkantak have had impacted the age-old customs and traditions of tribal communities.

#### ***Mela* (Religious Fair)**

A big *mela* (market) was frequently held at open place of Amarkantak during festive occasions for a period of four to eight



days. Besides local population, merchants from Pendra, Rajendragao, and Anuppur along with people from far way places arrange shops in *mela*. Neighbouring villagers, tourists, pilgrims visit the *mela* in large numbers and purchase agricultural and domestic implements, furniture, vessels, plastic items, ornaments, new cloth, bags, crockery, cosmetics, sweets, toys while enjoying the entertainment in the form of circus, *nautanki*, dance shows, giant wheel, and children amusement items. Evening cultural programmes, tribal dances, *bhajans*, children amusement centres are frequent during these days. It attracts large number of people of diverse cultural traditions including indigenous ones who interact each other and exchange cultural elements. These *melas* are used as a medium to spread the message of both great and little traditions to interior villages. For example, on *makar* Sankranti, Gondwana *samaj* arrange open *sabha* where clan elders, religious specialists, political leaders educate their brethren about Gond history, religion, folklore, customary practices, etc. Besides, shops with exclusive tribal products such as medicinal herbs, religious symbol printed cloth, calender, tribal literature, etc., are sold to the visitors. This *mela* is also used as a platform to disseminate communication, awareness on developmental programmes, merry making, marriage negotiations, etc. Thus, fairs associated with festivals at open place in Amarkantak attracting wide variety of population where diverse cultures and traditions overlap each other which in turn contributing to the concept of sacred complex.

### Conclusion

From the above-empirical observation, it is observed that diverse social groupings, native traditions, tourist destinations, immaculate temple architectures, monasteries of various denominations led to development of unique sacred complex at Amarkantak region. As a result of enormous growth of sacred geography of various traditions along with the Narmadamandir in recent times has been contributing for composite culture. With this people hailing from different parts get together and mutually exchange cultural elements. Thus, the sacred

networks evolved over a period of time not only strengthen the common bondage of diverse cultures that emerges in the worship patterns, but *bhajans*, and other sacred performances attracting the people with animistic traditions. Regular practice of great tradition orient worship and rituals have had considerable impact on the tribes of Amarkantak region which is demonstrated from the observance of goddess Lakshmi, Durga, Ganesh, and Govardhanpuja, *bhajans*, *kirthans* on auspicious occasion. Apart from this, they venture Amarkantak to celebrate life cycle rituals such as *mundan*, ear piercing, first feeding rituals, *shradha* ceremony and celebrate annual Hindu festivals such as Makarsankranti, Mahashivaratri, Holi, Ramnavami, Durgashtami, etc. Thus, the great traditions are penetrated into the native communities and praising of Narmada has become a way of life in the form of *narmadehar* slogan that eco throughout Amarkantak.

At the same time, local traditions do appear at this centre in the form of tribal dance forms, cultural performances, offerings, native practices, etc. For example, popularisation of ethnomedicine of Amarkantak region where local tribal communities collect various herbs from the forest and sale in front of the temples. People suffering from eye problems, skin diseases, and so on frequent to this place for herbal treatment. Thus, medicine prepared from *gulbakawali* flower which is used for eye related problems is famous in the Amarkantak region. Further, the sacred centres are adjusting with the modernity through reducing the prolong *narmadaparikrama* duration, mode of travel, relaxing diet norms, norms, etc., to attract more pilgrims. To continue the *parikrama* tradition, state government made wide popularity with initiation river cleaning programme such as *Narmada Seva Yatra*. Though it is a political programme, *sadhus*, *sants*, devotees assisting the local administration in cleaning the Narmada river and afforestation drive to protect the drying water sources. With the growth of population, even the sacred specialists also engaged in petty business, shops, private jobs as an adaptive strategy during off-season.

Thus, the sacred complex of Amarkantak demonstrates the adaptation to the secular life in a geographically isolated place and

avoiding the sectarian tendencies. This trend helps in narrowing the fissiparous attitudes among the people. At this juncture, it is noteworthy to mention enormous growth of temple traffic in and around Amarkantak testifies the hypothesis of Vidyanarayan's theoretical proposition of sacred complex of a Hindu place of pilgrimage reflects a level of continuity, compromise and combination between great and little traditions. Though Amarkantak is declared as *nagarpanchayat*, it could not able to increase the primary or secondary urbanisation unlike other sacred zones such as Ratanpur, Kashi, Buddha Gaya, etc., due to its geographical isolation from the rest of cities in the state. But the floating population during festive occasions increasing the temple traffic at Amarkantak. Existence of *ashrams*, Jain mandir, Gurudwara, Kabir Chabutara demonstrates the secular character of Amarkantak that in turn facilitating the unique character of unity in diversity our country. It is catalytic in attracting pilgrims which in turn paved the way to provision of source of income to the native people those who depended on temple traffic for their eke-out as well as for the development of tourism sector. The secular character of the temple gives a broader identity of the Indian culture by manifesting various dimensions of Indian civilisation. Further, participation of large number of merchants, petty traders, political workers, volunteers, casual visitors, indigenous people during *mela* also contributing for mutual exchange of cultural traditions. Thus, emerging sacred complex of Amarkantak reinforces Vidyanarayan's premise that these centres facilitating the continuous interaction of diverse traditions which reflects the complexity of Indian civilisation and unity in diversity.

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*Jinsar — A Rare Temple in Bengal*  
*Uniqueness, Innovation, Predecessor and Successor*

Peu Banerjee

**Abstract**

The temple at Jinsar is a rare temple and perhaps, the last existing one of that genre. It is in a very dilapidated condition and must be preserved, as it occupies a distinctive position in the architectural history of the region. This article discusses: i) the history of the temple and its possible dating, ii) its Odishan predecessors iii) its unique design and innovative construction systems, and iv) plausible connection with Ratna temples of Bishnupur. The existing temples at Jinsar, Odisha and Bishnupur have been considered as prime evidence. This paper would guide an authentic conservation effort of Jinsar.

**Key Words:** Jinsar, Odisha architecture, unique design, innovative construction, Ratna temples of Bengal.

**1.0 Introduction**

The discovery of Jinsar temple was by sheer chance. While browsing through the internet for academic literature about the origin of Ratna temples of Bishnupur, the author was quite intrigued to see the photos of a dilapidated temple at Jinsar. She had never seen anything like that earlier in the books and articles despite the fact that a large body of research publications exists on the architecture of eastern India. It also appeared that this temple had some connection with the Ratna temple layout. Since the present research of the author is in the domain of the Ratna temples of Bengal, she visited Jinsar immediately to conduct a probe and the outcome of that is this paper.

Jinsar temple stands on the bank of the river Kangsabati, about 20 km from Kharagpur in West Medinipur district of West Bengal. It



Figure 1 : Ruined temple at Jinsar



Figure 2 : Stone jail at Jinsar Temple

has a sanctum and a surrounding circumambulatory. Field visit, measured drawing and analysis revealed that the temple is a stand-alone *pidha deul*, encompassing both the sanctum and the circumambulatory within it and having a roofing system that could be termed as the only one of its kind. It is a rare temple and perhaps, the last one of that genre to still exist. The Jinsar temple is in a very dilapidated condition and might collapse any time, erasing an excellent piece of ancient wisdom. The temple must be preserved for posterity, as it occupies a distinctive position in the architectural history of the region. This paper would bring this temple to the notice of a wider audience and make them aware of the uniqueness of this architecture as well as guide its authentic conservation.

The first part of the paper discusses the history of the temple (Section 3) and shows that though the Jinsar temple was inspired by the Odishan style of architecture, it was unique in its own way. One also witnesses innovative solutions used by the builders to solve the construction issues (Section 4). The second part explores the possibility that this temple was perhaps one of the predecessors of the Ratna temple (Section 5).

As an architectural historian, my research has always focussed on the culture of 'building'— used here as a noun and a verb. The main premise has always been to study the building as the primary evidence

and use folklore, oral tradition and historical events as reinforcing evidences, specially where there is no documentation of the historical structures. The same methodology has been followed in this paper, as apart from a few e-publications and an article by Das<sup>1</sup>, which acknowledge the presence of a ruined temple at Jinsar, there is hardly any mention of this building in any published book or paper. This is probably because most of the architectural historians and researchers were unaware of its existence.

## 2.0 Discovering Jinsar

As mentioned earlier, while searching the internet for Bengal temples, the author came across an article by Mukherjee<sup>2</sup> about a neglected temple complex in Jinsar (Figure 1, 2), near Kharagpur in West Medinipur district. This temple is, in fact, in the neighbouring Balihati village. It was first discovered by Shri Barendranath Makra, then a student of the Medinipur College. He informed Shri Tarapada Santra and Shri Dipakranjan Das<sup>3</sup> about the temple in 1972, who shared the information with David McCutcheon.

Photographs showed that there was a corridor around the sanctum, similar to the verandah surrounding the cella of the Ratna temples. Das also writes about the covered circumambulatory around the *garbhagriha* of this temple and opines that it is a unique feature, not found in the temples of this region<sup>4</sup>. The author visited the site, keen to see whether this ancient temple fitted into the narrative of the Ratna temple architecture, the topic of her ongoing research.

The site visit revealed that the temple has a small dark cella (Figure 3) and a covered corridor all around it, which is a unique plan form that predates Ratna temples. The roof of the cella and the corridor has corbelled ceiling. The partly collapsed temple showed the corbelled courses with bevelled stone blocks, revealing how the roof was constructed and how the structural system behaved. Apparently, there was some similarity with Odishan temples in Bhubaneswar. Measurements of the wall thickness, corridor width, *garbha griha* width, etc. were taken and a preliminary measured drawing of the temple<sup>5</sup>

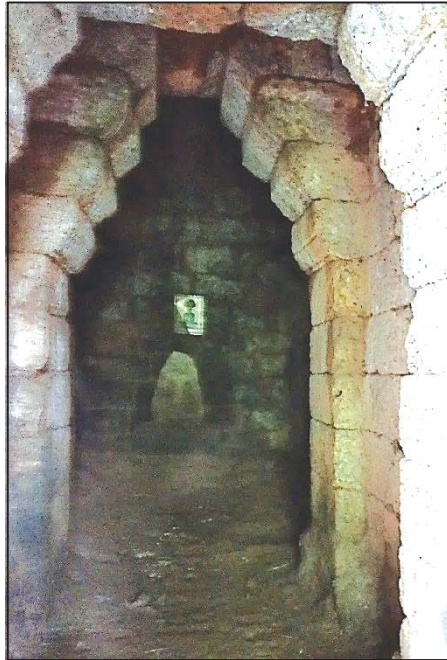


Figure 3 : Sanctum at Jinsar

was prepared (Figure 11). The author collated literary descriptions, historical events and empirical data to understand the temple, its time of construction, issues such as the religious context, influence from other areas, etc. To avoid speculation as much as possible, the existing temple was kept as the main premise of the study along with the local oral tradition about the temple.

### 3.0 History of Jinsar Temple

#### 3.1 *Jinsar-a Jain Temple?*

Jinsar town lies on the south bank of Kangsabati river, about 18 km from Kharagpur railway station. The Google map (Figure 4) shows that an ancient ruined Digamber Jain temple exists in this settlement. The local people call the town Jin Shahr. In Bengali '*Jin*' means 'Jaina' and '*Shahr*' means 'city' i.e., this is a city of the Jaina people. According to the local knowledge, the Jains lived there till the British era and this temple was part of a larger complex of Jain temples of which only a few exist today. There is a worn-out sculpture inside the cella,



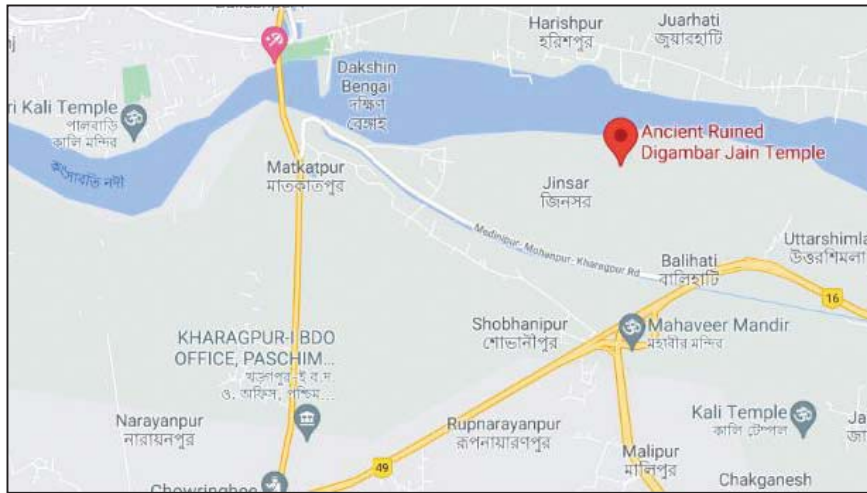


Figure 4 : Location of Jinsar

which is perhaps of a Jain Tirthankara. A Jain society in Kharagpur insisted that Jinsar was a Jain temple and wanted to adopt the property and restore the temple<sup>6</sup>. Das also surmises a Jain connection, based on the name of the place and the artefacts found in the locality<sup>7</sup>.

In summary, the oral history maintains that Jinsar was a Jain settlement and the temple was a Jain temple. While there appears to be inadequate evidence to establish that Jinsar was originally a Jain temple, the local belief cannot be ruled out completely either.

The dating of the temple will be examined in the following Section 3.2.

### 3.2 Dating of Jinsar temple

The dating of Jinsar is important in order to locate it on a time-line and understand the architectural styles that preceded and followed it. In the absence of any recorded date or scientific process of dating, the time of building Jinsar temple has been attempted based on literature review and an analysis of the construction technique as the prime evidence.

The State Archaeology Department of West Bengal has dated the temple to 10th century CE, which, according to Das, may not be correct<sup>8</sup>. However, he confirms that the temple at Jinsar is the oldest temple in Medinipur.

The last Sena king of Bengal lost his kingship in 1204 CE to Bakhtiyar Khilji, which resulted in the beginning of Islamic rule in the region and the destruction of numerous temples built till then. We do not find any major temple building activity in this part of India for the next two hundred years<sup>9</sup>. Mosques and tombs were built during this period using the arcuated system of voussoir arches, vaults and domes, though Bandyopadhyay<sup>10</sup> writes that the corbel technology was not completely forgotten and continued to be used in a limited manner. It is important to note that the entire roof of the cella and corridor of the semi-ruined temple at Jinsar used corbelled technology, which was the pre-Islamic Hindu style of construction<sup>11</sup>. Thus, the temple would have been built probably before or during the 13th century, i.e., before or immediately after Bakhtiyar Khilji's invasion, before the corbel system got eclipsed by voussoir technology in the next few centuries.

Das has discussed a chronology of early Bengal temples with respect to stylistic developments over time<sup>12</sup>. He mentions that during the 11th century CE, the temples had a *tri-ratha* plan (three steps in the wall in plan) and the wall thickness was half of the *garbhagriha* width. By the 13th century CE, the *tri-ratha* had evolved into a *pancha-ratha* style (five steps in the wall in plan) and several new details were introduced. A few among these were the number of *vedibandha* mouldings which had increased to six, and the corbelled masonry courses supporting the ceiling were scoop chamfered, i.e. bevelled. Since these characteristics matched with those found at Jinsar (discussed in detail in Section 4.1 and 4.2), the date of the temple may be surmised to be 13th century CE (based on Das's argument).

A portion of the roof of Jinsar temple which still exists shows that this temple was a *pidha deul* (Figure 5). The form, detailing, material and construction of Jinsar is very similar to the 11th century Lingaraj<sup>13</sup> temple of Odisha (discussed in detail in Section 4), indicating influence of Odishan architecture on the former. This also indicates that the Jinsar temple would have been built after Lingaraj and Jagannath temples<sup>14</sup>, so probably late 12th or 13th century or later. Moreover,

Jinsar is also similar to a number of *pidha* temples constructed in the region (West Medinipur district) between 11th-13th century CE<sup>15</sup>, all within a radius of 65-70 km. Khare dates Shyamaleswar temple (Datan) to 12th century CE, Kangareshwara (Garbeta) to 11th century CE (Figure 7) and Sarvamangala temple (Kesiary) to 13th century CE. On the other hand, the *pidha deul* at Dainitikri (Medinipur) has been dated as 15th century CE<sup>16</sup> by Das.

Thus, in the light of the above discussion, there is a strong possibility that Jinsar belonged to 13th century CE, or perhaps later in 15th century CE. It may be noted that irrespective of the conflict in the dating of this temple, it can be accepted that the temple was built before the first formal Ratna temples were designed and constructed in the 17th century CE by the Malla kings of Bishnupur. This issue will be taken up later again in Section 6.

#### **4.0 Jinsar Temple : Uniqueness, Innovation, Predecessor**

In the above Section 3.2, while examining the dating of Jinsar, its Odisha connection played an important role. It is important to understand the historical and political context of the neighbouring kingdoms of Bengal and Odisha around 12th century CE in order to understand the influences of one on the other.

The Pala dynasty ruled over an extensive region of Eastern India for more than four centuries (8th-12th century CE). They were initially patrons of Buddhism but by the 11th century CE they had started favouring the Shaivite and Vaishnavite cults of Hinduism. During the reign of its powerful rulers like Dharmapala (766-808CE), Devapala (808-845CE), Mahipala I (980-1028CE) and Rampala (1073-1126CE), Bengal, Odisha, Assam and Bihar were unified into the Pala empire, i.e., this whole region was recognised as a single political entity<sup>17</sup>. Taking advantage of the anarchy which followed Rampala's reign, the Odishan king Anantavarman Chodaganga Deva (1077-1147 CE) conquered the entire south-west Bengal (Medinipur, Bankura, Purulia), upto the river Ganga<sup>18</sup>.

So, there have been times between the 8th and 12th century CE (viz. under the Palas of Bengal and Anantavarman Chodaganga of Odisha) when Bengal and Odisha were unified under powerful rulers. This period also coincided with the period of development of Odishan temple architecture (6th century CE – 13th century CE). It seems very likely that the Odishan style of architecture pervaded over the unified Banga-Kalinga<sup>19</sup> region, (south-western Bengal) during this Early Hindu period. This is evident from the considerable number of *rekha* and *pidha deuls* which exist in Bengal from that period<sup>20</sup> in this area. Das discusses at length the Odishan influence on the early temples of Bengal and the stylistic variations over the years<sup>21</sup>. He also mentions that the temple at Jinsar is also of the same genre<sup>22</sup>, Therefore, it may be said that there was an influence of Odishan temple style on Jinsar, which is in West Medinipur district.

Jinsar temple is unique in many ways, which was recognised by the author during her visit to the site in August 2019. Interestingly, Das also corroborates this observation<sup>23</sup>. The following Sections 4.1 and 4.2 analyse the uniqueness of the Jinsar temple on the basis of the existing ruined structure as physical evidence. The paragraphs also ascertain the extent of influence of Odishan temples on its plan, form and construction techniques.

#### 4.1 Layout and Design Elements:

As discussed in Section 2, the Jinsar temple has a square cella ( $\approx 2.0$ m wide) with a surrounding corridor ( $\approx 2.1$  m wide). There is a staircase on the north-east corner of the temple. The ceiling shows corbelled construction. The existing portions of the ruined temple show that the outer roof was a *pidha deul* (discussed in section 3.2), which is one of the important components of Odishan temple architecture. The canons of Odishan temple architecture<sup>24</sup> state that the wall thickness should be half of the sanctum width, which is followed in most of the Odisha temples, as well as in Jinsar temple. Again, *rathas* are present in both Odishan architecture and the Jinsar temple. There is a strong resemblance between the design elements of



Figure 6 : Rekha and pidha deul at Lingaraj temple at Bhubaneswar, Odisha



Figure 7 : Pidha deul at Kangareshwara temple at Garbeta, West Medinipur

Jinsar and Odishan temples. For example, the pattern of stone moulding at the temple base (*vedibandha*) of Jinsar, the use of stone *jali* etc. (Figure 8) are very similar to those in Lingaraj, Odisha. This shows a definite influence of Odishan style of architecture on Jinsar, as was the case with many early temples of Bengal.

Typically, Odishan temples have two to four chambers arranged linearly along the east-west axis (Figure 6). The tallest and yet the smallest in area is the *garbhagriha* at the culmination of the progression. The *garbhagriha* would unfailingly be housed in a *rekha deul*. The other spaces on the axis, viz. *jagamohana*, *bhogmandap* and *natmandir* would be housed in *pidha deul* structures. In contrast, the *pidha deul* temples like the Kangareshwara temple (Figure 7) in south-western part of Bengal (discussed in Section 3.2), are often stand-alone single chambered temples which house the sanctum and do not form a part of a grand composition. Jinsar appears to belong to this second category as it is a stand-alone *pidha deul*. Hence, externally, Jinsar would look like a *pidha deul* of any Odishan temple or those in West Medinipur district.

While the Odisha and West Medinipur temples have only a single cuboidal volume inside (Figure 10), Jinsar *pidha deul* includes both the sanctum and the surrounding corridor within the external *pidha* form, with two independent stone corbelled roofs internally over the two spaces (Figure 11). This plan-form is unique and was not seen in Bengal before. Jinsar temple may thus be cited as the earliest example of this genre of temples.

The surrounding corridor in Jinsar temple was most probably used by the devotees for circumambulation, which was an ancient ritual of worship. Circumambulatory around the *garbhagriha* is found in many Indian temples, e.g., Durga temple of Aihole (late 7th century CE), Laxmana (10th century CE) and Kandariya Mahadeo (1030 CE) temples of Khajuraho, among others. Jinsar was perhaps in line with that trend. Yet, Das finds it logically incoherent that the influence of the South, West and Central Indian temples would be restricted to the inclusion of the circumambulatory alone<sup>25</sup>.



Figure 8 : (a) Base (vedibandha) moulding, stone jail and bevelled corbets in Lingaraj; (b) Base (vedibandha) moulding at Jinsar; (c) Stone jail and bevelled corbels at Jinsar

In short, it may be surmised that the Jinsar temple had a *pidha* form and decorative elements like Odishan style but is a stand-alone *pidha* structure like some of the West Medinipur temples. The circumambulatory could have been an influence from Aihole, Kajuraho or similar Nagara temples. What makes it unique is that while all other *pidha deuls* have a single volume inside, Jinsar *pidha deul* has two distinctly separate spaces (sanctum and circumambulatory) within its form, each with its own corbelled ceiling - an arrangement probably not seen in Bengal till then. Added to this is the fact that the circumambulatory is much wider than those attempted till then, thus posing major structural and constructional challenge to its builder in those days, which they innovatively solved, as evident from its long life amidst the adverse climatic conditions in Bengal. This issue has been discussed further in the Section 4.2.

Interestingly, we do not find any other Jinsar type temple in the recorded history of Odisha and Bengal. There is a possibility that

such temples have perished (Jinsar will perish soon if not restored) or may be in obscured location and have not been noticed by any researcher so far.

#### 4.2 Materials and Construction Techniques

Both Odisha and south-west Bengal (including Jinsar) lie in the same lateritic belt. So, it is quite understandable that laterite would be a natural choice for temple building in both these regions, because of its easy availability, ease of dressing/sculpting and durability. Even today the local villagers in these places use laterite for house construction. However, what connects Jinsar and Odisha temples are the similar dimensions of laterite stone blocks, the fine quality of their dressing and the bevelled corners of the blocks used



Figure 9 : Similar corbelling in opening using bevelled laterite blocks; a) Lingaraj b)

in corbelling of the roof and openings (Figure 9).

While exploring methods of construction, it was found that the finely dressed laterite blocks in Jinsar were laid in courses in the walls without any mortar, which was the trend in Odisha temples. The roof construction of Jinsar was based on the traditional Hindu system of corbelling, found in a large number of temples across the country (Odisha, Khajuraho, Rajasthan) and as far as Indonesia. However, Jinsar was different from the other temples mentioned here. As

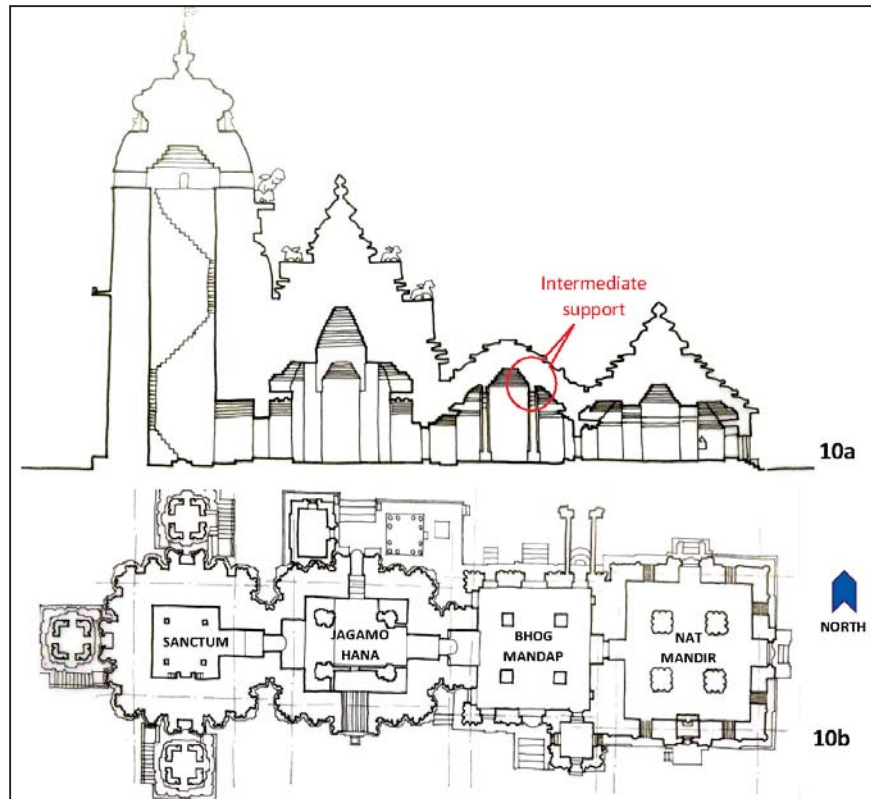


Figure 10 : (a) Section and (b) plan of Lingaraj temple, Bhubaneswar, Odisha

discussed earlier in Section 4.1, the main reason was that while a *pidha* form housed a single cuboidal volume in most of the eastern Indian temples, Jinsar had two distinctly separate spaces, a sanctum and a circumambulatory, all within a single external *pidha deul* form. Internally, though, there were two independent roofs over the two spaces. So, though the form would have looked the same from outside in both types of temples, the construction of the roof was different in Jinsar.

A comparison of the section drawings of Lingaraj temple (Figure 10) and Jinsar (Figure 11) will illuminate the differences between these two temples in terms of construction methods. *Jagamohana*, *natmandir* and *bhogmandap* of the former have internal columns, connected at the top with stone beams/ lintels. The roof corbelling of these spaces starts from the outer wall and continues up to the crown of the



pyramid, taking an intermediate support on the stone beams (Figure 12a). This intermediate support was necessary as the spans of the *jagamohana* (11m x 9.1m), *natmandir* (12m square) and *bhogmandap* (13m square) are relatively much more than the sanctum<sup>26</sup>. A similar type of structural system is found in Khajuraho temples (Laxmana and Kandariya Mahadeo), where the internal space dimensions are considerable.

A similar technique could have been adopted at Jinsar, i.e. the corbelled pyramid

starting from the external wall could have been supported on the intermediate sanctum wall (Figure 12b), before continuing upwards to complete the *pidha* roof. However, the master builder tried a quite different method of construction here, perhaps to reduce the risk of failure while constructing the corbelled roof over the much greater width of the circumambulatory (determined probably from functional reasons). In Jinsar, the top of the sanctum wall was corbelled out towards the circumambulatory to act as an intermediate support to the corbels moving inwards from the external wall of the temple (Figure 12c, d). Inside the sanctum, roof was a simple corbelled pyramid as the span was small. Externally, there was probably a single *pidha* roof over the whole arrangement (Figure 11).

There is a logic behind this. It must be appreciated that the corbelled roof was constructed without formwork, by projecting each layer beyond the lower one in order to close the roof, adding counterweights along each layer for stability. In this case, the corbelling out from the

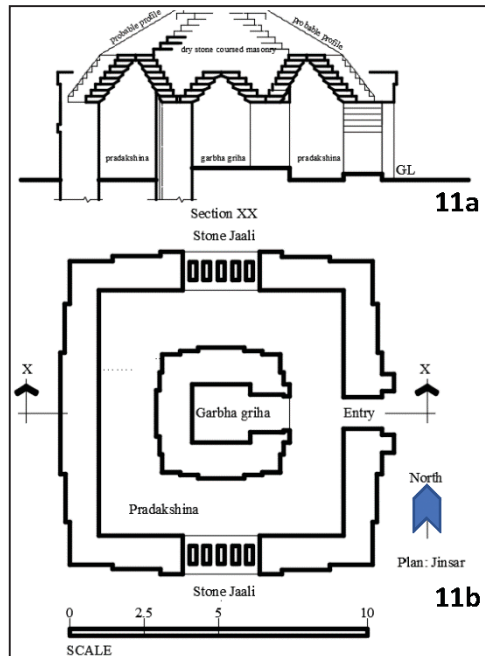


Figure 11 : Sketch (a) section and (b) plan of the temple at Jinsar (source : author)

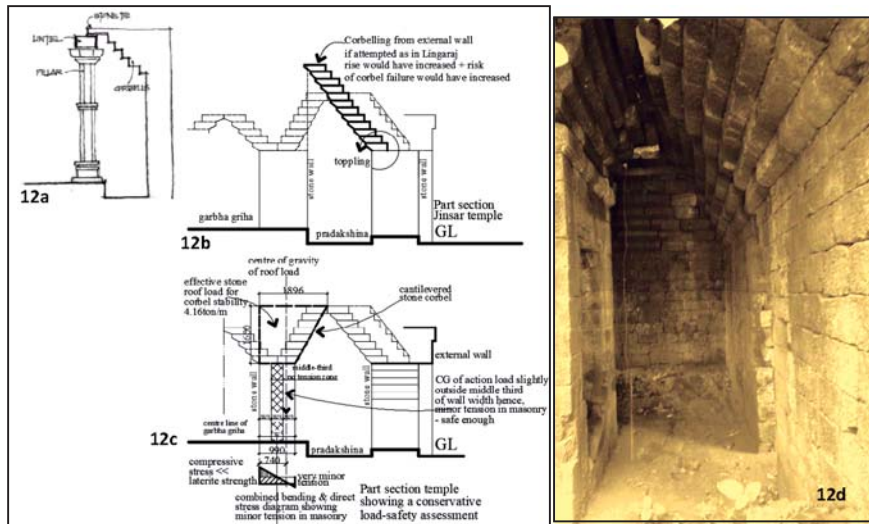


Figure 12 : (a) Intermediate support of corbels on columns and beams, as in-Lingaraj (b) If the same system of corbelling would have been used in Jinsar, it would be unstable as the cantilever span is much bigger; (c) Corbelling over the circumambulatory of Jinsar done from both sides; (d) Corbelled ceiling over the circumambulatory of the temple at Jinsar.

sanctum wall layer by layer made it a purely cantilever structure with no corner restraint and hence, required a steeper angle with smaller offsets to keep the centre of gravity of the roof load within the middle third of the supporting wall, to avoid toppling. The solid stone work above the *garbhagriha* acted as a counterweight and helped to reduce its toppling or overturning effect.

On the other hand, the slope of the corbels from the external wall could be less steep as the corner restraint would help to maintain stability of the corbelled pyramid. These two corbels from the two sides of the circumambulatory stabilised each other when they met at crown, in this case along a line slightly off from the centre of the circumambulatory (Figure 12d). Therefore, the roof over the circumambulatory in Jinsar is asymmetric, thereby effectively reducing the span of the corbels rising from the exterior wall, resulting in less chance of corbel failure during construction.

In short, from the point of view of materials and construction, there is a strong resemblance between the Odishan temples and Jinsar,

indicating that the latter was indeed influenced by the Odishan style. Yet, the construction method of the roof of the wide circumambulatory of the Jinsar temple is quite innovative, unseen and unheard-of till then or later. It was a unique system of corbelling, developed to roof a unique layout.

### 5.0 Jinsar Temple: Probable Successors

This section tries to draw parallels between the layout and form of the Jinsar temple and the later Ratna temples of Bishnupur, in order to assimilate the similarities and differences and analyse whether there was any influence of the former on the latter.

The Ratna temples in Bishnupur appeared as a finished product in the early 17th century CE, and one does not find any evidence of evolution in any of the existing temples or ruins. In this context, the author had collated and analysed the data of 1814 temples, based on literature review of several fundamental publications on the subject, web-sites and information from local researchers<sup>27</sup>. It was realised that while *rekha deul*, and sometimes the *pidha deul*, were the most prevalent forms in the early Hindu temples (upto 13th century CE), their number gradually dwindled over time. After a lean period of very little temple construction during the Sultanate period, one finds almost an explosion of a large number and a huge variety of temples in the Hindu Revival period (17th-18th century Bengal). While Jinsar temple may be presumed to be situated in one of the first two periods, the Ratna temples of Bishnupur belonged to the last chronological period.

The genetic intrinsic of these ratna temples consist of a central sanctum surrounded by a covered corridor/ veranda, curved cornice and one or more pinnacle(s) rising above the roof (Figure 13). Many scholars like McCutchion, Halder et al., Ghosh, Datta, Hasan<sup>28</sup> etc., have written about the origin of the various aspects of the Ratna temples, viz. the sanctum, covered veranda, pinnacle, staircase to the upper storey, the grid, the facade etc. This section discusses the surrounding covered veranda only, which probably served as a sheltered porch for the devotees. A close study of the corridors of the

ek-ratna temples of Bishnupur shows that initially this was a continuous passage all around the temple (Shyam Rai and Kalachand temples) and perhaps served as a covered circumambulatory for the devotees<sup>29</sup>. In later temples, these were blocked off – one part was probably accessed by the people while the other was used by the priests for storage and ancillary shrines. Ghosh mentions that these blocked-off portions probably housed the pilgrims or were used for yogic meditation during the monsoons<sup>30</sup>.

Scholars have very different points of views about the origin of the corridor of the ratna temples. McCutcheon<sup>31</sup> mentions that this might have originated from the *rekha deul* with a covered veranda all around. He illustrates this hypothesis with the examples of the temples of Kalanjaya Shiva at Patrasayer (Bankura) and Kanakeswara Shiva at Kanpur (Hooghly), though these were built at a later period (18th-19th century CE). His understanding was probably that similar genre of temples could have existed earlier as well, but lost due to vandalism or weathering action of nature. Both McCutcheon<sup>32</sup> and Ghosh<sup>33</sup> mention that the covered veranda all around the vernacular house was quite prevalent in domestic architecture of Bengal. This semi-open space protected the inner mud walls from heavy rains. It is quite possible that either or both the above could have been the models based on which the veranda of the ek-ratna temple form was developed.

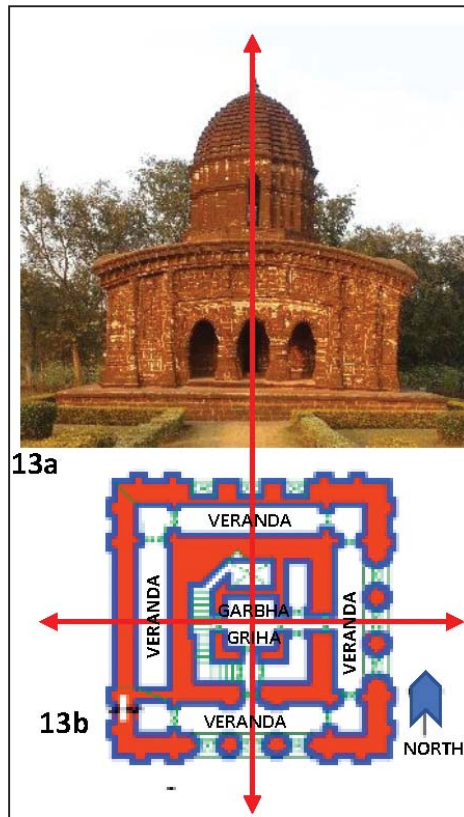


Figure 13 : Symmetry in (a) elevation and (b) plan of a typical ek-ratna temple

It is interesting that some scholars<sup>34</sup> considered the Ladkhan/ Nachna kuthara at Aihole as a possible influence on the covered verandah that surrounds a ratna temple. However, none of those scholars elucidate the process by which the development in the Nagara temples reached distant Bengal and influenced the ratna style. The possible influence of Nagara style in Ratna temples might have come from the neighbouring kingdom of Odisha, in the form of the pinnacle of Ratna temple, which resembles the *rekha deul*<sup>35</sup> and not the covered circumambulatory, which is absent in Odishan temples.

McCutchion<sup>36</sup>, Ghosh<sup>37</sup> and other researchers had discussed that the Qadam Rasul mosque at Gaur (Malda), dated 1530 CE, was the inspiration for the Ratna temple verandah. The premise is that first, the entrance façade of the Qadam Rasul mosque and the Ratna temples are similar and second, the mosque has a covered porch on three sides, similar to the covered veranda of the Ratna temples. This results in a uni-axial composition in the mosque vis-à-vis a biaxial composition in the ratna temple. Functionally, the porch of the mosque functioned as a transition space between the outside and inside, while the veranda of the ratna temple was used as an entrance porch, circumambulatory, storage and ancillary shrines, as discussed earlier.

Thus, having searched far and wide for a predecessor of the covered verandah of the Ratna temple, the Jinsar temple standing almost at

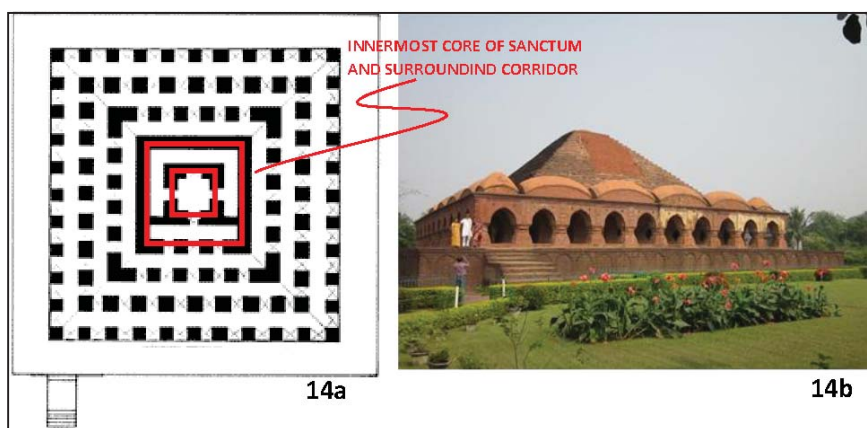


Figure 14 : (a) Plan and (b) view of Rashmancha, Bishnupur

the doorstep of Bishnupur is an eye opener. Among all other plausible contenders, Jinsar seems to be the closest match in terms of the plan-form. As discussed earlier, it may be reasonably presumed that Jinsar was not the only temple of this genre that was built, but was probably the only surviving one – the others might be ruined beyond recognition in long forgotten obscure places. A further in-depth analysis is done here to understand whether Jinsar had any influence on Bishnupur, the city where most of the ratna temples exist. A closer look at Rashmancha in Bishnupur is important at this point.

Rashmancha (Figure 14) is one of the earliest temples to be built in Bishnupur during the Hindu Revival Period. It is a very attractive temple and a cultural icon of Bengal (one finds a big picture of Rashmancha in any tourist office of Bengal). It was built in 1600 CE by Malla king Bir Hambir after he embraced Vaishnavism under the influence of Srinivas Acharya in 16th century CE. It was built to celebrate the *rashlila* festival of the Vaishnav faith. If we look at the plan of Rashmancha, the innermost temple consists of a cella with a corridor on all sides. The idea of the covered wrap-around corridor is repeated here like Jinsar, forming the very core of the temple. The difference is that while in Jinsar the corridor is continuous on all four sides, in Rashmancha, the fourth side is discontinuous from the rest, which could be a later modification. The external form of this temple is a *pidha deul*, again very much like the Jinsar temple roof, though much bigger in scale. Moreover, the *pidha deul* of Rashmancha encompasses more than one space, like the Jinsar temple; and not a single volume as in Odisha temples. This shows that there are similarities between the designs of Jinsar and Rashmancha.

The *pidha* roof of Jinsar is a corbelled construction. Interestingly, the *pidha* roof of Rashmancha, which looks like a corbelled pyramid from outside, is actually a series of voussoir semi-vaults on the inside. It may be noted that the voussoir technology was probably the prevalent construction method in 17th century Bengal and the masons were well conversant with this method as many mosques and tombs were constructed in Bengal between 14th-16th century CE<sup>38</sup>. The use

of voussoir technology internally to achieve the appearance of a grand corbelled pyramidal roof suggests that the latter was a conscious design choice, perhaps by the king, perhaps inspired by the Jinsar temple type.

It may be surmised that the Jinsar or similar temples influenced the Rashmancha plan and form. It will now be examined if Jinsar influenced the Ratna temples of Bishnupur. This possibility is not surprising, as Jinsar is only about 85km from Bishnupur. Communication and transportation in the region were not difficult as this whole area was drained by the Damodar-Ajay-Kangsabati-Darakeswar network of rivers, which had been used for centuries for trade and movement.

The covered corridor of the Ratna temple seems to have no universally acknowledged predecessor, though different scholars have different views (Section 5). As discussed earlier (Section 4.1), one of the unique features of the Jinsar temple is the covered corridor surrounding the sanctum. It is possible that the idea of covered veranda surrounding the sanctum of ratna temples might have come from the surrounding covered corridor of the Jinsar temple. A number of reasons may be cited in support of this hypothesis.

First, Jinsar is located very close to Bishnupur, where ek-ratna temples flourished. It may be presumed that the model for a circumambulatory would be closer to the town itself rather than the far flung Aihole, Khajuraho or even Gaur. Second, it may be said that the influence of Jinsar had already reached Bishnupur, evident from its similarity (in plan and form) with Rashmancha. Third, the Ratna temples have been inspired by the Odisha style of architecture (Section 4) and evidently, the pinnacle of the Ratna was derived from *rekha deul*. McCutchion<sup>39</sup> did mention that the Ratna temples could have been derived from a *rekha* temple having a surrounding verandah. The notion of a veranda around the sanctum in ratna temples could have been inspired by the covered corridor around the sanctum in Jinsar. Fourth and perhaps the most important, is that the sanctum width and the overall dimension of Jinsar and ek-ratna temples are

TEMPLE	JINSAR	KALACHAND	NANDALAL	JORA MANDIR NORTH	RADHA MADHAV
DATE	13th - 15th Century CE	1656 CE	2nd Half 17th Century CE	1726 CE	1737 CE
	WEST MEDINIPUR	BISHNUPUR	BISHNUPUR	BISHNUPUR	BISHNUPUR
PLAN					
PHOTO					
MATERIALS	Laterite	Laterite	Laterite	Laterite	Laterite
METHOD OF CONSTRUCTION	Corbelled roof Dry masonry wall	Dome & vault roof Dry masonry wall	Dome & vault roof Dry masonry wall	Dome & vault roof Dry masonry wall	Dome & vault roof Dry masonry wall

Table 1 : Continuity of Jinsar Plan-form in Ratna Temples of Bishnupur  
Source - Drawings made by author, based on site-measurements

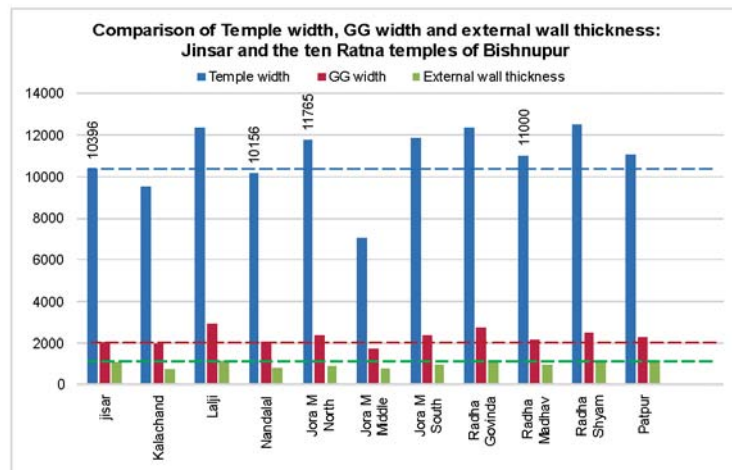


Table 2 : Comparison of Temple Width, Garbha Griha Width and External Wall Thickness in Jinsar and Ek-Ratna Temples of Bishnupur. Source-Author, based on data collected at site.

very similar. This can be seen from the very first ek-ratna temple constructed in Bishnupur, viz. Kalachand (1656 CE). The others like Nandalal (2nd half of 17th century CE) and Radha Madhav (1737 CE) too, have their overall width and *garbhagriha* width very close to that



of Jinsar. One noticeable difference is that the veranda of Jinsar is wider than the ek-ratna temples. However, if one adds the staircase width (as present in ek-ratna temples) to the Jinsar plan, its veranda width would also be very close to the ratna temples. This tends to suggest that there was a strong connection between the layouts of Jinsar and the ek-ratna laterite temples of Bishnupur.

Table 1 provides the plans (to-scale) of Jinsar, Kalachand, Nandalal, Jora Mandir North and Radha Madhav temples. The plans of the other ek-ratna laterite temples are also similar. The table shows that the planform, material and wall construction of Jinsar and the ek-ratna temples are akin to each other. Figure 1 compares the temple width, garbha griha width and external wall thickness in Jinsar and ten ek-ratna temples of Bishnupur and finds an extremely close correspondence between them. It must be mentioned here that the Table and the Figure were prepared based on the data and measurements collected at the sites by the author. Thus, it is quite probable that the Jinsar temple provided inspiration for the veranda of the ratna temple<sup>40</sup> and it is the unique sheltered wrap-around corridor of the Jinsar type of temples which was copied. The technology, of course, changed from the corbelled system in Jinsar to the vousoir arches and domes, since that was the prevailing construction method of the time.

## 6.0 Conclusions

Jinsar temple stands on the banks of the Kangsabati river, about 20km from Kharagpur in West Medinipur district of West Bengal. It has a sanctum and a surrounding circumambulatory and is in a very dilapidated condition. Field visit and measured drawing showed that the temple is a stand-alone *pidha deul*, encompassing both the sanctum and the circumambulatory within the form. It may be reasonable to presume that Jinsar was not one-of-a-kind temple, and the other similar types have either collapsed or not been discovered yet. The Jinsar temple is a rare temple and perhaps, the last one of that genre to still exist. The temple must be preserved for posterity, as it occupies a distinctive position in the architectural history of the region.

This article discusses: i) the history of Jinsar temple and its possible dating, ii) uniqueness in the design and innovations in the construction systems, iii) its possible predecessor and iv) plausible connection with Ratna temples of Bishnupur. The existing temples at Jinsar and Bishnupur have been considered as tangible and prime evidence.

Literature review and site visits suggested that the Jinsar temple was constructed in 13th or 15th century CE, definitely before the first Ratna temples were built in Bengal. Researching deep into the Odisha connection revealed that both the Jinsar and the Odisha temples had similar *pidha deul* forms, wall *rathas*, *pabhaga* (base) mouldings, *jali* patterns, materials, stone block size and shape, corbelling angles and methods of construction etc. and both followed the Odishan architectural canons for their proportions and wall thickness.

Despite being highly influenced by Odishan style of architecture, Jinsar was a unique temple, using innovative construction methods. Unlike the Bhubaneswar temples, where a *pidha*-form encloses a single volume, Jinsar encompasses both the cella and the circumambulatory within one *pidha* form. Internally, the two spaces had two individual corbelled roofs. This arrangement was probably not seen in Bengal or Odisha till then, thus making it unique.

Moreover, the circumambulatory of the Jinsar temple was much wider than those attempted till then (perhaps a functional requirement), thus posing a major construction challenge to its builders in those days. In order to build a roof over the wide circumambulatory, the Jinsar builders did not follow the traditional method of corbelling inwards (in one direction only) from the outer walls and using the internal columns and beams for intermediate support. They had corbelled inwards from the walls on both sides of the circumambulatory, which met at crown and stabilised each other along an asymmetric line above this space. This met the different stability requirements of the two sets of corbelling from the inner and outer walls and in the process, gave birth to an honest roof-form while attempting to achieve the equilibrium of forces. This was definitely an innovative solution of constructing corbelled roofs over large spaces.

Finally, this paper explores the possible connection of the Jinsar temple with the wrap-around veranda in Ratna temples in Bishnupur. Bengal Ratna temples, with their curvilinear roofs and pinnacles, define a unique architectural style. Bishnupur gave birth to and nurtured the Ratna type temples, which continued in Bengal till the modern times. Though a lot has been written about the origin of the pinnacles and the facade of the ratna temples, the origin of the surrounding veranda remains elusive.

Some researchers have written about the temples with covered circumambulatory in Central and South India as feasible models. Yet, a few of them have mentioned that it is perhaps, a far-fetched idea since there is no evidence of such influence in any other part of the temple. Other scholars have cited Islamic structures like Qadam Rasul mosque as a predecessor of the veranda of the ratna temples. Or perhaps, the covered veranda of the domestic vernacular architecture was the model.

After searching far and wide for plausible precedents (viz., Durga temple at Aihole, Kandariya Mahadev temple at Khajuraho temples, Qadam Rasul mosque at Gaur, vernacular), the concentric arrangement of the sanctum and circumambulatory in the nearby Jinsar temple seemed another possible model for the sanctum and wrap-around veranda of the Ratna temples. The Jinsar temple seems to have influenced the plan and form of Rashmancha (in Bishnupur) as well. Formal, constructional and dimensional analysis of Jinsar and the ek-Ratna temples of Bishnupur show close similarity among them.

As mentioned before, there is no documented evidence to prove that the Bishnupur Ratna temples followed the footsteps of Jinsar. It is a fact that Jinsar is situated very close to Bishnupur and definitely within the radius of possible influence. This paper has demonstrated that there is a stunning similarity of Jinsar with ratna temples in terms of plan-form, *garbhagriha* width and overall dimensions. Thus, there is strong circumstantial evidence that the temple at Jinsar was one of the predecessors of ratna temples.

### Acknowledgements

My acknowledgements to Professor Dr. Ranjana Mital (HOD, Department of Architecture, SPA, Delhi) and Professor Manoj Mathur (Senior Faculty, Department of Architecture, SPA, Delhi) for reviewing my paper and providing valuable inputs.

### Notes

- <sup>1</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246-247.
- <sup>2</sup> Tarun Tapas Mukherjee, "The Temple Complex of Jinsar near Kharagpur, West Medinipur: a Photo Journey", *Chitrolekha Journal on Art and Design*, Vol. 3(1), 2013, <http://chitrolekha.com/the-temple-complex-of-jinsar-kharagpur-paschim-medinipur/> dt.on 31.12.19
- <sup>3</sup> This has been recorded by Shri Dipakranjan Das in his article "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246.
- <sup>4</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246.
- <sup>5</sup> Very detailed measurements could not be taken as the temple was covered in thick vegetation infested with venomous snakes, with trees growing through the walls and about half of the roof had collapsed.
- <sup>6</sup> Interactions with the local people, especially Ashim Das Mahapatra, resident of Jinsar village, and his nephew Bibek Bikash Dey.
- <sup>7</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246.
- <sup>8</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246.
- <sup>9</sup> This has been discussed by many authors. Some of these references are listed here.  
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Ajay Khare, *Temple Architecture of Eastern India*, Shubhi Publications, Gurgaon, 2005; 19, 20.  
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- <sup>10</sup> Amiyo Kumar Bandyopadhyay, *Bankura Jelar Purakeerti*, State Archaeology Department, Government of West Bengal, 2015; 16.
- <sup>11</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 1.
- <sup>12</sup> <https://en.banglapedia.org/index.php/Architecture> dt. 25.6.22.
- <sup>13</sup> One may note that on several occasions in the paper, Jinsar temple has been compared to Lingaraj temple in Bhubaneswar. This does not imply that the

former was influenced by the latter alone. 'Lingaraj' has been used as a typical example of Odisha genre of temples, which inspired the construction of Jinsar temple in terms of laterite block size, shape, angle of corbelling etc.

- <sup>14</sup> Lingaraj temple was built in the 11th century CE (<https://www.culturalindia.net/indian-temples/lingaraj-temple.html>), dt. 25.6.22; while Jagannath temple was built in the 12th century CE (<https://www.culturalindia.net/indian-temples/jagannath-temple.html>), dt. 25.6.22.
- <sup>15</sup> Ajay Khare, *Temple Architecture of Eastern India*, Shubhi Publications, Gurgaon, 2005; 122, 124, 125.
- <sup>16</sup> <https://en.banglapedia.org/index.php/Architecture> dt. 25.6.22.
- <sup>17</sup> Ajay Khare, *Temple Architecture of Eastern India*, Shubhi Publications, Gurgaon, 2005; 36, 37.
- <sup>18</sup> <https://www.historyofodisha.in/anantavarman-chodagangadeva-1077-1147-a-d/> dt. 23.5.21.
- <sup>19</sup> Banga refers to Bengal and Kalinga refers to Odisha
- <sup>20</sup> These temples can be seen in Purulia, Bankura, Medinipur districts of Bengal. These have been mentioned by many scholars. Some of the references are listed here.  
Bimal Kumar Datta, *Bengal Temples*, Munshiram Manoharlal Publishers Pvt. Ltd., New Delhi, 1975; 24, 26.  
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Sibabrata Halder and Manju Halder, *Temple Architecture of Bengal: Analysis of Stylistic Evolution of the Temples from Fifth to Nineteenth Century*, Urbee Prakashan, Kolkata, 2011; 157-190.
- <sup>21</sup> <https://en.banglapedia.org/index.php/Architecture> dt. 25.6.22.
- <sup>22</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246.
- <sup>23</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246.
- <sup>24</sup> N. K. Bose, *Canons of Orissan Architecture*, K. N. Chatterjee, Calcutta, 1932; 119 <https://archive.org/details/in.ernet.dli.2015.100340/page/n11/mode/2up>
- <sup>25</sup> Dipakranjan Das, "Balihatir Jain (?) Mandir", in Tarapada Santra, ed., *Kaushiki*, Pustak Bipani, Kolkata, 2004: Volume 1, 246-247.
- <sup>26</sup> <http://unexploredbihar.blogspot.com/2017/07/the-lingaraj-temple-bhubnashwar-odisha.html> dt 30.6.21.
- <sup>27</sup> The literature review included books and articles of subject stalwarts like David McCutcheon, George Michell, Amiyo Kumar Bandyopadhyay, Tarapada Santra, Hiteshranjan Sanyal, Dipakranjan Das, Ajay Khare and so on, as well as local researchers like Manik Lal Singha, Chittaranjan Dasgupta, Tushar Sarkar, Jaladhar Halder, Sunanda Halder etc. The main list was

adopted from Aishee website (www.aishee.org), which was compiled by Shri Amit Guha from several sources.

- <sup>28</sup> Origin and development of ratna temples have been discussed by many scholars. Some of the references are listed here.  
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Pika Ghosh, "Space and the New Temple Vernacular of Seventeenth-century Bengal", in Subashree Krishnaswamy, ed., *Traditional and Vernacular Architecture*, Madras Craft Foundation, Chennai, 2003; 17.  
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- <sup>29</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 11.
- <sup>30</sup> Pika Ghosh, *Temple to Love – Architecture and Love in Seventeenth Century Bengal*, Indiana University Press, Bloomington and Indianapolis, 2005; 156, 157.
- <sup>31</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 11.
- <sup>32</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 11.
- <sup>33</sup> Pika Ghosh, *Temple to Love – Architecture and Love in Seventeenth Century Bengal*, Indiana University Press, Bloomington and Indianapolis, 2005; 80.
- <sup>34</sup> Hiteshranjan Sanyal, *Banglar Mandir*, Karigar, Kolkata, 2012; p. 33.
- <sup>35</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 11.
- <sup>36</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 10.
- <sup>37</sup> Pika Ghosh, *Temple to Love – Architecture and Love in Seventeenth Century Bengal*, Indiana University Press, Bloomington and Indianapolis, 2005; 80, 82.
- <sup>38</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 1.
- <sup>39</sup> David J. McCutcheon, *Late Medieval Temples of Bengal: Origins and Classifications*, The Asiatic Society, Calcutta 1993; 11.
- <sup>40</sup> Though the plans are similar, the sanctum wall thickness of Ratna temples is more than that in Jinsar temple in order to accommodate the stairs which lead to the pinnacle.

**FIGURE CREDITS**

Figure 1: Author

Figure 2: Author

Figure 3: Author

Figure 4: <https://www.google.com/maps/place/Ancient+Ruined+Digambar+Jain+Temple,+Jinsar,+West+Bengal+721305/@22.3699363,87.3283889,13.7z/data=!4m5!3m4!1s0x3a1d45459af8a0bb:0xd4791428a2e05552!8m2!3d22.3949993!4d87.3681736 dt 18.6.21>

Figure 5: Photo: [http://www.chitrolekha.com/V3/n1/06\\_Jain\\_temple\\_jinsar.pdf](http://www.chitrolekha.com/V3/n1/06_Jain_temple_jinsar.pdf) dt. 01.07.21; Processed photo: Author

Figure 6: <https://www.orissapost.com/asi-unearts-stone-structure-suspected-to-be-remains-of-ancient-temple/> dt 21.6.21)

Figure 7: <https://amitabhagupta.wordpress.com/2014/03/13/gongoni-the-grand-canyon-of-bengal/dt 21.6.21>

Figure 8: Author

Figure 9: Author

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## *Annadananda Sen — a life well lived*

Ritinkar Sen

### **Abstract**

My Uncle (Choto Jethamoshai - Ramapada Sen) had authored the biographies of our Thakurda (Grandfather - Annadananda Sen), another uncle (Boro Jethamoshai - Umapada Sen), and his own. I have used the word 'authored' because he did not 'write' them! Choto Jethamoshai's handwriting was not very legible and he was fully conscious of it. So, he dictated the entire text in Bengali to his daughter-in-law Shibani and granddaughter Munna. Both of them are very beautiful ladies with equally beautiful handwriting. The biographies were written in a 1972-print diary so I assume it was written around that time. Choto Jethamoshai then must have been about 80 years of age. I am lost for words in admiration of his memory and mental faculties when he narrated the texts. He did wonderful work that cannot be allowed to remain caged in a diary and then fly away to oblivion. The diary is in the possession of the Head of our family Barda (Nirapada). When I was writing the Annada Nibas story, I went to meet Barda for some input. He showed me the diary and on flipping through the first few pages I realised it was a real treasure — a fountain of information on the life and times in the days gone by.

Annadananda was born probably in January or February 1851. His father Kalidas Sen lived in the village of Arkandi in Faridpur district. His mother Nabadurga Debi was from the village of Kakia in *Jeshore* district. Nabadurga lost both her parents at a young age and was brought up by the brothers of her mother who lived in the village of Moyna in *Jeshore* district.

Kalidas's father Bishwanath Sen had two wives. The first wife Chandmoni bore him a son Padmalochan and died early. Padmalochan

worked as Munsif in Kustia and also died early leaving two sons - Durgagati and Shyamacharan.

Bishwanath remarried and his second wife Lakshipriya bore him Kalidas. Please refer to the family tree on the last page

Kalidas worked as a legal practitioner in the town of Rajshahi. In those days *Farsi* (Persian Language) was the official language used in the court and Kalidas had mastered the language. Legal practitioners were paid well those days. Kalidas became a Government lawyer at an early age and had a substantial income. One had to travel between Arkandi and Rajshahi by a river boat. Arkandi was situated on the bank of river Chandana and Rajshahi on the river Padma. In those days Chandana was quite wide and navigable throughout the year. There were no railways yet. At the time of Durga Puja, Kalidas used to fetch water in pitchers from the river Ganges for Puja use. Looking at the spot in the premises earmarked for the Puja and implements that were used it seems that the Puja was performed with a lot of pomp and gaiety. Similar pomp and gaiety were also observed in the Puja performed at the premises of our close relative Phatiklochan Sen. After sudden demise of Phatiklochan, Kalidas organised the Puja at his premises as well.

Kalidas died young leaving behind his daughter 5 or 6 year old Sanandamoyee and one year old son Annadananda.

I do not have any further information on Kalidas Sen.

In those days that the so-called higher class people, unlike those now, did not display their superiority by the way they attired or by their lifestyle. The relatively well-off too were simply attired and many such menfolk wore only a piece of cloth to cover the upper part of the body like a shawl. Their footwear consisted of slippers only. Their class was revealed through attitude and dealings with others. One reason for this was the social order of the day. The less privileged ones used to depend on the dispensations of the relatively well-off people. The drummer, the man who used to slaughter the goat (for ritual sacrifice) and those assigned with other tasks for the Puja were

given *chakran land* (a land given away for the service provided). Sometimes, even the man whose task was to raise the branch of the tree to facilitate the slaughter of animal (for, felling the tree was prohibited) was given *chakran land*. The gardener, washer-man, barber, shoe-maker, blacksmith, maker of earthenware, the artist and astrologer from the village made substantial earnings on the occasions of Puja, *Shraddha* (religious rites performed when one dies), marriage ceremony and similar events, not to speak of the Brahmin priests! It used to be said there were "*baromashay teroparban*" (thirteen events in twelve months). It was considered a virtuous act to feed the Brahmins on the occasions. Those Brahmins who were the priests depended for their living on the pujas and other religious events. But those practices are no more observed. These days all arrangements are dependent on personal interest and convenience. The bond between the upper class and the common man is almost non-existent.

People of all classes and religions lived in the village. Everyone followed his own trade through generations. There was not such a wide gap between the upper and lower class as we have today. Irrespective of sect or religion younger ones used to address the elders as *Dada* (elder brother) or *Kaka* (uncle). When there was an age difference, the master's children used to address the washer-man, barber, cobbler and household servant as *Dada* or *Kaka*. A servant Najem was addressed as *Dada*. A woman belonging to the Jogi sect named Swarnadasi who worked as a maid was addressed as *Mashi* (aunt). We have observed this practice in our village Arkandi, but only in our childhood. The society had become infested with injustice, but Annadananda maintained the same courtesies that he had learned to practice in his young days. Annadananda loved the people of our society used to freely mix with men of all classes and castes in Arkandi. He felt united in mind and spirit with the people. During his working life he spent all his vacations in the village.

Sanandamoyee was married to Mahimchandra Sen of village Banibaha. They had two sons - Sharatchandra and another (name

unknown). There is not much information about the family but it seems none of them survived for long.

The sons of Padmalochan - Durgagati and Shyamacharan were young that time. After the death of Kalidas, Nabadurga had to take charge of the 4 young ones. She had only a small property. Some of her mother's relations successfully practised in *Ayurvedic* (herbal) medicines. Nabadurga did receive some education and had learnt the application ayurvedic medicines. She could read the pulse and was able to treat young patients. She used to store medicines with her and in the course of time she earned the respect of the villagers who used to help her with cash and kind. This way she managed to bring up the four children. There was no school in the vicinity making it very difficult to educate them. She managed to send Durgagati away to Jalpaiguri and Shyamacharan to Faridpur for schooling. In those days many households gave food and shelter free of charge to young students who had to leave their villages where there no school or colleges and had come to the town to get their education. Boys from the village Arkandi used to study thus in nearby towns like Faridpur, Kustia and sometimes Pabna. All of them had to travel by river in boats. Annadananda had been to as far away as Rangpur for his studies. There was one Chandi Sen practising law who was quite well-off and had given shelter to many students who stayed with him for their studies. Initially Annadananda stayed with him. The home of Chandi Sen became known as "*Boro Basha*" (the big house). Later Annadananda moved to the home of another lawyer Tarinicharan Sen. Tarinicharan was from the village Tetulia near Arkandi. His wife was very fond of Annadananda. Later her sister Khemankari was married to Shyamacharan. At that time there was prevalence of malaria disease in Rangpur. People used to refer to Rangpur as "*Jemput*" (abode of the ruler of the hell). Krishnadhan Ghose, the father of Shri Aurobindo, was the civil surgeon of Rangpur at that time. In order to combat malaria he had arranged to dig a large canal through the town for the drainage of water. The canal is still referred to as the "*K.D. Canal*".

Due to health problems Annadananda moved from Rangpur to Faridpur to continue his studies. Thereafter winning a scholarship, he enrolled at a rather late age, in High English School. After some double promotions he appeared and passed his Entrance examination while still young. He was quite proficient in mathematics and often used to help students of higher class on the subject. After his Entrance Annadananda enrolled in the engineering college in Calcutta, but had to give up on account of his poor eyesight. During his studies in Faridpur he was short of cash most of the time and had to work as a cook in the home where he stayed.

As mentioned earlier in those days educated and well-off men, particularly, those from the legal profession used to provide free boarding and lodging to school and college students in their own home to the best of their ability. Even as recent as 25 or 26 years ago, the famous legal practitioner Kishorimohan Chowdhury of Rajshahi used to provide boarding and lodging to 30 students in a separate home entirely at his own expense. Another Rajshahi legal practitioner Shri Jitendranath Bhadury provided free boarding and lodging to 12 school and college students in his home. And when a student who was in dire straits approached him for a berth, Jitendranath's mother Shrijukta Padmakamini Debi vacated her own room for the boy and moved herself out live in the *Shiv Mandir* (temple of Shiva). Those days are no more.

Due to lack of money Annadananda could not progress very far with his education and was forced to start work for a living. He did not earn very much. His sister Sanandamoyee was married to Mahimchandra Sen of village Banibaha which was close to Arkandi. Mahimchandra died early and his young widow moved to stay with her mother in Arkandi. She spent the rest of her life in her parents' home.

Durgagati was educated in a missionary school in Jalpaiguri up to senior class. Shyamacharan passed through various difficulties while he studied in different places. Both the brothers began to work in Jalpaiguri district. Durgagati was good in English language, had a

good job and earned well for some time. He was good in music and used to perform in musical events. He was also a good hunter and used to go hunting with British people. He lived happily hunting wild animals and birds and attending musical events. He did not work for very long as he became sick and returned to live in Arkandi. Even here he used to spend his time with music and sports. Shyamacharan worked in a government office in Jalpaiguri.

Annadananda too began his career in Alipurduar sub-divisional office of Jalpaiguri district as clerk at a young age. Durgagati got married to Monomohini Debi, the daughter of Kalichandra Roy of the village Arkandi. Shyamacharan got married to Khemankari Debi of the village Gourabdia. Annadananda got married to Nistarini Debi, the daughter of Brajalal Munshi of the village Jatrapur, Pabna district.

I have no idea for how long Annadananda worked as a clerk in Alipurduar - it may not have been more than 10 years. Within a short time after joining he familiarised himself with the working of all departments in his office. Besides attending to his own work he used to help other clerks with their task also. By learning the work in all departments he became eligible and was promoted to Head clerk superseding several others. In those days the sub-divisional officer used to be a British and often a person retired from the military service. There were often skirmishes with Bhutan. The army had to be sent to the border area to prevent raids. British officers from the army were not too familiar with the routine office work. Annadananda had to give assistance to sub-divisional officers in various tasks.

Annadananda had impressed the Jalpaiguri Commissioner and Divisional Commissioner by his performance. With the passage of time he made himself conversant with many of the tasks of the sub-division. The Divisional Commissioner was so pleased with the performance of Annadananda that he wanted to promote him to a higher position. At this time the post of the Manager of Falakata *khas mahal* in Alipurduar jurisdiction fell vacant and the Divisional Commissioner wanted to appoint Annadananda to this position. (*Khas mahal* is a land vested

with the government to be sold or given out on lease). The post was meant for a gazette rank officer. The rules did not permit a person from the rank of clerk to be promoted to the gazette rank. As Falakata was close to the Bhutan border there often used to be disturbance in the area. There were also problems and irregularities in the working of the khas mahal. The Divisional Commissioner Mr. Nolan wrote to the Bengal Government proposing appointment of Annadananda to the position of Manager of Falakata khas mahal. When the Government did not agree Nolan replied "I shall shake off all responsibility in the management of Western Duars if Annadananda is not placed in charge of the estate as manager". Eventually the Government agreed. Annadananda was promoted to the rank of Sub-deputy Collector and posted as Manager of the Falakata khas mahal. He was about 30 years old at this time.

While in Alipurduar his wife Nistarini died. They had a son who died earlier. Sometime later Annadananda was married again to Sukhadasundari, the daughter of Harachandra Dasgupta of village Beradanga which was close to Arkandi.

Travelling to Falakata was quite difficult. It was about 50 miles from Alipurduar. One had to travel by a horse driven carriage or cart pulled by a cow. A family accommodation was also difficult to find. For those interested in hunting, there were wild animals including tigers that sometimes used to invade the locality. There were no doctors or pharmacies. A Deputy Commissioner had once asked Annadananda if he had any problems living in Falakata. When Annadananda suggested that a doctor should be posted in Falakata, the Deputy Commissioner laughed and said "Well what can the doctor do? They know nothing. Keep a bottle of wine and a bottle of castor oil. This is all they have got".

In the khas mahal no proper records were kept of the collection of revenues the particulars of the lands. No land measurements were carried out or title deeds issued. These created a lot of difficulties and losses to the exchequer. After Annadananda came to Falakata he made

some changes in the methodology for collection of revenue and record keeping. He drafted some forms and got them approved by the Government.

During Annadananda's time, British hunters from many places used to often come to Falakata and spend some time in camps. At times a small detachment of soldiers would also come and camp there. Annadananda had a difficult time in arranging at short notice for their boarding and lodging. The hunting was of a different kind there. The *sahib* hunters were often not used to tiger hunting. (*Sahib* - a superior person originally the title was meant to be a British only). Elephants were employed from all sides to chase the tiger. It was arranged that the *sahib* would shoot the tiger when it was brought in front of him. Annadananda himself did not hunt or accompany the hunters. On one occasion, he was forced to accompany a hunting party. They had to cross a river through the hills to hunt on the other side. As usual a tiger was chased and brought in the presence of the *sahib*, but the tiger was so big and looked so ferocious that the hunter's hands shook as he raised his hands to shoot. The shot missed the tiger and it came to attack the elephant on which he was riding. The *sahib* and his wife screamed in fear. There was an expert *deshi* (local) hunter but he was not allowed to shoot before the *sahib*. After the *sahib* missed the shot, the *deshi* hunter shot the tiger twice and killed it. Annadananda was standing by on top of another elephant at a short distance near a large tree. In panic he climbed on the tree! He never went on a hunting party again.

Annadananda spent about 4 or 5 years in Falakata. At this time, he started a tea garden and had 1/4th share of it. The garden turned out to become one of the top-ranking tea gardens.

There was one khas mahal in Bogura district with its kachari (office) located in Khanjanpur. There were irregularities in the accounts of the khas mahal and more than Rs. 1 lakh (Rs. 100,000) was defalcated from its funds. The Board of Revenue posted Annadananda in Khanjanpur for a period of 3 months for investigation.



There was a *Nilkuthi* (indigo cultivating establishment) in Khanjanpur. Its owner Peter *Sahib* became a *zamindar* (a landowner of substantial means). When there was strong protest movement against the cultivation of indigo, the owner left everything and went back to his country. His property was vested by the Bengal Government and a khas mahal was created. A sub-deputy collector named Moulabi Abus Soban Chowdhury was the Manager of the khas mahal. He was a man of high birth and was rather lazy and lived luxuriously. The clerks working under him were cunning and dishonest. There was no proper accounting of collection of revenues. Taking advantage of the simple nature of the Moulabi and in the absence of proper rules and procedures, the men working under him defalcated large sums of money from the khas mahal fund. As the investigation began, the Moulabi gentleman was suspended. Annadananda completed his investigations and submitted his report to the Board of Revenue. The Board approved the report with the following remarks:

“The Board records its appreciation of the report submitted by Babu Annadananda Sen. The report shows sympathy for the Manager Moulabi Abus Soban Chowdhury in his troubles. In such circumstances, he might have criticized the Moulabi to bring out his own success into relief. But there is no such trace anywhere in the report though he never attempted to hide any truth”.

Following this, in the year 1885 Annadananda was transferred from Falakata to take over as Manager of the khas mahal in Khanjanpur. The *Nilkuthi* Sahib had a two storey home in Khanjanpur. The ground floor became the office of Falakata khas mahal and first floor was allocated to the Manager for his residence. Khanjanpur was located 2 miles from Jaipurhat railway station. There was train service from Calcutta to Jaipurhat. The river Padma had to be crossed by steamer.

At this time Shyamacharan suddenly died. His wife Khemankari, twin daughters Sarojini and Kumudini and young son Jyotishchandra were living in their Arkandi home. Durgagati fell ill, left his Government job and moved to Arkandi. His family was living in Arkandi. Annadananda's sister Sanandamoyee too lived here. Annadananda's

mother Nabadurga and wife Sukhadasundari visited and stayed in Falakata from time to time.

Annadananda had to shoulder the responsibilities for all the family members. He was forced to sell off valuable shares of the tea garden. He had his own horse and a small elephant which too were sold off. Shyamacharan's daughter Sarojini was married off to Anath Bandhu Sen of nearby village Tetulia. The other daughter Kumidini was married off to Gangacharan Roy of Arkandi village.

Durgagati's son Srishchandra passed his F.A. in 1889. Two or three years later he got married to Hiranmoyee Debi, the daughter of Shri Guruprasanna Munshi of Rajshahi.

Although Khanjanpur was not very well developed, it was a better place to live in than Falakata. Essential items were cheaper. There was a district board medical facility near Jaipurhat railway station and a good doctor in attendance. There was also a good ayurvedic doctor. Food items were cheap and in abundance. All kinds of crops, vegetables and fruits used to grow in the field. There were a number of small waterbodies breeding plenty of fish. There were 7 litchi trees bearing high quality litchis. The accommodation provided to Annadananda was free of rent.

Muslims were larger in number than Hindus. In addition there were Santhals, Buna, Mohall and other tribal people. There were no kindergartens or schools. Ox or cow driven carts were the only means of transport. Boats used to ply in the river during the monsoon periods only.

Durgagati's wife Manomohini died in Arkandi in the Bengali year 1300 (1894 AD). Her youngest son Tarapada was only one year old. A short while later Annadananda brought the entire family to Khanjanpur to live all together -. Durgagati, his elder son Srishchandra and daughter-in-law Hiranmoyee, daughter Kusumkumari, youngest son Tarapada, Shyamacharan's wife Khemankari and son Jyotischandra. Nearly everyone used to go to Arkandi during the Puja days. Sanandamoyee used to make all arrangements for the Puja. She also used to look after the landed properties. Another person name Madhab Thakur also lived

in the Arkandi home and was of some help. A servant named Mukunda who worked for Durgagati in Jalpaiguri accompanied him too and stayed in Arkandi for a long time. Mukunda used to tell stories of his master and of himself of various acts of bravery. Mukunda used to work in the army at one time. He accompanied Durgagati in his hunting expeditions.

Annadananda's first son Umapada was born in the month of Shravan 1298 (1892 AD) and Ramapada on 29 Kartik 1300 (14 November 1893), both in Khanjanpur.

The marriage of Durgagati's daughter Kusumkumari with Sureshcharan Sen of village Suapur (Dhaka district) took place in 1303 in Khanjanpur with a lot of pomp and gaiety. When the *bor-karla* (chief representative of the groom) wrote to Annadananda refusing to ride a "devil's carriage" (read ox-driven cart) to come from the railway station to the place of marriage, he wrote back saying he would send a Lord Indra's carriage (read -an elephant) to bring the *bor-karla*! The sad part of the story was the younger brother of the groom Satishcharan fell from the elephant's back and was badly injured!

For some years the all members of the family lived together in Khanjanpur peacefully and happily. Durgagati often held singing programme in main hall. He used play the sitar and sing songs composed by him. Raicharan Biswas was in accompaniment playing the *tabla* (a set of two drums played by hand). Raicharan's home was in Arkandi, he came with Durgagati and was living in Annadananda's home.

Then came the sad spell. There was a severe earthquake in north Bengal on the Muharram day in the month of Jaistha, year 1304. The two-story home collapsed. Durgagati, his 5-year old son Tarapada, and Kumudini's first child (the 3-year old son Shailen) were on the first floor. The rest were downstairs. Annadananda was at this time 6 miles away in Jamalganj. The staircase was broken and Durgagati was upstairs helplessly with Tarapada in his arms and holding on to Shailen. Nabadurga tried to climb to the first floor but got trapped up to her waist in the rubble. The building was in complete ruins.

When the rescuers came and cleared the rubble, they found Durgagati and Tarapada in his arms both dead. Shailen was still alive and rescued. The place and surroundings became red with the brick dust.

When Annadananda returned and saw Shrish he exclaimed “at least you are alive!” thinking that all the rest were dead. No one in this region had ever seen an earthquake of such a devastating scale. Most of the household items were destroyed. A new *pucca* (made of brick and mortar) structure was built. Separate structures were built for the *kachari* (office) and Manager’s residence. It took 3 years during which Annadananda and family had to live in temporary mud and straw huts.

It was probably in 1894 when Annadananda passed his departmental tests and a year later promoted to Deputy Magistrate.

The *Nilkuthi* owner was interested only in making money for himself. He did not care for the needs or grievances of the common people. Even after the establishment of the khas mahal there were some miscreants who used to cheat the common people in many ways. There was no a proper procedure or order in the working of the khas mahal. Most of the officials were corrupt. No proper records were maintained of the details of the land held by the tenants, collection of the revenues and outstanding taxes. Shortly after he joined Annadananda made a proposal to the Board of Revenue for carrying out measurement of all the lands under the khas mahal and preparing title deeds in the name of the tenants. At that time the process of taking measurements of the land and preparation of title deeds in accordance with the Bengal Tenancy Rights Act had not commenced in the district of Bogura, nor was it likely to do so in the near future. The Board agreed to the proposals of Annadananda and decided to carry out petty settlement of all the lands in khas mahal in accordance with the Bengal Tenancy Rights Act. A senior Deputy Magistrate was sent to Khanjanpur charged with this responsibility but he returned unsuccessful after some time. Then as recommended by Annadananda, a young sub-deputy collector Sorab S. Dey was engaged for the task. He was the son of Rev. Lalbehari Dey a renowned educationist and Principal of Baharampur Krishnanath

College. Annadananda felt that a young inexperienced but intelligent officer would heed to his advice and help Annadananda in the settlement work. After 2 years of work of taking land measurements and preparing title deeds, the title deed map and other papers were printed and distributed to the tenants. Annadananda helped with the settlement work in every way. He had taken leave for 3 months but this had to be forfeited. Sorab S. Dey in his final report was full of praise for Annadananda for his contribution. The Board of Revenue thanked Annadananda for this work.

The revenue from the khas mahal had nearly doubled as a result of the settlement. Further increase resulted from the allocation of the surplus lands. The accounting system also improved. At that time the tenants were not allowed to transfer the land to others. The zamindar had the power to take over any transferred land. Therefore the buyer had to pay a premium over and above the purchase price. As a result the tenant was unable to secure a fair price for the land. The tenants were also not allowed to fell the trees on its land without paying the price of the tree to the zamindar. Annadananda began giving permission to fell the trees without charging any fees if an application was made by the tenant on a plain paper. Only a small fee was charged when a land was to be transferred. When some officials from the office of the district magistrate brought the matter to the attention of the Board of Revenue pointing out how this was causing losses to the exchequer, the Board supported the actions taken by Annadananda. One of the members of the Board carried out an inquiry on the matter and stated "He is the *Ma Baap* (father and mother) to the tenant. Let him remain so". There are many dramas and novels written on the topic of zamindars and how they used to exploit their subjects. Annadananda tried his best to ensure that the tenants in his khas mahal jurisdiction did not have to face such exploitation. The Board of Revenue more or less supported Annadananda even when it resulted in some losses in revenue. The law has since been modified acknowledging the rights of the tenant. In case of disputes and litigations between the tenants the Manager used mediate and settle the matter amicably. He used to

admonish any miscreants and sometimes even beat them up! This was the way of the administration those days. Even in criminal cases brought up to his court were mutually settled in most cases.

Annadananda had carried out many works for developments in khas mahal. These include building roads, digging wells, distributing high grades of seeds to the farmer for cultivation, introducing new varieties of crop etc. He created a number of *haats* (large markets that operated only on certain days of the week). The Jamalganj *haat* was the most famous amongst them. In the zamindars haat the vendors had to pay a lot more toll. This was not the case in the khas mahal *haats*. As a result the zarnindar's *haat* had to be closed down and the khas mahal *haat* thrived. A railway station was built near the place. The then district magistrate wanted to name it after Annadananda, but he declined.

Annadananda's elder daughter Sumati was born on 15 Bhadra 1304 and the younger daughter Supriti on 18 Aghrayan 1307 (?). The third son Achchudananda was born on 28 Aghrayan 1309 and the youngest son Satchidananda on 11 Chaitra 1311. All of them were born in Khanjanpur.

After the year 1306, Sanandamoyee's health started deteriorating. After prolonged illness she died in Khanjanpur on 22 Shravan 1309. During these years she was under careful treatment by Dr. Ambikacharan Chakraborty of Jaipurhat. Sanandamoyee used to address Annadananda as 'brother dear'. There was deep affection between the brother and sister. She used to dote on Umapada, the eldest son of Annadananda. Sanandamoyee had a property in the village Hulin near her husband's village Banibaha. She gifted it to Umapada.

22 Chaitra 1309 Nabadurga the mother of Annadananda came to Calcutta to take holy dip in the Ganges. After the dip she felt unwell and died in the home of Dr. Hemchandra Sen who lived in the Jelepura (fishermen's quarters). At that time Annadananda was in Khanjanpur. He received a telegram to come to Calcutta. As he was preparing to leave he received the news that Nabadurga had expired. Before dying Nabadurga had felt her own pulse and said "I will not see Annadananda again". *Shraddha* (last rites) for Sanandamoyee and Nabadurga were performed in Khanjanpur.

After Nabadurga's death Shyamacharan's wife Khemankari took quite ill. After a time there was water accumulation in stomach. After treatment by the ayurvedic doctor Radhakanta Sarkar of Jaipurhat, she recovered completely. Radhakanta Sarkar was a very competent doctor. There was no resident doctor in Khanjanpur. With Annadananda's efforts, a free medical centre was established in the khas mahal in 1906. Dr. Kaliprasanna Ghose from village Gava of Barisal district came to Khanjanpur as its first doctor.

The Khanjanpur elementary school was in the course of time upgraded to a minor school status. Anathbandhu Sen the husband of Sarojini Debi was appointed as the headmaster. He used to live in Annadananda's home, Umapada passed his minor examinations in 1905 and Ramapada in 1907 from this school.

At this time the movement for independence was gathering force. The young men were coercing the shopkeepers in the markets and haats to stop the sale of salt, cloths and other items imported from England. After a few incidents like this, the police complained that Annadananda was not cooperating in preventing this. When the Chief Secretary of the Bengal Government asked Annadananda to explain, he admitted his inaction but said that these were small incidents and would end in natural course. The movement would intensify if resisted. The Chief Secretary accepted the explanation and said "I shall throw the file in the waste paper basket".

Srishchandra had studied up to B.A. class but could not pass. He was very good in English language. Annadananda made a lot of efforts to find a job for him. Annadananda's own sons were at that time studying in lower class. Those days it was a custom to educate and prepare boys for similar kind of government service as their fathers. Annadananda had even promised to the authorities that he would not request them for a government job for his own sons if Srishchandra was given a job. But that was not possible as Srishchandra was not a graduate. At the end he learnt short-hand writing and got a job in the head office of a French Silk Company in Baharampur. He started living there with his family in a rented home. Umapada went to Baharampur

in 1905 and Ramapada in 1907 to study in the collegiate school. After Umapada passed his I.A. from Baharampur College and Ramapada passed his matriculation from School, both of them came to Calcutta for further studies in 1911.

In 1908 Khemankari, the mother of Jyotishchandra died in Baharampur home and the Shraddha was performed there. Annadananda bore a large part of the Shraddha expenses. He also had to send money to Jyotishchandra from time to time.

In 1912-13 the silk industry in Baharampur had closed down. Srishchandra lost his job. With the help of P.C.Lyon, the Chief Secretary to the Lieutenant Governor of East Bengal and Assam, Annadananda managed get him a job as confidential clerk to Chittagong Commissioner.

After Jyotishchandra passed his B.A., Annadananda tried to get a job for him in the government service. Jyotishchandra was offered the post of a sub-register. He did not like the offer and instead started working as a school teacher. He got married in 1907 to Surabala, the daughter of Ambikacharan Sen who was an advocate in Tangail.

Annadananda secured a job for Gangacharan, the husband of Kumudini in the nearby zamindar's kachari in Badlagachi and arranged a place to stay there with family. However, Gangacharan was not able to keep his job for long. So at the end their family had to be maintained by Annadananda.

Kusumkumari's husband started a business in Jamalganj and settled there permanently. Anathbandhu began working as a school teacher in Khanjanpur. A home was made ready for Anathbandhu and his family moved to this home after Annadananda left Khanjanpur. Kumudini was living in Arkandi in her own home at that time .

Annadananda had engaged several Hindus and Muslims from Arkandi and the next village for various jobs in Khanjanpur. He also made arrangements for their permanent living in Khanjanpur. In June 1909 Annadananda's elder daughter Sumati was married off with a lot of pomp and gaiety to Taraprasanna Sen of Kashiani village. That year the farmers faced a lot of difficulty due to drought. The day the bridegroom reached Khanjanpur there came a heavy downpour. Later



on it became a common expression in Khanjanpur “when there is drought bring a bridegroom”!

Tarapasanna and Anathbandhu were cousins - their mothers were sisters. Anathbandhu was living with Annadananda in Khanjanpur. Sumati was only 12 years old when she got married and Anathbandhu became Sumati's *Bhasur* (a husband's elder brother or male cousin). Sumati had a big problem when she came on a visit to Khanjanpur. She had strict instructions from her parents-in-law not to talk to her *Bhasur* Anathbandhu (as was the custom). Sumati did not comply but in the beginning she used to cover her head with an umbrella as a mark of respect!

Dr Kaliprasanna Sen was an expert angler using fishing rod with wheel. It was quite a sight to watch him catching a big fish. At times it took an hour or more to play the fish till it got tired and then the fish could be brought up. Annadananda too became an addict. The two of them often angled together in different waterbodies. Sometimes Anathbandhu too would join. They used different types of hooks for different fishes like rohu, katla and others. The line materials were also different. The equipment was always kept ready. At times they used to go to faraway places in cow driven cart or by river boat returning home often very late. Sometimes everyone at home became quite worried. His darling daughter Supriti used to cry and no one could pacify her except Annadananda. Supriti cared very much for her father and used to say, “Baba, I get very much worried when you are late in returning home at night”. Sometimes Annadananda used to return late at night bringing a large fish caught by him. As the servants had gone to sleep Sukhadasundari had to fry the fish till late (to preserve the fish). While engaged in fishing Annadananda used to also run the affairs of the khas mahal at the same time. At times the subjects would come to him with their litigations and he would adjudicate them on the spot.

Before his retirement from service Annadananda had dug out and made nice pond in his Arkandi home and introduced some fish for breeding. As long he was in the village he continued with his old practice of fishing with the wheel. Anathbandhu was the headmaster

in M.E. school and lived in Annadananda's home. He was of a very calm and quite sort and a good and sincere teacher. Annadananda was very fond of him. Anathbandhu spent most of his time supervising the education of the boys, fishing and looking after vegetable gardening. He used to smoke the hookah. Annadananda knew of this but did not want to cause him any embarrassment, (it was a taboo to smoke in the presence of a senior). After he finished smoking his own hookah, Annadananda used to move away and Anathbandhu would then take his turn! At times Anathbandhu would inhale the smoke so deep that his eyes popped up much to the enjoyment of the boys watching. Sometimes he would go hunting with a gun but by the time he aimed his gun the birds would fly away!

There used to be a *Kalipuja* (a Puja of Goddess Kali) and a big fair in Jamalganj during the *Rampurnima* (a full moon occasion). The fair lasted about a month. Many shopkeepers from outside used to participate displaying their variety of wares. There were brisk sales. There used to be open air theatres, musical events and other kinds of entertainments. People used to buy new clothes and shoes for their children. There was a *dak bungalow* (a guest house mainly for the use by government officials on tour of duty) in the Jamalganj khas mahal. Annadananda used to go there with his family and spend a few days in the *dak bungalow* during the fair. There lived in Jamalganj a doctor by the name Durgacharan Sarkar. The children used to address him as *daktarkaka*. He used to love the children and give them presents.

In Khanjanpur every year during the month of Shravan a "*punyaha*" used to be held. It was an occasion used by the zamindars for extracting taxes from their subjects. The practice was followed in khas mahal also. Renowned performers used to come from Calcutta to stage open air theatres. The event would last 3 or 4 days. This was also a time when friends and relatives from other places came to visit Annadananda.

Litchi harvesting was one of the festivals held every year. It was a great occasion when the litchi began to ripen in all the seven 'trees. Relatives from Rangpur would often visit at this time. Litchis packed in baskets were sent by railway parcels to different places. Making

noise by gun fire or beating a tin canister and spreading a net over the trees were the methods of preventing monkeys from getting at the litchis during this period. Litchis were distributed amongst the kachari staff, subjects and others.

Often distant relatives or friends came to Khanjanpur to stay with Annadananda, sometimes for 2 or 3 months. Prominent among them were visitors from Arkandi like Annadacharan Gupta, Jyotishchandra Sen and his cousin Sharatchandra Sen, sons of Phuladacharan Roy from Rangpur and countless more.

A relative Shashibhusan Majumdar from Arkandi was a permanent resident at Annadananda's home in Khanjanpur. I think he used to write legal documents. Amritalal Dasgupta from Bogura had come to Khanjanpur to join government service and stayed with Annadananda for one year. Raicharan Biswas came from Arkandi accompanying Durgagati, the singer and cousin of Annadananda. He stayed in Annadananda's home with his son Lalit for several years even after the death of Durgagati. Ganeshchandra Sanyal, the Pandit moshai stayed with his family for a year in Annadananda's home.

Because he was so generous with his hospitality throughout his life Annadananda was not able to make any savings. After leaving Falakata and coming to Khanjanpur Annadananda had an occasion to go to Jalpaiguri to stand as witness in a court case. At that time the Chief Advocate of Jalpaiguri Tarinicharan Roy had promoted a tea gardening company. Tarinibabu was very fond of Annadananda and offered to sell some shares of the company to him. When Annadananda told him that he had no money, Tarinibabu issued some shares in his name and paid the amount of Rs. 500 from his own pocket. Later on Annadananda paid the money in installments over a long time. Its name was Atiabari Tea Company and it ranked amongst the first-class tea companies. Much later Annadananda's sons sold the shares for Rs. 45,000. While in Khanjanpur, Annadananda had purchased a small zamindari estate in the Dinajpur district. Advocate Shri Dwarik Roy of Dinajpur helped him to buy the property. It was sold for only Rs. 400 in an auction by the collectorate and registered in the name of Sukhadasundari the wife

off Annadananda. The yearly income from the zamindari was Rs. 400. After the partition Annadananda's sons sold it off. During his Khanjanpur days Annadananda had purchased some shares of Alipurduar Tea Company, Duars Union Tea Company and Rangpur Tea Association. These paid him dividends for a time. Later they were sold off by his sons for a good price.

Annadananda spent 22 years without break as Manager of Khanjanpur khas mahal. There were not many instances of high ranking government officials serving in one place such a long period without a transfer. There were no sub-divisions in the Bogura district. Many of the administrative functions had to be carried out from the Khanjanpur kachari like looking after railway 'B' class land and agricultural projects. There were no separate staffs appointed for the agriculture department. Census operations too were among the works that had to be carried out by the manager of the khas mahal. In those days the district magistrates were chosen most of the time from the ranks of junior British ICS officers. They had little knowledge on revenue matters. Every time a new district magistrate was appointed he tried his best to ensure that Annadananda was not transferred. They needed him very much for the revenue works.

Annadananda himself did not want to move out of Khanjanpur. He had complete freedom in his work. Most of his works were approved by the Board of Revenue. Annadananda did not want a transfer from Khanjanpur as he was reluctant to give up this freedom. He could easily have secured an extension of service by three years if he wanted to but this could result in a posting as in charge of a sub-division and Annadananda was not keen on it. Because of this he wanted to retire from service looking very much forward to going back to his own village in Arkandi.

Even after retirement Annadananda could have worked as a manager of 'court of wards' or as manager a large zamindari, but he had no inclination towards working again for a salary.

He retired in 1909 and left for Arkandi. He took a train to Pangsa and then a boat down the river Chandana. There was a severe storm

and several boats sank in the river. Annadananda had his entire family with him in the boat. With a great difficulty the boatmen managed to steer the boat against the storm for the next 20 miles to arrive safely in Arkandi. After getting into his home in the evening the storm intensified even more. The storm raged throughout that night. Next morning it was found that the well furnished outside meeting hall was in ruins. Many large trees fell down blocking all the roads.

Considerable amount of household effects had accumulated during the long stay in Khanjanpur and these were shifted to Arkandi beforehand in a large river boat. Some fodder for the cow was shipped by this boat. Umacharan, the domestic servant who was from the village Arkandi travelled in the same boat.

The disease malaria was quite widespread in Arkandi those days. In some homes there was no one living. Some of the homes were in ruins and covered with wild vegetation. The nerve centre of the village was the house of the Roybari (the home of the Roys) where a number of persons lived. Durga Puja was held in the Roybari every year and those living away used to come and spend some time in their home on the occasion. Tarinicharan Roy of Roybari was a famous doctor. Such high caliber doctors were rare in the villages. At times Tarinicharan was requested to visit nearby towns to treat a patient. He was also a very good surgeon. Annadananda used to address Tarinicharan as 'Monikaka'. He was 5 or 6 years older than Annadananda.

Annadananda had a close friend of about the same age named Rameshchandra Sen. He worked as head clerk in the Faridpur Collectorate, had settled down in Arkandi after his retirement. Rameshchandra's younger brother Hemchandra Sen who used to work in Jalpaiguri had already settled in Arkandi after taking an early retirement. Hemchandra also became a friend of Annadananda. Another person, Baradaprasanna Roy of Roybari who was in government service in Pabna, had retired beforehand and settled in Arkandi. He was senior to Annadananda and the latter used to respect Baradaprasanna, address him as "Barada-khuro". Prior to his taking pension and retirement Baradaprasanna had arranged digging and constructing a pond (a water

body) and adding a nice room to his home in Arkandi. All rooms were made of mud and straw and these were in a poor condition due to lack of maintenance. In those days the river Chandana used to be navigable for only 4 or 5 months in a year. At other times one had to travel either by a cow-drawn cart or palanquin. The 12 mile stretch was not always in a good condition.

There were no schools in the village at the time. Despite all its shortcomings Annadananda had decided to reside permanently in the village. His elder son Umapada had passed his Entrance examination and was studying for his I.A. course. Youngest son Satchidananda was only 5 years old. Youngest daughter Supriti was still unmarried. As there was no school in Arkandi it became problematic to continue the education of the young children. Umapada and Ramapada were staying with Shrishchandra in Baharampur for their studies. They too were suffering from malaria. In Arkandi malaria was raging.

After a while in Arkandi, Annadananda began to replace the large room in the north made of straw by a brick-walled room. Another large brick-walled room was built in the middle and one for the family deity with tinned roof. "Gobindo Roy" the family deity was shared with five other relatives of the family tree. Annadananda dedicated the room as permanent abode of Gobindo Roy. The large panda I for puja was renovated and the straw roof was replaced with tin sheets. The area of his property was 25 *bighas* (about 8 acres) including the built up area and the water tank. There were mango, litchi, jackfruit, batabi lebu (a large citrus fruit), coconut and other trees in the property. More coconut and betel nut trees were planted which yielded a good income. Jackfruit too was a good source of income. Cotton seeds in about one bigha of land near the water tank. It yielded very good quality cotton which again turned out quite profitable. The Faridpur District Magistrate had come to see the cotton plants. A lot of fish was bred in the tank and Annadananda himself use to catch the fish using a wheeled tackle. There were plenty of vegetables and milk produced at home. Annadananda kept himself occupied looking after these. He had two more mango plantations nearby, that yielded large quantity of mangoes.

Juice extracted from date palm trees and jaggery made from it were delicious.

Dr. Jogeshchandra Sen, a cousin who graduated from the Calcutta Medical College and worked for some time in Nepal, was later carrying out private practice in Rangpur. He suffered an attack of paralysis that affected the entire lower part of his body. Extensive medical treatment did not yield any result. It was probably in 1910 he returned with his family to his home in Arkandi. His legs had dried up and he was not able to walk. When in Rangpur, Jogeshchandra was involved with the Revolutionary Party. He had generously helped the needy with money. Many boys and young men from educated families in Rangpur used to respect him as their guru. Some of them from Rangpur used to take turn and come to Arkandi to stay and look after him. Boys from the village used to massage his legs, cleaned the bedpan and performed other tasks. Jogeshchandra knew Sanskrit and was an expert in many other subjects. The boys in the village used to hold discussion, meetings with him in the chair. Achchudananda and Satchidananda began studying under him. Jogeshchandra used to respect Annadananda as his elder brother. When in Rangpur he often visited Khanjanpur. Annadananda used to help him with finance when Jogeshchandra was studying in the Calcutta Medical College.

Annadananda was a bosom friend of Dr. Umeshchandra Sen, who had retired from government service and later worked as doctor in the palace of Tajhat in Mahinganj of Rangpur district. Thereafter he moved to Kashi with his wife and lived there permanently. At the request of Annadananda he arranged to dig out and make a nice water tank in his village Arkandi. Later he built a Middle English school in Arkandi dedicated in the memory of his father Madhusudhan Sen. Kumudbandhu Roy played an important role in it.

He (Kumudbandhu) was unmarried and spent his life in serving the people of the village. Even after the partition of the country he stayed back for 13 or 14 years in Arkandi. There were many people who

owned homes and properties but lived away from Arkandi and he used to look after their assets. It was his efforts that brought about improvements in the Roybari library. A centre was established in Arkandi called "Antapur Stri Shiksha Samiti for women's education and examination for the issue of certificate. Annadananda was its President and his daughter Supriti was one its students. Kumudbandhu Roy was teacher. There were no schools for girls at that time. Many girls studied here and were issued with certificates.

The village of Arkandi was very progressive in women's education and equally against Hindu fundamentalism. Some Hindus in the village converted to Bramho religion. The well known poet and historian Bioychandra Majumdar from the nearby village Khalkuka had converted to Bramho religion. Annadananda's friend Rameshchandra wanted to convert to Christian religion but was dissuaded by his astute wife. Dr. Tarinicharan and Dr. Jogeshchandra never liked or supported religious fundamentalism. Annadananda never practised untouchability and used to accept food or drinking water from any person. He hated fundamentalist practice but was a devout Hindu to his core. He used to deeply believe in pujas and rituals and performed Kali puja in his home regularly.

Annadananda's daughter Supriti was married off in June 1913 to Baradaprasanna the son of Guruprasanna Munshi of Kalihatiri. Baradaprasanna was the brother of Hiranmayee the wife of Shrishchandra. They were the permanent residents of Rajshahi and 4 or 5 years after settling in Arkandi, Annadananda became the President of the village *Panchayet* (local municipal council). He had accepted the position at the request of Goalanda sub-divisional office. He was not very keen on taking the responsibility but agreed in order to avoid some undesirable person taking over this post and doing more harm than good for the village. He gave up the position probably a year later.

Arkandi post office was located in the *kachari* of Motilal Bagchi in village Betanga. There were irregularities in the working of the post



office and because of this efforts were made to shift the post office to the village Arkandi. Moti Bagchi wanted to retain the post office in his *kachari*. Motilal was the zamindar and had some muscle men in his team who used to open and read the mails. When the postal superintendent came to carry out an investigation, Annadananda told him everything. Moti Bagchi then filed a defamation suit against him in the Goalanda sub-division court. Annadananda pleaded that whatever he had said was the truth and was determined to reveal all the facts at the trial. Moti Bagchi had appointed the renowned barrister IN. Roy of Calcutta High Court to cross-examine Annadananda. But Moti Bagchi then dropped the case and the post office was moved to Arkandi. While he was Panchayet President and even later Annadananda used to enquire into criminal cases in his area and in most cases resolved the issue.

Annadananda never wanted to leave Arkandi and settle somewhere else but was forced to move out of Arkandi for a period owing to the prevalence of malaria in his village. Especially Umapada, Ramapada and Achchudananda were suffering from the disease. Their health was deteriorating. Whenever Umapada and Ramapada came from Calcutta for holidays they had malarial attack.

In 1914 Annadananda rented a home in Purulia and moved there with his family. The home was situated at the fringe of the town surrounded by open land. Nirupama, the wife of Sharatchandra Sen, a relative of Annadananda lived in another home close by. Umapada and Ramapada sometimes used to come from Calcutta and stay with her during vacations. Sharatchandra's brother Dr. Jogeshchandra Sen also came to Purulia and stayed with Nirupama. Achchudananda and Satchidananda used to study under Jogeshchandra when in Purulia. Sumati and Supriti too came to Purulia to spend some time together with the family. Umapada and Ramapada were preparing for their university examinations. All of them benefited health wise in Purulia

After spending a year in Purulia, Annadananda returned with his family back to Arkandi. When in Purulia, Annadananda had to visit

Bogura on one occasion to stand witness in a court case. On the same day the Padma river bridge was inaugurated and opened to public. He crossed the river by this bridge on the opening day.

In October 1915 Umapada got married to Surama Debi the daughter of Shri Kedar Nath Sen of the village Shakrail in Mymensingh district. Annadananda went on the occasion to Shakrail and returned to Arkandi with Surama.

Shrishchandra was working in Chittagong and living there with his family since 1913. Umapada passed his B.A. with honours in philosophy in 1913 and Annadananda tried to get him the job of a Deputy Magistrate. Lyon *sahib* who was the Chief Secretary to the Bengal Government at the time offered Umapada the post of a Sub-Deputy Collector but he declined to accept.

In 1917 Ramapada got married to Renu Debi the daughter of Shri Jyotishchandra Dasgupta of the village Suapur in Dhaka district. All ceremonies from the groom's side were conducted in Arkandi.

The village of Beradanga was only 6 miles away from Arkandi. Sukhadasundari's only brother Satishchandra Dasgupta used to live there with his family. He had studied in Rangpur in his young days. Satishchandra was very fond of Annadananda and often visited him in Khanjanpur. After Annadananda moved to Arkandi he used to often visit him, stay a few days and go out fishing together. Annadananda's sons too visited him in Beradanga during puja festivities.

Kumudini's second daughter Suprava was married to Hirendranath Dasgupta of village Jatrapur in Pabna district in 1919. Annadananda paid all expenses for the wedding. Kumudini was financially not well off and depended very much on the support from her uncle Annadananda.

The police were increasingly harassing the students living in hostels in Calcutta. The college students were arrested on the slightest pretext. For this reason Annadananda rented a private home for his sons in Calcutta. Umapada and Ramapada were studying law. Achchudananda

and Satchidananda studied in Keshab Academy. Baradaprasanna who too studied law stayed in the same place. The home was in a Muslim locality and often there were disturbances.

In 1918 Umapada moved to join the Khanjanpur High School as headmaster. Achchudananda and Satchidananda too stayed with him in Khanjanpur to continue studies. Two years later Umapada moved to Boqura to practice law.

In 1920 a home was rented in Bogura in area known as Jaleswaritala. Ramapada also moved and stayed there to begin his practice in law in Bogura court. Both Umapada and Ramapada were earlier suffering from malaria. Bogura was free of malaria at that time. Achchudananda and Satchidananda enrolled in the Coronation School and eventually passed their matriculation examinations. Bogura became the family centre. In 1923 Annadananda quit Arkandi and began to stay with his sons in Bogura.

After retirement from service many people face health problems and some may even die early. This is because after superannuation there are not many job opportunities and this affects the mind and body. In the 13 years that Annadananda had spent in Arkandi after retirement he kept himself busy with any work that he liked. He was in good health, alert and able to work. He was busy with work in Arkandi most of the time. People at large often approached him with their problems and Annadananda tried his best to help them. He used to enjoy helping others.

Life in Bogura was not the same. Annadananda had some acquaintances and many in Bogura knew him. He had no difficulty in settling down in Bogura in the new surroundings. He used to meet his old friends frequently. It was nice for him to stay together with all his family. This was not the case in Arkandi as his sons lived away.

Annadananda retired from his government service in Khanjanpur in the Bogura district in 1909 and 11 years later two of his sons began their legal practice in Bogura. The name and goodwill that Annadananda

left behind in Bogura 11 years ago still existed and this proved a great advantage in their profession. Right from start Umapada's legal practice flourished, he had many clients coming over from the khas mahal and other nearby places.

Apart from getting clients the sons also got expert professional advice, some of the leading lawyers when they came to know the family background of the sons. Amritalal Dasgupta worked as clerk under Annadananda when he was working in the khas mahal. Amritalal's son Sureshchandra was a very renowned lawyer in Bogura but gave up his practice permanently and joined the non-cooperation movement spearheaded by Gandhi in 1920. He arranged for his *muhuri* (lawyer's clerk) to work for Umapada and also handed over many valuable law books to Umapada. Most of the lawyers of Bogura bar had stopped their practice for two months during Gandhi's non-cooperation movement. When Umapada and Ramapada asked their father for advice he told to stop their practice too. Amritalal was still alive and helped them in many ways. Three others who had worked under Annadananda were now working as clerks in Bogura collectorate and they too helped in many ways.

The best medical practitioner in Bogura Dr. Jogeshchandra Chowdhury was a family physician to Annadananda. He never charged any fees. His father was the manager of another estate near Khanjanpur and received many helps from Annadananda.

In 1924 Jyotishchandra Sen's first daughter Sabitri was married off to Pramodechandra Sen of village Dasora in Manikganj sub-division of Dhaka district. Annadananda bore all expenses for the marriage.

Annadananda decided to build a home in Bogura and in 1925 bought a plot of land in a good locality in the central part of the town. The home was completed in 1926. Somewhat earlier, Annadananda's third son Achchudananda fell ill and died at a young age of 23. Achchudananda was in poor health even earlier due to an attack of kala azar. No doubt Annadananda was devastated inside but he did not let it show.

It was a sad family that moved in the new home. Even at this time Annadananda helped anyone with studies if requested. Many people sought his help in drafting application for a job. Even as late as 4 or 5 days before his death he helped the retired superintendent of Technical School Haraprasad Chowdhury to draft an application for a one-time lump sum payment in lieu of pension. Annadananda was about 76 years old at this time.

In June 1928 all the daughters and sons of Annadananda were together in the Bogura home. Daughters Sumati came from Calcutta and Supriti from Rajshahi. Satchidananda who was studying in the Jadavpur Engineering College after passing his B.Sc was home in summer vacation. One day during this time he suddenly told his daughter “now that all of you are all together it may be a good time for me to leave”. Two days later in the morning he was in good health and went through his normal morning routine. As he was entering the room thereafter he suddenly lost his balance but managed to hold on to the door. Sumati was nearby and he lied down and rested his head on Sumati’s lap. He was fed tea by a spoon. Slowly his words became garbled and then he became unconscious and died after 48 hours. Doctors who came and attended said Annadananda had suffered an epileptic attack.

Sahadeb, an old servant who had left him a year ago and gone to Rajshahi to start a business, came to visit Annadananda in the first evening after he became ill. He had brought with him one container full of good quality jaggery made of cane juice and two containers full of sweetmeats. He explained his sudden appearance saying “I dreamt that the master was ill so I brought some of his favourite sweets”. Annadananda was of course in no position to taste them. Anathbandhu too came down suddenly from Khanjanpur. Annadananda breathed his last in the presence of his family members in the early morning of 18 June 1928 (3 Ashar 1335 in Bengali calendar).

\* \* \*

Annadananda had composed a few poems, ex-tempore but did not write them down. Sumati and Supriti remembered some of them which are reproduced below

Fish, Pan (beetle leaf), Bananas  
Rupon was told

Rupon went to the market  
Umacharan was depressed

The cow returned to its shed  
The shed was locked

All tasks ended  
Umacharan went home

The fish came from the market  
Sumati took the knife (to cut the fish)

Ma went to cook  
Gona started to cry

Cooking and serving done  
Saba was called

Brought water in a pitcher  
Added khaer in it

Quickly the rascal Rupon  
Carried the hookah

Gani went to mash the pan (beetle leaf)  
With khaer and lime  
While smoking the hookah  
Baba went to sleep

Said Supriti Debi  
Pleadingly

The art of writing poetry  
Is learnt this way

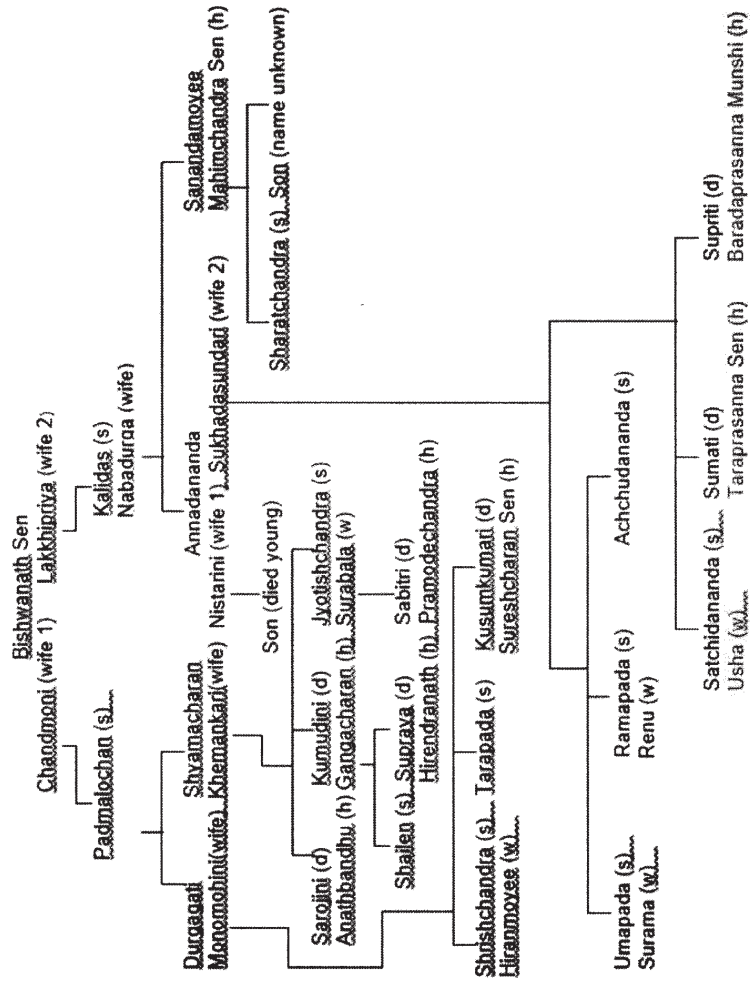
\* \* \*

The sun rose in the sky the flowers blossomed  
The plants and animals began celebrating  
Over the mountain or in middle of the ocean  
Spread the light of the kind and almighty God  
At this time one is not a human being  
If his heart and mind is not filled with peace and happiness

With silvery head and most beautiful expanse  
Under the pair of eyes of Lord Shiva in an ascetic world  
On the feet ever decorated with lotus full of nectar  
Source of all kindness all powerful to overcome death  
Kind to those who worship He embodies the light of welfare to all  
He the lord of the world will deliver you from sins of hell

*(Difficult to make a more sensible translation of the poems)*

**Genealogy**





*Contributions to Oriental Herpetology I.—The Lizards of the Andamans, with the Description of a new Gecko and a note on the Reproduced Tail in Ptychozoon homalocephalum.*—By NELSON ANNANDAIE, B.A., Deputy Superintendent of the Indian Museum.

In a recent paper on the distribution of the Indian vertebrates Blanford (1) says regarding the Andamans and Nicobars, "These islands are included because they are under the Government of British India, but they are of small importance zoologically." A collection of lizards from Narcondam, lately presented to the Indian Museum by Major A. R. Anderson, I.M.S., has led me to doubt whether this summary dismissal by so catholic and liberal an authority does not perhaps unduly minimize the zoological importance of the Andamans, however true it may be of the Nicobars, the faunistic separation of which from the neighbouring archipelago he fully recognizes. The Indian Museum is rich in material for a study of the Andaman fauna, and it has seemed worth while to undertake an analysis of this one sub-order, even though I have few facts that are absolutely new to put on record and only one new form to describe.

The following list, probably still far from complete, embodies what I have been able to discover as to the species of lizards known from the Andamans or represented in our collection. I understand that Major Anderson is about to publish an account of the fauna of these islands and am much indebted to his generosity in permitting me to make use not only of his collection but also of his observations on the distribution of *Calotes versicolor* in the archipelago. Those species in the list which are also known from the Nicobars have their names distinguished by a star.

#### LIZARDS KNOWN FROM THE ANDAMANS.

##### GECKONIDÆ.

*Gymnodactylus rubidus* (Blyth); *Gonatodes andersonii* nov.; *Hemidactylus frenatus*\* (Schleg.); *Gehyra mutilata*\* (Wiegman.); *Lepidodactylus lugubris* (D. & B.); *Gecko verticillatus* Laur.; *Gecko stentor*\* (Cant.); *Ptychozoon homalocephalum*<sup>1</sup>\* (Crev.)?; *Phelsuma andamanense*, Blyth.

<sup>1</sup> I am not altogether satisfied with the evidence on which this species is included. A specimen which I thought to be from the Andamans (*Ann. Mag. N. H.* (vii) xv, 1905, p. 31) appears to have been labelled wrongly. (But see Theobald, *Cat. Rept. Brit. Ind.*, p. 73.)

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AGAMIDÆ.

*Gonyocephalus subcristatus*\* (Blyth); *Calotes versicolor* (Daud.); *C. andamanensis*, Blgr.<sup>1</sup>; *C. mystaceus*,\* D. & B.

VARANIDÆ.

*Varanus salvator*\* (Luar.)

SCINCIDÆ.

*Mabuia multifasciata*\* (Kuhl); *M. tytleri*, Blgr.; *Lygosoma maculatum* (Blyth); *L. olivaceum*\* (Gray); *L. macrotympanum* (Stol.).

The Museum possesses a number of specimens of a Skink the exact position of which I am not yet prepared to state. They are closely allied to, if not identical with, *L. maculatum* (Blyth), but differ from the descriptions of this species in proportions. Possibly they may be new; but as I have not yet worked through the Skinks in the Museum collection, I prefer not to express an opinion at present. The specimens were collected by Major Anderson on Narcondam.

ANALYSIS OF THE LACERTILIAN FAUNA OF THE ANDAMANS.

*Gymnodactylus rubidus* is a form peculiar to the Andamans. It has close allies in *G. marmoratus* of the Malay Peninsula and Sumatra (possibly occurring also in Tenasserim) and *G. khasiensis* of Assam. *Gonatodes andersonii* is closely related to *G. kandianus* of Ceylon, South India, Preparis Island (which lies between the Andamans and the coast of Burma to the north) and Engano,\* an island off south-west Sumatra. Its exact relationship to this form is discussed below. Although it is difficult to split up the genus *Gonatodes* into definite sections, *G. kandianus* and *G. andersonii* may be said to belong to its Malabar, as distinct from its Malayan, division. In South India and Ceylon there are a number of species which have their headquarters within the Malabar Province of recent zoologists (chiefly on the hills of the east coast on the mainland) but extend into places not included therein. In the Malay Peninsula two species, *G. affinis* and *G. kendallii*, occur, the former of which possibly extends northwards into Tenasserim. On the whole they are distinguished from the Malabar species by their larger size, more brilliant coloration (in some cases), the greater degree of specialisation of their dorsal scales (in some cases), and above all by the absence of femoral or præanal pores in the male. The genus extends eastwards into the Malay Archipelago, is represented by a number of species in Tropical America, and by at least one in East Africa.<sup>2</sup>

<sup>1</sup> *Ann. Mag. N. H.* (vi.) viii., 1891, pp. 288, 289.

<sup>2</sup> Boulenger, *Ann. Mag. N. H.* (6) xvi., 1895, p. 173; and Tournier, *Zool. Jahrb. Syst.* xiii., 1900, p. 534.

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*Gehyra mutilata*, *Hemidactylus frenatus* and *Gecko verticillatus* are house-lizards and have a wide adventitious range on coasts and islands, being easily carried with merchandize or personal baggage. On the mainland of Asia their range extends northwards and westwards from the Malay Archipelago, through Malaya and Burma, to the north-eastern districts of India proper. This range they share with many other animals. Of the three, *G. verticillatus* (which is only a house-lizard in some districts) is most restricted. Probably it does not occur in the southern part of the Malay Peninsula, though abundant (not as a house-lizard) in the northern, and the few specimens taken in Singapore would seem to have been introduced from Bangkok (where it occurs in almost every inhabited building) or Java. *Gecko stentor*, on the other hand, is usually a jungle species; in the dense woods of northern Malaya its peculiar cry is heard perpetually, though the lizard is seen but seldom. In Selangor and elsewhere, however, it has been known to take up its abode in houses. Its retiring habits render it somewhat rare in collections, and it is not known to occur west of Chittagong. *Lepidodactylus lugubris*, regarding the habits of which little or nothing is known<sup>1</sup>, has a very wide insular distribution in the Indian and Pacific Oceans and occurs sparingly in Malaya and Burma.

*Phelsuma andamanensis* is probably the most interesting of the Andaman lizards. Its allies are found not in the Malayan islands or on the mainland of Asia, nor even on the mainland of Africa, but in Mauritius, the Seyshelles, Réunion and Madagascar. The number of cases in which the names of authors of species are enclosed in brackets in the tables which accompany this paper shows how little reliance can often be placed on the generic distinctions of herpetologists; but *Phelsuma* would appear to be a natural genus, in which the species are closely related. It would not be difficult to confuse an example of the Andaman species in which the colours had faded with one of *P. cepedianum* from Mauritius, though the specific differences are much greater than those between *Gymnodactylus rubidus*<sup>2</sup> and *G. marmoratus*.<sup>2</sup>

Both *P. andamanense* and *G. rubidus* (also *G. marmoratus*) are arboreal. Probably they never enter houses.

In considering the fauna of any tropical district the Geckos have a peculiar interest. Their structure (especially that of the vertebral column, on which great stress must be laid) proves them extremely ancient, and their genera (except in a few cases, such as the *marmoratus* section of *Gymnodactylus* and the Malabar division of *Gonatodes*) lack the plasticity of some families. I have compiled lists

<sup>1</sup> That is in Asia. Schneer has a note on its habits in the Pacific (*Z. Natur.* Stuttgart, 1901) which I have not seen.

<sup>2</sup> These two forms were once placed in separate genera.

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of the Geckos of Burma and Sumatra for comparison with that of the Andaman representatives of the family. Boulenger (3), as recently as last year, has published a list of the reptiles of the Malay Peninsula, and I need only say here that the Geckos, with a few exceptions, are the same as those of Burma. For information regarding the Sumatran species I am indebted chiefly to Werner's (5) recent memoir, and regarding the Burmese to Boulenger's volume (2) in the "Fauna of India" series and the same author's account (4) of Fea's collection, now in the Genoa Museum. Two species included have been described by myself (6) quite recently.

GECKOS OF BURMA AND SUMATRA.

Name of Species.	Burma.	Sumatra.
1 <i>Gymnodactylus pulchellus</i> <sup>1</sup> (Gray) §	× (Lower Burma)	—
2 " <i>variegatus</i> (Blyth)	× (Lower Burma)	—
3 " <i>peguensis</i> , Blgr. §	× (Lower Burma)	—
4 " <i>fez</i> , Blgr.	× (Lower Burma)	? (Sinkip Island)
5 " <i>lateralis</i> , Wern.	—	×
6 " <i>marmoratus</i> (Kuhl) §	—	×
7 <i>Gonatodes kandianus</i> , (Kelaart.)	? (Preparis)	? (Engano)
8 <i>Phyllodactylus burmanicus</i> , Annand.	× (Lower Burma)	—
9 <i>Hemidactylus frenatus</i> * (Schleg) §	×	×
10 " <i>brookii</i> , Gray §	×	—
11 " <i>subtrioides</i> , Annand.	× (Upper Burma)	—
12 " <i>leschenaultii</i> , D. & B §	?	—
13 " <i>flaviviridis</i> , Rupp. §	×	—
14 " <i>bowringii</i> (Gray)	×	—
15 " <i>garnotii</i> , D. & B. §	×	×
16 " <i>platyurus</i> (Schneid.) §	×	—
17 <i>Gehyra mutilata</i> * (Wiegman) §	×	—
18 <i>Spathoscalabotes mutilatus</i> , D. & B.	—	×
19 <i>Lepidodactylus lugubris</i> * (D. & B.) §	×	—
20 " <i>ceylonensis</i> , Blgr. §	×	? (Engano)
21 <i>Gecko verticillatus</i> Laur. * §	×	×
22 " <i>stentor</i> (Cant.) * §	×	×
23 " <i>monarchus</i> , Schleg. §	—	×
24 <i>Ptychozoon homalocephalum</i> * (Crev.) §	× (Lower Burma)	×

In the above list a × denotes the occurrence of a species, a — that it has not been recorded. The names of those species known from the Andamans are distinguished by a \*, of those known from the Malay Peninsula by a §. The Geckos of Sumatra are still very imperfectly known, while the discovery of fresh species both in Upper and Lower Burma is probable.

Of the Geckos common to the Andamans and Burma or Sumatra all but *Ptychozoon homalocephalum*, *Gecko stentor* (which is sometimes found in houses) and *Lepidodactylus lugubris* (whose insular distribution

<sup>1</sup> We have in the Museum specimen from Lower Burma of an allied species not yet described.

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would suggest that it too may be carried from island to island) are house-lizards, and as such of no importance in considering questions of geographical distribution. They may very well have been introduced in the nineteenth century. As regards *P. homalocéphalum*, a curious fact in its life history may have had an influence on its dispersal; I mean the long period spent in the egg. An observation by F. H. Bauer (quoted by Gadow in *Amphibia and Reptiles*, p. 512) shows that this period may last for five months, and from eggs which I have examined in the Malay Peninsula I am prepared to conclude that this case was normal. It is obvious that an egg with a hard shell, to some extent impermeable to liquids, can endure conditions which would be fatal to a delicate young lizard. Boats have been carried out from the coast of Malaya to the Andamans in very much less than five weeks, and logs of wood must frequently come by the same route. *P. homalocéphalum* lays but two eggs at a time; they adhere to leaves and tree-trunks. It is essentially a jungle species, but Flower has taken a specimen of the closely allied *P. horsfieldii* on a wooden post in the Botanical Gardens at Penang (*P. Z. S.* 1896, p. 868), showing that it may desert the jungle occasionally for human erections in the immediate neighbourhood.

Thus, of the nine Geckos recorded from the Andamans, the presence of five, possibly six, can be accounted for without assuming that they have been in the islands for any long period. The remaining three are peculiar to the archipelago (including Narcondam). None of these have been recorded from the Nicobars; but one is closely related to forms on the nearest mainland, a second has Malabar affinities, while the third exhibits a Madagascan facies.

As regards *Gonatodes andersonii*, any argument derived from its relationship to *G. kandianus* has its weak point; for *G. kandianus* is, at any rate in some places, a house-lizard<sup>1</sup>, and though it probably originated in the mountains of Ceylon or S. India, it occurs also in the plains; it may therefore, have been introduced by man into the Andamans. In any case it must be regarded as the ancestor of *G. andersonii*, which is merely an offshoot from it: whether we look upon the two forms as specifically distinct depends entirely on the answer we are prepared to give to the question, "What is a species?" I have given the Andaman form a name because it is convenient that things should have names, and because the lizard can be distinguished by characters which appear to be constant; but I should doubt whether it is a "physiological" species. Poulton (7) in one of the latest general contributions to the subject of specific characters, regards it as impossible, from a scientific

<sup>1</sup> It is worthy of note that the distribution of this species is much wider than that of its allies.

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standpoint, to determine a species from a mere examination of specimens. Undoubtedly he is right. Without a study of bionomics it would be impossible to group together the seasonal forms of certain butterflies he instances, or to draw the line between closely related local races of many animals. But in a museum—and too often the naturalist exists for the museum, not the museum for the naturalist—any system of arrangement is impossible, unless names are given to specimens. Anyone who would have the courage, the skill, and the patience (and would live long enough), to classify the whole animal kingdom according to some system of numbers and letters, which could be recorded as in a library catalogue, would confer an enormous boon on scientific zoology. The tendency at present among systematists is to search for differences rather than relationships, and very little is being done in tropical countries to find out what these differences mean. No investigations are being made, so far as I know, to discover whether the members of the fauna of any given island or group of islands of limited extent are undergoing modification in any one direction. That this is probably the case even in Northern Europe is shown in a recent paper by Eagle Clarke (8), who points out that in the Farces animals as distinct from one another as the wren, the starling and the house mouse (*Mus. musculus*) have all developed in the direction of increase of bulk and coarseness of the feet. The work of Darwin and of Wallace on island life is of course classical, and as such liable to be ignored. When they wrote and laboured on the subject the extraordinary elaboration of modern zoology had scarcely begun, and it was less easy to lose sight of philosophical principles. We now know a considerable part of what is to be known about the "species" of the larger Indian vertebrates, using the term "species" in the loose way to which the museum zoologist is condemned; we do not know, even in a few cases, why one animal survives<sup>1</sup> under any given change of environment while another, apparently just as fitted for survival and quite as variable perishes. It is not likely that we shall soon gain any such knowledge, at any rate in the tropics; for such problems can only be studied in the field. Collectors have rarely time to observe, and all that can be done in a Museum is to classify and anatomize dead and imperfectly preserved material.

The object of this digression from the subject strictly in hand has been to illustrate the position of the Andaman *Gonatodes* as a distinct form, and at the same time to point out that even where a fauna has

<sup>1</sup> For example, why is it that certain species of the Indian tank molluscs succumb almost at once if kept in an aquarium without ventilation, while others from the same tank live for a considerable period under such conditions?

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been completely "worked out," the greater and the more important part of its zoology has still to be investigated.

To return to the Andaman lizards. Of the Agamids, one, *Calotes andamanensis*<sup>1</sup>, is known from a single specimen in the Copenhagen Museum; it is allied to *C. liolepis* of Ceylon. Another is *C. mystaceus*,<sup>2</sup> which has a somewhat restricted range on the mainland of S.E. Asia and is common about Mandalay.<sup>3</sup> Major Anderson tells me that, in the Andamans, *C. versicolor* is found only in the Cocos group, not south of Table Island. It is essentially a mainland form and does not, as a general rule, penetrate into primæval jungle. In the Siamese Malay States it is only to be met with in cultivated land or secondary jungle and I believe that this is also true of India. It generally lays its eggs at the base of bushes in hedges or plantations. According to Prain (11), there are several cultivated plants which have run wild in the Cocos, and if these were brought from the mainland or elsewhere as plants, it is quite possible that the eggs of this lizard may have been brought with them. Although it has been recorded from the southern districts of the Malay Peninsula, *C. versicolor* is rare south of the Perak and Kelantan Rivers, its place being taken by *C. cristatellus*, which is closely allied to *C. jubatus* of the Nicobars and Malayan Islands. The southward range of *C. versicolor* as a common member of the local fauna is greater on the eastern than on the western side of the mountains which form the backbone of Malaya, as is also the case with of a number of other animals.

*Gonycephalus subcristatus*, on the other hand, is peculiar to the Andamans and the Nicobars. *G. humei* (Stol.) also occurs in the latter islands, but I do not think that this species can be maintained. We have in the Museum two males from Tillinchong identified as *Tiaris humei* by Stoliczka and possibly the types of the species. From the same island we have a normal specimen of *G. subcristatus*, also named by Stoliczka; but in a series from Kondal (an island in the other division of the Nicobar group), identified by the same authority as belonging to the latter species, I find a female which must be associated with the two males from Tillinchong. These three specimens are distinguished from the whole of a

<sup>1</sup> Boulenger, *Ann. Mag. N. H.* (vi) VIII, 1891, pp. 288, 289.

<sup>2</sup> I have found a well-authenticated specimen of this species from the Andamans in the Museum collection, which also contains several of *C. versicolor* from the Cocos.

<sup>3</sup> J. Anderson, *Res. Yunnan Es.*, p. 806.

<sup>4</sup> It is convenient to confine this term to the Malay Peninsula, using "Malaysia" for the Malay Archipelago.

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large collection (over one hundred specimens), made by different collectors in different islands of the Andamans and Nicobars, only by their greater size and more pronounced crest, which is interrupted in a very distinct manner just behind the neck and raised on a fleshy, laterally compressed hump in front of this point. On the whole, I am inclined to regard them not as representing a local race or even an incipient species, but as aged individuals of the common form. Against this view must be placed their rarity—and Major Anderson tells me that he has examined very large numbers of specimens without finding any like them. However, the adults of some Agamids (e.g., *G. borneensis* and *Aphaniotis fusca* in the Malay Peninsula, *vide* Laidlaw (9)) are seldom taken as compared with the young, while in some cases (e.g., that of *Calotes cristatellus* in Lower Siam) the largest individuals are only seen in very deep jungle, where of course there is less chance of their capture.

Of *Varanus salvator*, one of the bulkiest of lizards, I need say very little. It has practically the same range in Asia as *Gehyra mutilata* (except that it is found nearer the heart of India) and extends eastwards to Australia. Although it cannot be carried accidentally on ships, it is extremely tenacious of life and has frequently been observed swimming in salt water, though never far from shore. Probably it might survive in the sea for a considerable period clinging to a floating log, for it can go without food for weeks, if not months, without apparent inconvenience.

The Skinks, judging from the enormous number of closely allied species in the family, are among the most plastic of lizards; yet some of them have an extensive distribution. Of the Andaman forms, *Mabuia multifasciata* is the common Skink of the Malay Peninsula and extends northwards into Burma, possibly into Sikkim, southwards and eastwards into the Malay Archipelago. Specimens from the Andamans, of which I have seen a considerable number, may differ to a slight extent, on the average but not individually, from those taken on the mainland; for the proportion with quinquecarinate dorsal scales is probably greater than that given by Flower (10), who examined a large series in Malaya. *M. tytlerei* and *L. macrotympanum* are only known from the Andamans. *L. maculatum* has a range similar (as far as the mainland of Asia is concerned) to that of *V. salvator*; *L. olivaceum* does not extend so far to the north, but is characteristically Indo-Malayan.

In comparing the Agamidæ and Scincidæ of the Andamans with those of the Nicobars, we find that several forms occur in the later group which are absent from the Andamans but have Malayan or Malabar affinities. *Calotes jubatus*, apparently common in the Nicobars, occurs



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in the Malay Archipelago, but has not been recorded from the Peninsula; *C. ophiomachus* is only known from Ceylon and S. India. Several Skinks probably occur in the Nicobars which are absent from the Andamans, and the same may be true of *Dibamus novæ-guineæ*—the sole representative of a family closely allied to the Skinks and once regarded as peculiar to the Nicobars and Papuasia, but now known to exist both in the Malay Peninsula and in several of the islands of the Malay Archipelago.

What is perhaps a true relationship between the Andamans and Ceylon consists in the absence from both of the genus *Draco*, which occurs within the Malabar province in S. India (also in Malaya, Burma and Assam) and consists of forms too striking to escape notice readily.

Prain (12, 13) has shown that the flora of the Cocos group and that of Narcondam differ considerably from that of the southern Andamans. The geological separation between the different islands, and especially between Narcondam and the rest of the archipelago, is well illustrated by the marine depths marked on the maps recently published by Alcock (13) and Kloss (14). Narcondam is distinguished zoologically by the possession of an isolated Hornbill (*Rhytidoceros narcondami*). I have very little information about the lizards of the Cocos, except that *Oalotes versicolor* and *Gonyocephalus subcristatus* occur; on Narcondam Major Anderson has taken *Gymnodactylus rubidus*, *Gonatodes andersonii* and *Phelsuma andamanense*, as well as *Mabuia multifasciata* and another Skink. The three Geckos characteristic of the Andamans therefore occur on this island. Of three specimens of *G. rubidus* from Narcondam in the Museum, two are considerably larger than any in a large series from other parts of the Andaman archipelago; otherwise no difference can be detected. The only adult specimen of *G. andersonii*,<sup>1</sup> is from Narcondam, but, except in point of size, it agrees with two young individuals collected by Wood-Mason somewhere in the Andamans (exact locality not specified) and confused by him with the young of *G. rubidus*, to which they bear a close superficial resemblance. Specimens of *P. andamanense* agree in every respect with those from the other islands.

I do not propose to generalize as to geography on the basis of the lizards. The study of a single sub-order somewhat poorly represented (or perhaps rather imperfectly known) does not permit wide generalizations as to the whole fauna, much less the geology and geography, even of a small group of islands. It has been my object to show, in the first place, that the vertebrates of the Andamans are not devoid

<sup>1</sup> Since this was written two more have been received from Narcondam, collected and presented by Mr. C. G. Rogers.

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of zoological interest, in the second that the study of the geographical distribution of animals must be preceded by a study of their bionomics.

Description of *Gonatodes andersonii*, nov.*Measurements.*

Total length	...	...	...	73 mm.
Body	...	...	...	23 "
Tail	...	...	...	40 "
Head	...	...	...	10 "
Fore-limb	...	...	...	11 "
Hind-limb	...	...	...	16 "
Breadth of head	...	...	...	5 "

Closely allied to *G. kandianus* (Kelaart) from which it differs only in the following points :—(1) The habit is more slender, the limbs slightly, the tail considerably, longer ; (2) the scales on the back and sides are more nearly homogeneous, none of the former having a definite keel ; (3) the spine-like tubercles on the flanks are much reduced, but not altogether absent ; (4) there are only five or six labials on each jaw. The scales on the belly are smooth, as in the typical form of *G. kandianus*, or feebly keeled. *G. andersonii* differs from *G. gracilis* (another very close ally of *G. kandianus*) chiefly in respect of its proportions, but also in its scaling. The specimens have been compared with examples of *G. gracilis* named by Boulenger and of *G. kandianus* from the Sarasin's collection.

I have also examined specimens of *G. wicksii* (Stol.) from Prepara which have been identified by the author as *G. wicksii* and may be his types. They agree exactly with Boulenger's description of *G. kuanus* and also with specimens of this species from Ceylon regarded by Theobald as typical of *G. humei*. There can be no doubt, therefore, that Boulenger was right in considering both these names to be synonyms of *G. kandianus*, as he does (but with a query) in the "Fauna of India" and his *Catalogue of Lizards*.

In a recent paper (6) I identified, with some doubt, the immature specimens of *G. andersonii* in the Museum with Beddome's *G. marmoratus* from S. India. The examination of an older specimen in better preservation shows that I was wrong.

## LITERATURE.

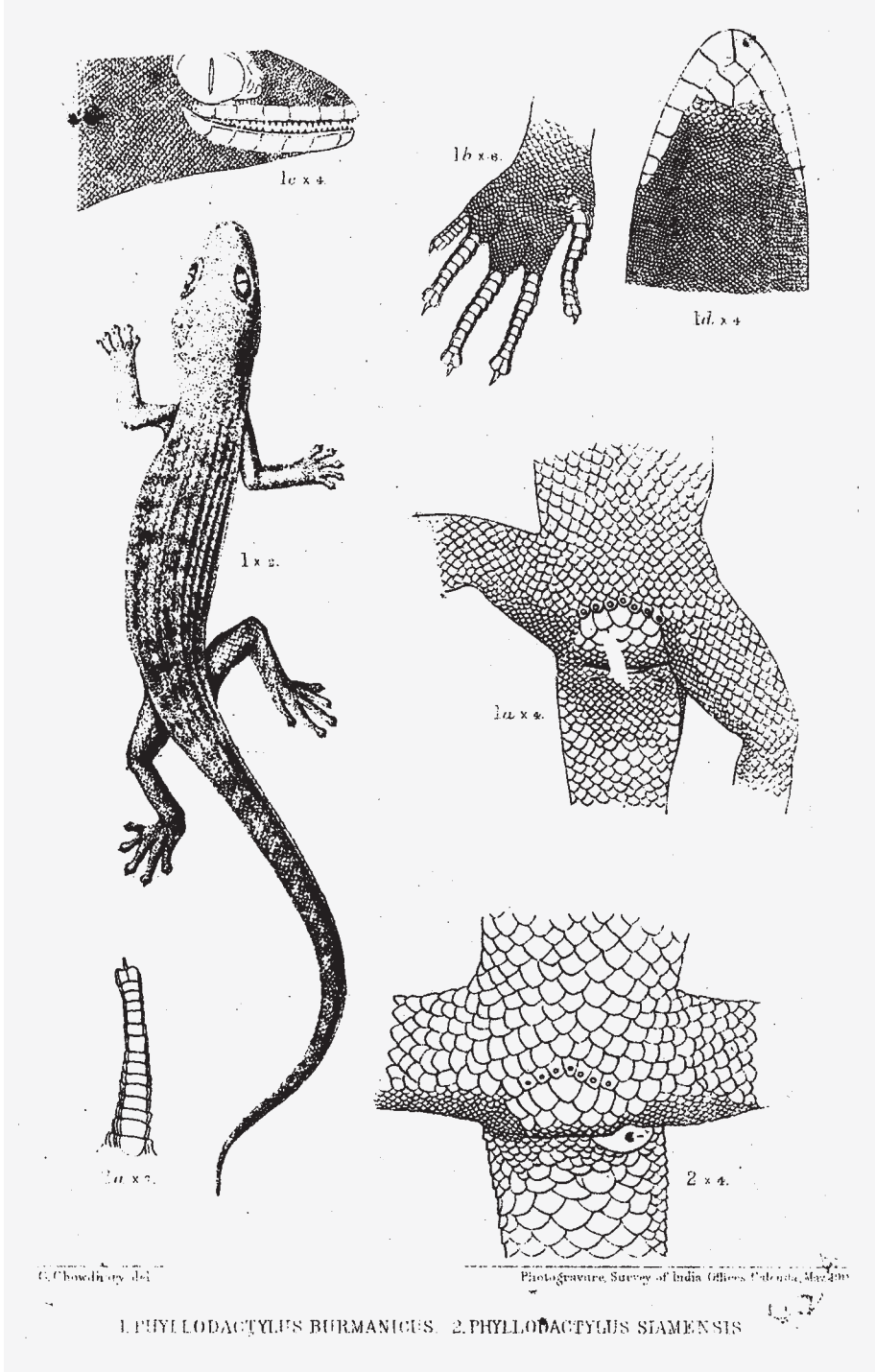
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NOTE ON THE REPRODUCED TAIL IN *PTYCHOZOOON HOMALOCEPHALUM*.

I am not aware that the appearance of the tail after it has been lost and reproduced has been described in this species. It has a certain interest, because Müller<sup>1</sup> regards the character of the lobes of the tail as being of some importance as a specific distinction in the genus. In a specimen from the Nicobars, lately presented by Major Anderson to the Indian Museum, the distal part of the tail is reproduced. The scales upon it are slightly smaller than those upon the uninjured portion, and the dorsal tubercles are completely absent. The loose membrane surrounding it is only about half as wide as is normal, asymmetrical, not divided into lobes or expanded at the tip of the tail. Thus the condition differs considerably from that apparently normal in *P. horsfieldii*, Gray, but rather less so than from that of the uninjured tail of *P. homalocephalum*.

<sup>1</sup> *Festschr. Nat. Ges. Basel*, 1892, p. 209.



## NOTES ON GLEANINGS

### *The Asiatic Society, Nelson Thomas Annandale and his Publications on Lizard in the Journal of the Asiatic Society of Bengal*

Asok Kanti Sanyal

The Asiatic Society, an Institution of National Importance was founded during the company rules in India to enhance and further the cause of "Oriental Research". It was founded by the philologist William Jones on 15th January, 1784 in a meeting presided over by Justice Robert Chambers in Calcutta. At the time of its foundation the Society was named as "The Asiatic Society". In 1825, the Society was renamed as "The Asiatic Society". In 1832 the name was changed to "The Asiatic Society of Bengal" and again in 1936 it was renamed as "The Royal Asiatic Society of Bengal". Finally on 1st July, 1951 the name of the Society was changed to its present one, i.e., The Asiatic Society.

The Society's journal started its publication in 1788 and had several names reflecting changes in the objectives of the Society. From the beginning to 1832, the name was *Asiatick Researches, Transactions of the Society*, for enquiring into the History and Antiquities, the Arts, Sciences and Literature, of Asia. The Asiatic Society, on 7th March, 1832, passed a resolution, that the monthly journal hitherto published under the name of *Gleanings in Science*, should be permitted to assume that of the *Journal of the Asiatic Society of Bengal*. The only journal of the Society was dedicated for publication of results of studies on Arts, Culture, History, Science and other disciplines of Asia. Out of nearly fifteen authors who were regular contributors of results of their zoological researches in the journal, maximum number of papers were published by Dr. Thomas Nelson Annandale, D. Sc. In the present article attempts

will be made to include a brief report based on analysis of the earliest research papers of Annandale on Herpetology of India and Ceylon with special reference to lizards, published in the Journal of the Society.

Dr. Thomas Nelson Annandale the eldest son of Professor Thomas Annandale, the famous Edinburgh Clinician, was born on 15 June, 1876 at Edinburgh city of United Kingdom. He was awarded D. Sc. in Anthropology from Edinburgh in 1905. His ardent interest in natural history especially in Zoology and Anthropology was initiated immediately after graduation in Zoology as an investigator into the Anthropology and natural history of the Malay Peninsula. He published numerous papers between 1900 and 1924 on biology along with Anthropology of the Malay Peninsula and the islands of Scotland including "The Faroes and Iceland", British India and Ceylon. A completed study in Island life, "and "Fasciculi Malayensis", the classical work on Malayan natural history were published. The work included many hitherto unknown and known zoological species which are still recognized as the epitome of zoological and anthropological researches in India. Dr. Annandale not only published numerous papers in the Society's journal, he was also intimately associated with the Asiatic Society occupying official positions including the post of President of the Society during 1923 – 1924.

Dr. Annandale, after coming to India in 1904, first joined the Indian Museum as the Deputy Superintendent and later in 1907 he became the Superintendent. His works showed that exploration of faunal resources of India and zoological researches were his one and only mission after coming in India. His love for zoological studies was proved from his unique Presidential Address delivered in the Section of Zoology in the Ninth Indian Science Congress in 1922. His address was on "Ethics of Zoology". With a quote from the 'Ain-i-Akbari' Annandale told, "Let us constitute ourselves humble followers of Akbar and strive to find a rule that will at once protect the animal, guard and stores of zoological learning, maintain equity between zoologists and stimulate the excellent, if not the lazy man to sound zoological research."

While discussing the genesis of zoological research in India, Annandale said, "Sir William Jones in his inaugural discourse to Asiatic Society, delivered in Calcutta in 1784, omitted zoology from the proposed agenda of the Society. Nine years later, in his tenth address Jones explained the reason. 'Could the figure, instincts and qualities of birds, beasts, insects, reptiles and fishes', he said, 'be ascertained, either on the plan of Buffon, or that of Linnaeus, without giving pain to the objects of our examination, few studies would afford us more solid instruction or more exquisite delight'.

Dr. Annandale was forthright in criticizing the dogma of the western scientists towards the work of Indian zoologists or the works carried out in India, when he mentioned, "in discussion on the value of zoological works there is nothing that makes me more indignant than the saying that this or that piece of Indian research is good work – for India, .... working amidst Indian difficulties."

The records showed that exploration and study of Indian fauna were started long after 1784 - the year of establishment of the Asiatic Society in Calcutta. In the early period of the Society Zoology was not considered as a pioneer subject of study which was known from the remarks of Dr. Annandale, "Sir William Jones after the establishment of Museum in the Society's building in 1814, was personally not in favor of collecting zoological specimens; however, there was definitely a bias towards biological specimens from the very beginning in the Museum".

While reviewing the numerous publications of Dr. Nelson Thomas Annandale published in different journals including 'Nature', it was surprisingly noted that during his stay in Calcutta from 1904 to his last breath in 1924 *i.e.* only in 21 years he published a total of 515 papers containing description of 29 new species and several new varieties of animals and voluminous reports of Anthropological studies. Again, the records showed that of the total publications, 45 were on zoological specimens collected from British India and Ceylon by the earlier researchers and were deposited in the Indian Museum, Calcutta. It was also very interesting to me that all the 45 papers were published during 1904 – 1921, in the *Journal of the Asiatic Society of Bengal* and of these 35

were published in four years (1904-1907) only. It may be mentioned here that the zoological specimens collected by both the scientific and non-scientific British personnel residing in the then British India had deposited in the Museum of the Asiatic Society in Calcutta. These huge collections were later shifted in the Indian Museum which was established in Calcutta in 1814 at the cradle of the Asiatic Society of Bengal. All the collection were further shifted to the museum of the Zoological Survey of India after it was established in Calcutta in 1916.

Dr. Annandale's first research paper on lizard was published in the *Journal of the Asiatic Society of Bengal* in the year 1904. The paper was on the study of lizards of the Andamans and Nicobar, with description of a new species of Gecko, detail list of species of lizard present in the Archipelago and an interesting discussion on the reproduction of tail in a lizard *Ptychozoon homalocephalus*. Besides this paper four other papers on Oriental lizards collected from British India and Ceylon and present in the Indian Museum, Calcutta were written and published by Annandale. In the present communication the present author intends to discuss on the species of lizards which were described as new to science and also the species known earlier from British India and Ceylon published by Annandale in the *Journal of the Asiatic Society of Bengal* during the period 1904-1906. In addition, a detailed discussion on the resultsof investigation presented in the first paper as mentioned above and informative notes on the results included in other four papers would be discussed in this communication.

The paper on the lizards of Andamans and Nicobar contained a list of 19 species under four families like Geckonidae, Agamidae, Varanidae and Scincidae. Besides description of new species and the names and short note on the species identified, the author made serious attempt to analyze relationship with the species known from other parts of the Oriental region. Annandale started the discussion with the species named *Gymnodactylus rubidus* which he mentioned as peculiar to the Andamans and the species had close similarities with *G. marmoratus* of the Malay Peninsula and Sumatra and *G. khasiensis* of Assam. Likewise



in the discussion on distribution of the house – lizards *Gehyra multilata*, *Hemidactylus frenatus* and *Gecko verticillatus*, it was mentioned that these species have a wide range on coasts and islands, being easily carried with merchandize or personal baggage. It may be inferred from the analysis done by the author that most of the species listed in the paper have very wide insular distribution in the Indian and Pacific oceans and occur sparingly in Malaya and Burma. The author also mentioned his comments on analysis of characters and distribution of Gecko that these unique lizards are extremely ancient, and their genera lack the plasticity of some families. It was also mentioned in the paper that the species of Gecko present in the Andamans and Nicobar were very primitive inhabitants there. Annandale also included in the paper a list of 24 species of Gecko known from Burma and Sumatra. While comparing distribution of Agamidae and Scincidae of the Andamans with those of the Nicobar, the author observed that species under Scincidae were absent from the Andamans but had Malayan or Malabar affinities.

The new species of Gecko *Gonatodes andersonii* was characterized with morphological features and compared with examples of *G. gracilis* (Boulenger) and *G. kandianus* (Kelaart). At the end of the paper the author included a note on appearance of tail after it was lost and reproduced in the species *Ptychozoon homalocephalum*. In one specimen from the Nicobar, it was noticed that the scales upon the tail are slightly smaller than those upon the original i.e., uninjured portion of the tail.

In addition to the brief discussion on the analysis of scientific studies on lizards in the above-mentioned paper published in the year 1904, the subsequent studies of Annandale on lizards and publishing the reports in the *Journal of the Asiatic Society of Bengal* would also be discussed here in brief to understand the level of research acumen of Annandale. Keeping this in mind, brief analysis of the results of studies on lizards belonging to a large number of species and published in the Society's Journal are discussed below.

In 1905 two papers on the notes on the Oriental lizards from British India and Ceylon were published in the Society's Journal. One paper

included brief description with salient features of 26 species including three new species under five families and the other contained reporting of 26 species with description of two new species and one new variety under two families. The fourth paper was published in 1906 with description of one new species of Gecko from the Eastern Himalayas. The last one was published in 1906 on the Batrachians and Reptiles from desert tract in Southern India with special remarks on the Reptiles of the desert region of the North-West Province. This paper contained the report on lizards including 26 species under 18 genera, of which 3 species were reported as new to science and the other one as the new variety.

Lastly, it may be said that the knowledge on faunal resources especially on the lizards in India (the then British India) was enriched extensively through the studies during 1870 to 1924 by Jerdon (1870-1875), Anderson (1870-1890), Boulenger (1888-1902), Blanford (1899-1903), Annandale (1903-1924) and others. The studies on lizards during the period listed nearly 400 species from the Indian Empire and Ceylon where the role played by the British researchers and explorers are of great importance. In this praise worthy endeavor the contribution of Annandale will always be remembered as most special because of his constant efforts towards development of zoological researches in India, which enabled him in establishing the Zoological Survey of India in Calcutta in 1916.

The obituary of Dr. Nelson Thomas Annandale, C.I.E. written by Cedric Dover and published in *Nature* on 26 April, 1924 said, "The death of Dr. Nelson Annandale, Director, Zoological Survey of India in Calcutta on April 10, at the comparatively early age of forty-eight, is a severe loss to science and to Indian Zoology in particular".

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## BOOK REVIEW

### A BEAUTIFUL HISTORIOGRAPHY ON SCIENCE AND TECHNOLOGY IN MEDIAEVAL INDIA.

Second volume of *Bharote Bigyan Projukti, Modhyojuger Sesh Parber Itihas (1206-1833)* by Aparajita Basu was published by K P Bagchi & Co. in 2019. It was no doubt a beautiful attempt by the author to amalgamate all technological developments of the aforesaid period in this volume. A scientific development of the said period was published in its first volume in 2017. The present volume extensively covers developments of Chemical technology including metallurgy, Agricultural technology including irrigation, Shipbuilding and Navigation technology, technological developments in Transportation and Bridges, Textile technology, Artillery, Paper and printing technology, development of basic tools, Military technology and Architectures. The period started with the Sultani regime in Delhi after the defeat of Prithwiraj in the second battle of Tarain in 1192, which led to the conquest of northern India by Turko-Afghans in 1206 A.D. and ended with direct British invasion in India superseding the role of East India Company. Though little similar studies in English are available, such a comprehensive compilation like this in Bengali language was not attempted before. Hence the work done by Sri Basu is a praiseworthy one. He has not only compiled the available information and historical findings, but also tried to arrive at a logical conclusion about the socio-economic status of the people of the aforesaid period. The work also opens up an avenue for further study in History of Science and Technology in India in regional language. Following Professor Irfan Habib and others, the study of Dr. Basu clearly reveals to his readers that the mediaeval period is not dark at all with respect to scientific and technological development of India. However the western Historians reported it differently.

In historical research, study of technology is of immense importance. It is helpful in determining the material foundation of society, institutional structure, agricultural relations, condition of ruling class, financial base of its metropolitan areas etc. to have a complete understanding of the people living in a class-based society. The Books

of Linn White<sup>1</sup> and Joseph Needham<sup>2</sup> had informed us about their importance. Study of technological advancements prior to British rule definitely helps us understand the existing political, social and historical features of that time.

Dr. Basu succeeded to give a vivid description of development of science and technology in mediaeval India in his two volume writings. Thus he automatically included himself into the list of famous Bengali writers on 'History of Science'. Without taking any reference from his book, scientific and technological development study in mediaeval India seems to me impossible now. His presentation is very nice, lucid and in a story-telling type. Some important photographs are the added attraction of this book. Few confusions and printing mistakes (pages 16, 21, 126, 127, 135, 139 ... etc.) need clarifications and rectifications. We expect that it will be done in its next edition. On page 11 'Sora' was considered as 'sodium or potassium nitrate'. But actually we use this term for Potassium Nitrate. Sri Basu correctly assigned its allopathic medicinal value, where it was termed as 'Potas Nitras B. P.'. On page 18, use of 'janjar' as pesticide was mentioned. Use of other pesticides, seed collection and storing technique, organic control of pests, medicinal plant cultivation, participation of women labourers, technology used for converting paddy to rice, etc. is our further expectation from Dr. Basu. Some light on those areas may also help in fulfilling the curiosity and enriching the understanding of the readers. Mention of 'Janta' and 'dheki' are there in pages 317-318 indicating their role in removing husks of the grain. But that is not enough to fulfil one's curiosity. In his book Sri Basu used the term 'mordant' for chemicals which are used to bind the colour intimately on the object. Instead of mordant, *Ragbondhoni* could be a better Bengali option.

Distillation is a very important chemical technology used in the mediaeval period for producing alcohols, which is necessary for the production of perfumes and Ator. Fermentation technology was a prerequisite one for alcohol production. Sri Basu has elaborated on that technology. At the same time developments of distillation

technology was also a place of interest for the researchers. Italian-Arabic still used a moor's head over the alembic of Gandhara still to make it more effective. Another two types also elaborated by Habib<sup>3</sup> as Mongal still consisting of a catch bowl, where the condensation actually occurs, and Chinese still, consisting of the catch bowl connected with the receiver. Abul Fazal mentioned all three types in his *A'in-i-Akbari*<sup>4</sup>. Barni (1357) mentioned the use of Rose water in Bengal during the 1340s. It was produced by grinding the petals of Rose and mixing it with water followed by distillation and condensing the said water vapour after a stipulated time. By carefully lifting the film over this hot rose water mother of Nur Jahan became able to prepare a perfume with high fragrance named '*itor-e-Iahanqiri*'.

As writing materials Indians often used black tablets as ink and palm leaves, bark of the tuz tree called Bhurja and silk as papers. This was reported by al-Biruni<sup>5</sup>. White paper manufacturing was started in India in the 13th century. In his '*I'zaz-i-Khusrawi*' Amir Khosraw<sup>6</sup> mentioned '*Kaghaz*' several times. According to him, paper was made with Cotton, Linen-cloth, silk, and reed. They were shocked in water, pounced and turned into pulp, followed by converting the pulp to sheet and drying. A sharp scissor was used to cut the dry paper to desired size. The ink was prepared using metallic or herbal origin following the method described in *Rasaratnakara*<sup>7</sup>. The ingredients used were lamp-black charcoal, gum, burnt husk of almond, gold and silver powder and others.<sup>8</sup>

Little more mention in relation to minting of coins used in mediaeval India was expected. Mostly gold, silver, lead, bronze, brass, bullion and copper were used for minting of coins at that time. Iltutmis struck the silver 'Tanka' and copper 'Jital'. Abu'l Fazal mentions a small round gold 'dinar' issued by sultan Alauddin Khilji, whose refinement was considered to be 12½ degree, but it was actually 10½ degree. Mukherjee in his paper discussed the issue thoroughly<sup>9</sup>.

Utility of astrolabe for astronomical activities was discussed in length. The instrument was used to keep proper timing also. Muslim mathematicians and technical personalities applied their intelligentsia

to develop this. Firoz Tughlog placed an astrolabe, a sundial and a clap cidrao in Firozabad (Delhi) over a pillar and arranged to ring a bell to notify people about the time. This was considered as the early watch of the city.<sup>10</sup>

'Alok Sojja' is another comparatively newer arena of discussion under the chemical technology section, for which Dr. Basu must be praised. I would suggest him to use 'Dohan a Alakayan Prajukti' instead of the title used.

The book possesses over 200 rich references for further study by ignited minds.

After the Turkish invasion changes occurred in the field of Textile technology and Irrigation technology. Developments also occurred in writing materials, scientific tools and in Cavalry fields. All these are now of special interest and need to be studied extensively by the future researchers. We thank Dr. Basu for presenting a very beautiful History of Science and Technology of Mediaeval India to us.

#### Notes

<sup>1</sup> Linn White, *Mediaeval technology and social change*, Oxford, 1962.

<sup>2</sup> J Needham, *Science and civilization in China*, IV, 2, pp. 102-105.

<sup>3</sup> I Habib, *Modhyojuger Bharote Projukti 650-1750 A.D.*, NBA, 2011, pp. 32-35.

<sup>4</sup> A 'in-i-Akbari, *Bibliotheca Indica*, Calcutta, Vol. 1, 1867-77, pp. 76-77.

<sup>5</sup> *Kitab-al- Hind* (Hyderabad, 1958), p. 146.

<sup>6</sup> *Lithographed*, Nawal Kishore Press, Lucknow, 1865, p. 45

<sup>7</sup> P K Gode, "Recipes for hair dye in Navanitaka and their close affinity with the recipes for ink manufacture after A.D. 1000" in *The studies in Indian cultural history*, Vol. 1 (Hoshiarpur-1961), pp. 101-110.

<sup>8</sup> Priyadarajan Ray, *History of chemistry in ancient and mediaeval India*, p. 73.

<sup>9</sup> B N Mukherjee, "Technology of Indian coinage, ancient and mediaeval periods' in the Aniruddha Roy and S K Bagchi's book *Technology in ancient and mediaeval India*, Delhi-1986, pp. 47-70.

<sup>10</sup> *Afif Tarikh-i-Firuz Shahi*, pp. 254 -260.

Arunabha Misra

## BOOK REVIEW

Rohit De, *A People's Constitution : The Everyday Life of Law in the Indian Republic* : Princeton & Oxford : Princeton University Press, 2018; 312 pages, \$60. ISBN 978061174433 (Hardcover).

The Indian Constitution is the lengthiest written constitution in the world, compiled after ransacking most of the known constitutions of the world under the guidance of Dr. BR Ambedkar. It's neither rigid nor too simple in its character. Critics often criticized it because it was framed in the framework of the custom of an alien land, thus they often said it was a 'slavish imitation' of western culture and it was only meant to serve the purpose of English-speaking elites. However, over time it was more or less the people from the minority community, whether religious or linguistic and people who belong to the subaltern class invoked the various constitutional privileges given to them. As the custodian of the constitution, the Supreme Court was often flooded with the appeal for writs for a legal and constitutional remedy. Rohit De's *A People's Constitution: The Everyday Life of Law in the Indian Republic* tried to trace the phenomenon where the constitution came to play a dominant role in the socio-political life of Indians. The author himself said that "This book explores how the Indian Constitution, a document with alien antecedents that was a product of elite consensus, became part of the experience of ordinary Indians in the first decade of independence. It traces the process through which the Constitution emerged as the dominant field for politics." (p. 4).

The Introductory Chapter mostly dealt with the historical situation by which the constitution came into existence. This chapter gave us a vivid description of the establishment of the supreme court in a 'sleepy government town' of Delhi in 1934 as the Federal Court (p.11-12). Apart from dealing with the debate about the nature of the constitution this chapter also dealt with the Integrated Judicial System of India. This chapter concludes with a brief introduction of property law and the democratic nature of the Indian Republic.

The first chapter starts with a reference of the draconian Bombay Prohibition Act (BPA). The author here shows that even after independence, the new government used this act for the battle against the consumption of alcohol. Article 47 of the constitution is invoked to hold the legality of BPA and other similar acts; however, the question here doesn't rest entirely on the legal term of right and wrong, the postcolonial government sees it as a moral right and wrong. Even if the postcolonial government wanted to do the morally right thing, it did indeed depended on the mechanisms of the colonial government, simply the nose of the constable became the judge of whether a person is drunk or not, and 'in all those cases the burden of proof had been placed on the accused' (p.60). While the majority population of India more or less were indifferent about these acts, they were opposed by the minority communities like The Parsis (Zoroastrians), The aboriginal people, etc. But 'with the introduction of a majoritarian democracy, the Parsis, as a minority community lost influence and access to state power' (p. 66), and they saw these acts as the government's tools which were used to encroach their fundamental rights. The author in this chapter also shows us how a small legal victory was a headache for the government as 'constitutional litigation highlights the possibility of engagement with state structures, which fractures the state's authority and coercive power' (p. 72).

In the second chapter, the author took up the Essential Supplies Act (ESA) which was used by the colonial government for the smooth functioning of British India's wartime government. This Act armed the colonial government to impose necessary restrictions against hoarding of essential commodities whenever it wanted. However, 'after independence, the same restrictions were adopted by the postcolonial government in the name of harnessing the national economy for development' (p.78). These acts were seen as a necessary evil by the postcolonial government to guard the socialist principle of the Nehruvian state. The Essential Supplies Act (ESA) which later was reimposed by the post-colonial government as Essential Commodities



Act 1955 (p.78), and the system endorsed by it, i.e., the license quota Raj, an economic regulation system which had criminalized economic offenses. The middle-class Marwari traders at large were the targeted people. Feeling their right to trade disturbed by the government, the Marwari community moved to the court to seek remedy in a constitutional manner. The author noted that this kind of economic regulation with its faulty design was the fundamental cause for the increasing trend of corruption in Indian society, 'but it wasn't just poor policy design that led to the failure of the controls. Bureaucrats and academics both acknowledged that they were hampered by the widespread lack of public support and sympathy for the government' (p. 83). This chapter also dealt with the power of judicial review of the constitution in detail.

In the third chapter, the author discussed the constitutional provision which laid out pathways for the ban on cow slaughter. The issues related to cow protection were always viewed as a political and religious issue between the Hindus and the Muslims, for the Hindus 'the cow... represented the greater Hindu community being threatened by a demon, which the government believed could represent Muslims or even the British' (p.127), and they by invoking article 48 passed many draconian laws, which not only banned the cow slaughter but even criminalized the consumption of beef! The victims of these laws, the Muslim butchers however decided to take on the government by its own system. They petitioned the court on the ground that these laws were creating hindrances to their livelihood. This action suit was 'possibly India's first class-action suit. They turn to the court because their economic rights were infringed and sought a remedy from the court. This chapter highlights how people from minority communities moved their grievances regarding their religious and economic rights from the political arena to the judiciary and invoked the constitution to uphold their rights.

In the fourth chapter, the authors highlighted the effort of post-colonial governments and laws enacted by them to enforce article 23 which

sought to end prostitution and flesh trafficking for good. Even before the independence it was one of the goals for women's rights activists, and after the independence, they tried to remedy these social evils by suppressing the prostitutes, 'the suppression of prostitution in postcolonial India was framed in terms of granting freedom to female citizens' by enacting The SITA act (p.176). However, the SITA act was challenged in court by none other than the sex workers themselves, whom the states wanted to free. 'Unlike the existing provincial anti trafficking acts that were concerned with the regulation of proscribed acts and the punishment of offenses, SITA provided an elaborate government program for the rescue and rehabilitation of prostitutes, attempted to set up safeguards against police excesses, and laid the basis for a bureaucracy of social welfare staffed by women' (p.179). The persons engaged in the sex trade saw this act as a state's measure to encroach on their right to trade and profess the profession of their choice. Husna Bai, the litigant, a self-confessed prostitute 'claimed that SITA, in effect, illegally prohibited her from carrying on her trade by imposing unreasonable and illegal restrictions on it' (p.191). The author also highlighted that even with some victories in the courts the sex worker had to go through a very hard situation because they were confronted socially and politically from every corners of the society. This chapter highlighted the deep anxiety of society regarding the status of prostitutes.

De in this book tried to show the legal struggle to earn their rights given by the constitution of most marginal communities of India, whether they were economically weak or numerically wasn't strong enough to push the government. The first two chapters of this book concerned itself with the postcolonial government's action regarding the prohibition and economic controls, which by large were a relatively new concept in every-days life. While the author in the last two chapters tried to discuss the issues which date back to the 19th century, here the author tried to discuss them in the light of the constitution. The epilogue portion of the book tried to connect the dots between

these different themes. By analyzing these themes, the author tried to understand the process by which the constitution became a part of every-days politics and life, and how the common masses came to understand the importance of the constitution and the rights guaranteed by it to them. This chapter also dealt with the wide power of judicial review given to the judiciary by the constitution. In the end, he also discussed the change of legal theories in India and also around the Globe, NGO's role as a pressure group, etc.

This work of Rohit De is surely a gem among the work of Indian legal history, in this book he systematically tried to demonstrate the development of the people's constitution which changed the daily lives of the peoples of the Indian Republic, as people's right to approach the courts for defending constitutionally guaranteed rights was a novice idea to the Indian people. However, this work also has some shortcomings. For instance, De had noted that most of the litigants who turned to the court for their constitutionally guaranteed rights belonged to the minority community, whether they are Parsis or Muslims. But nowhere in this book, does he take the issues of penniless masses who were deprived of their constitutional rights on a daily basis only because they were too helpless to afford an attorney as this book of De only argued the cases where the litigants were financially strong to challenge the state's decision and moved to court to defend their rights. De also failed to understand why the Muslim minorities were unable to go to court to uphold their religious rights as they did before the independence, i.e., Why they moved to court against the ban of Cow slaughter on the basis of livelihood and not on the basis of defending their right to profess their religious obligations openly. De in this book also claimed that it was the people from minority and subaltern strata of the society who always moved to the courts to seek enforcement of their constitutionally granted rights, but in a book published in 2018, De surely missed how right dominated 'majority' and privileged group of the society often moved to the courts to curtail the fundamental rights of the minorities, even

their right to protest was often suspended on the issue of public safety, thus De's subaltern peoples were indeed subaltern minus the Muslims. De also showed that not everyone who approached the courts to seek validation of their rights was able to secure their objectives, for instance in the Qureshi case, the Supreme court upheld the constitutional validity of banning cow slaughter, but the courts, in this case, tried to put a break on state's over enthusiasm with elaborate regulations that it was state's duty to distinguish between cattle which has to be saved from the slaughter and the animals which were permitted to slaughter, but here De failed to mention that even though the slaughter of some animals was allowed, the butchers were always facing constant threat from state officials and cow vigilantes despite the court orders. However, apart from some of these shortcomings, this book should be widely read to understand the constitution's effect on the day-to-day life of the common people of India.

Sakir Hossain Laskar

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Rhys Davids, *Buddhist India*, London, 1933, 7.

**Articles in Books :**

H.V. Trivedi, "The Geography of Kautilya", *Indian Culture*, Vol. 1, 202ff.

**Edited Volumes :**

C.W. Troll, ed. *Muslim Shrines in India : Their Character, History and Significance*, Delhi, 1989.

**Articles in Journals :**

G. Hambly, "A Note on the Trade in Eunuchs in Mughal Bengal", *Journal of the American Oriental Society* (hereafter JAOS), Vol. 94(1), 1974, 125-29.

**Articles in Edited Volumes**

P. Gaeffke, "Alexander and the Bengal Sufis", in Alan W. Entwistle and Francoise Mallison, eds, *Studies in South Asian Devotional Literature, Research Papers, 1988-1991*, New Delhi/Paris, 1994, 278-84.

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## SYSTEM OF TRANSLITERATION

## SANSKRIT

आ = ā	ई = ī
ऊ = ū	ऋ = ṛ
ऌ = ṝa	च = ca
छ = cha	ज = ja
ट = ṭa	ठ = ṭha
ड = ḍa	ढ = ḍha
ण = ṇa	श = śa
ष = ṣa	' = m̄

## TIBETAN

ཀ = ka	ཁ = kha	ག = ga	ང = ṅa/nga
ཅ = ca	ཆ = cha	ཇ = ja	ཉ = ṅa/nya
ཏ = ta	ཐ = tha	ད = da	ན = na
པ = pa	ཕ = pha	བ = ba	མ = ma
ཚ = tsa	ཛ = tsha	ང = dza	ཤ = wa
ཞ = zha	ཟ = za	འ = 'a	ཡ = ya
ར = ra	ལ = la	ཤ = śa/sha	ས = sa
ཨ = ha	ཨ = a		





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It will flourish, if naturalists, chemists, antiquaries, philologists and men of science, in different parts of Asia, will commit their observations to writing, and send them to the Asiatick Society at Calcutta; it will languish, if such communications shall be long intermitted; and it will die away, if they shall entirely cease.

Sir William Jones  
on the publication of the Asiatic Society