Volume 2, Number 3, 2014
Special Methodology Edition
ISSN 2052-8396 (Online)

SPACE AND CULTURE, INDIA

A peer reviewed India focused International Journal in Humanities and Social Sciences

December 2014

Published by: ACCB Publishing, England

EDITORIAL OPEN ACCESS

Research Methodologies: An Exciting Mixed Bag!

Professor Saraswati Raju[†]

There are many books and articles, which discuss a variety of social scientific research methods. As such, bringing out an issue on research methodologies may be somewhat questioned. However, our purpose here is somewhat different and twofold: to expose the readers to different subject fields with varying methodological concerns having specific disciplinary edges in one place and, in the process, indirectly touch upon the various possibilities while relooking afresh at existing research trends. The mixed bag thus deals with scholars directly pointing out the inadequacies of existing doctoral theses in the Indian universities on one hand to positioning the local in the historiography as one of the research concerns on the other.

The issue opens up with the invited paper by Gillian Rose. She discusses the evolutionary trajectory of visual representation of the city which has familiar and yet extraordinarily complex history, unravelled by many. From the maze of kaleidoscopic images that it has, Rose has picked up the visual medium of photography, and its interface with the urban. Photography has been chosen because of its widespread use in diverse conditions and the focus is on scholars - professional social scientists or otherwise who use or create images as ways to understand what 'the urban' is. A seemingly trivial medium, photographic representation is in fact about politics of that representation - a glossy and idealised cityscape can also be captured through its underbelly of squalor, shanty settlements, and so on. The criticality of such representation, however, is assumed to be self-evident thereby missing the point that the text thus produced can be read differently by different people. Photograph perceived as 'speaking for itself' is then seen as somehow objective.

Contrary to this, are the recent shifts in photographing and videoing the city to incorporate the contemporary theoretical concerns to show embodied experiences of urban spaces. Such works use visual images to implore the affective feel rather than to decipher the representation of urban spaces. For these scholars, photographs thus become important analytical tools. The other shift is through digital visual images. Rose observes that these two - the theoretical and the technological - are analytically distinct. However, the multimodal technology and online platforms not only allow for new ways of scholarly engagements with places, they are now being effectively used to create their feel as well making 'representation' just one among several epistemological possibilities. Such an approach makes a way of looking at photos with 'an aesthetic sensibility rather than a semiological/discourse, a response that takes the form of a bodily and emotional stance rather than interpretive or hermeneutic work'. The differentiating methods have their own pitfalls, and a meaningful collaboration between urban scholars interested in visual modes and a visual practitioner is what is required to overcome them - a concern that has remained inadequately addressed. Whether such collaboration would be considered well within the purview of critical social sciences is another issue.

Rose mentions geographical practice of map-making that does not depend on the distinction between professional and amateur cartographers in claiming the ground realities and use 'representation' as the preferable mode of depicting urban spaces.

The camera/smartphones have added another dimension to the whole debate about everyday social practices through which urban lives are being performed, often going beyond representation and/or evocation of urban. The digital mediums act in close association with

[†] Professor, Centre for the Study of Regional Development, School of Social Sciences, (CSRD), Jawaharlal Nehru University, New Delhi. Email: saraswati_raju@hotmail.com

the social networking sites with accompanying images, texts, comment, and so on. This, according to Rose, is 'networked urbanism' wherein the emergent form of urban visual culture offers significant challenges to prevalent social science methodologies. The three-way relationship between photographs and urban - representation, evocation and performance - necessitates rather different methodological approach from social scientists interested in the mediation of urban spaces by visual technologies. In order to work as representational devices, photographs require interpretation so that their meaning can be decoded; for them to act as evocative devices, the photographs entail an aesthetic sensibility in order to experience their affect, and their understanding as performative devices require an engagement with the dynamic network of social practices, their creation and distribution for enactment. The three - the photographic, the urban and the social-theoretical - are, however, interlinked and cannot be understood apart from one another.

The second article by Venkat Pulla is about Grounded Theory which works in reverse order as compared to the conventional method in social science research, i.e., theoretical framework first which is to be substantiated with data. Instead, the grounded approach is from ground upward, i.e., with no preconceived theoretical ideas prior to a research project, it is the empirical observations, the data collection in various ways, which form the basis for generating a theory. In a way then the researcher goes to field without being constrained by ongoing theoretical constructs. The author deals with the principles and processes of the Grounded Theory followed by discussion on the nature of codes, coding process and the concept of saturation. Not surprisingly, there are arguments against and in favour of Grounded Theory. Pulla delves into these issues in depth and is of the opinion that the theory does provide a sound theoretical basis for practice. Selected narratives from the author's recent studies explain the processes involved in Grounded Theory.

Misra et al. explore the Social Network Analysis (SNA), which has received increasing attention from various disciplines and is used to unravel social relations among individuals and institutions in the next article. According to the authors, the analysis has been largely adopted by scholars interested in studying livelihood systems of the rural poor. The growing commercialisation of common property resources as well as movements to non-farm employment has rendered a complex tenor to rural livelihoods; there is information overflow from diverse sources and the service needs are becoming progressively multifarious. The intertwining of these factors requires not only a comprehensive understanding of issues faced by the rural people; any services aimed at sustenance entail efficient rural institutions and their restructuring at multiple levels. According to the authors, SNA is such an analytical tool which can handle livelihood system analysis and can deal with matters of practical importance such as the influential actors as well as the key institutions in a livelihood system and the functioning of their interactive network, their role in rural development, and so on. The paper offers elaborate research methodology along with graphic details about different kinds of networks, matrices, terminologies commonly used in the analysis, etc. for those who would like to adopt SNA as a research tool.

The article that follows is by Indrajit Goswami who has systematically analysed several doctoral theses selected randomly from the reference sections of two leading universities in Tamil Nadu, India to point out the loopholes and conceptual inadequacies therein. Following a brief introduction to quantitative and qualitative methods, the author discusses the problematic issues in research, which include irrelevance of thesis titles, insufficient attention to data collection, sample size and selection, identification of proper instrument for their execution and framing of objectives, hypotheses and operational definitions, etc. The case-by-case observations on each thesis gives a critical edge to the study, which should

help the prospective researchers, academicians, and students avoid the pitfalls. The objective of this article is purely academic and its scope is limited to enhancement of quality of future research studies in the domains and related fields.

Sarma's article carries out a critical review of the trends of historical writings with reference to Assam. The historical writings of Assam have more or less followed the basic periodisation of Indian history in terms of Early Historical Period (600 BC to 400 CE), Late Historical Period (400 CE to 700 CE), Early Medieval Period (700 CE to 1200 CE) and Medieval Period (1200 CE to the Colonization Period). According to the author, there is no apparent difficulties whatsoever in following this specific periodisation. However, the absence of an early historical phase is an intriguing problem in the dynastic history of Assam. The author opines that a pan-Indian approach to the history of Assam in the Northeast would thus not be just in decoding the cultural dynamics of the complex society in the region; the history would lack authenticity. An alternative and more precise periodisation of the historical phase that has been provided by him does not suggest any clear marker between periods and eras in the region, but emphasises on slow and steady transformations. Sarma stresses on corroboration of the historical events through 'proper' historical source material for reconstructing the history of the region rather than deriving inferences from mythology and legends. However, he acknowledges the importance of recent trends such as selective utilization of oral traditions, folklores and memory in historiography. Sarma's exposition, although not directly dealing with research methodologies per se, pointedly brings out how any research has to be contextualised by taking into account local histories and spatially distinctive communities rather than adopting all-encompassing metanarratives.

We hope that the readers would enjoy this issue, as always feedbacks are welcome.

About Professor Saraswati Raju

Prof. Raju's teaching and research interests include issues related to social development with focus on gendered marginalities in labour market, access to literacy/education/skills, empowerment, and gender and space. She has published extensively on these issues in national and international journals of repute. She is one of the founding members for the International Geographic Union (IGU) Commission on Gender and Geography.

Member of editorial boards of Annals of Association of American Geographers, Antipode and Progress in Human Geography, amongst others, she has been at the forefront in introducing gender studies in Indian geography; her co-edited publication of the *Atlas on Women and Men in India* has been praised as a landmark work in this direction. Her recent co-edited and edited books include *Colonial and Post-colonial Geographies of India* (2006, Sage Publications), *Doing Gender, Doing Geography: Emerging Research in India* (2011, Routledge), *Gendered Geographies: Space and Place in South Asia* (2011, Oxford University Press) and her co-authored book titled *NGOs and the State in 21st Century: India and Ghana* (2006, INTRAC, UK).

Saraswati has received many visiting awards and fellowships in her long and illustrious career. She is a recipient of Janet Monk Service Award (2010) given by the Women Specialty Group of Association of American Geographers for exemplary contribution to the study of gender/feminist concerns in geography. This is the first ever award outside the Anglo-Saxon world. She has also been awarded the 2012's Distinguished Service Award for Asian Geography instituted by the Asian Geography Specialty Group, Association of American Geographers, USA. The award honours '*outstanding scholars in the field of Asian geography who have demonstrated exceptional scholarship as well as service to the specialty group'.*

METHODOLOGY OPEN ACCESS

Visual Culture, Photography and the Urban: An Interpretive Framework

Professor Gillian Rose[†]

Abstract

This paper offers a framework for understanding and reflecting upon the various ways that urban scholars have worked with visual representations of city spaces. It suggests that there are three main approaches: representing the urban, evoking the urban and performing the urban. The paper discusses the methodological implications of each of these.

Key words: photography, urban, visual culture, methodology

[†] Department of Geography, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK Email: gillian.rose@open.ac.uk

Introduction

There is of course an extraordinarily long, rich and complex history of visual representations of the city. From high art, to popular culture, across urban-related professions to the mass media, urban places have been encountered and pictured by all sorts of visual practitioners. The material and affective qualities of urban environments have thus been mediated by many kinds of images, and in turn our engagement with the urban has been shaped by photographs, paintings, drawings, films, plans, maps, digital visualisations and videos of real and imagined cities, among many other visual forms (see for examples: Boyer, 1994; Gordon, 2010; Lindner, 2010; Marcus and Neumann, 2007; McQuire, 2008; Nilsen, 2013; Tormey, 2012).

This short essay takes just one possible route through this complex intersection between visual culture and the urban. It focusses on one visual medium: photography. Photography is a useful medium through which to explore ways of conceptualising relations between the urban and visual media, because it has from its inception been used to picture cities; it is also a very widely distributed technology, used in a vast range of contexts by diverse kinds of users. The essay also looks at one particular kind of 'visual practitioner': scholars, whether professional social scientists or not, who use or make images as ways of understanding what 'the urban' is. The essay offers a brief framework for approaching the range of ways in which urban scholars have engaged with photographic images as a means of interpreting, evoking and performing city spaces.

Representing the Urban

How cities are represented in various visual media, from film to architectural drawings to photography to paintings, has been considered by a large literature from a range of disciplines. This scholarship, broadly speaking, focuses on how discourses about 'the urban' are both reflected in, and re-articulated by, visual images. Professional visual practitioners, such as architects, filmmakers, advertising or television companies, photographers or artists, generally create the images themselves that are studied in this body of work. A body of such work is taken and interpreted by the scholar to demonstrate how it represents a specific understanding of the urban.

Photography in particular has been used in many different ways in relation to the city. Some of the earliest photographic work showing city places appears highly descriptive: photography as a technology has very often been used as a means of objectively recording visual appearances. In the second half of the nineteenth century, for example, many urban development projects in Europe and its colonies were documented by photographers who recorded both the old areas of the cities being demolished and the process of building the modern infrastructure that took their place. And while many photographers from Europe travelled to photograph colonial cities, photographic technologies were rapidly taken up by equal enthusiasm by photographers in cities globally, who developed their own urban visions (Pinney and Peterson, 2003). The use of cameras to record a changing urban landscape continues into the twentieth century, of course.

However, most scholars of urban photography would not argue that the camera is ever objective. While it may faithfully record the patterns of light that fall onto its chemicals or photovoltaic cells, a photographer pointed the camera at a particular place, controlled the camera's sensitivity and exposure to that light, developed the print or uploaded the file to a computer, perhaps edited the photograph somehow, before sending it on to various audiences to make their own interpretations of it. Indeed, Elizabeth Edwards has recently dissected in detail the documentary impulse animating the widespread amateur photography movement in late-nineteenth and early-twentieth century England, arguing that their efforts to describe changing urban and rural landscapes were both driven by, and

constitutive of, nationalist discourses of nostalgic anti-urbanism (Edwards, 2012). Thus, their apparently descriptive work in fact also articulated a quite specific ideological position.

Hence, a recurrent theme in scholarly work on photographs as representations is the politics of that representation: how and what is pictured, by whom, and with what effects. There are many studies demonstrating that the work of representing urban spaces is by no means trivial. The work of re-presentation always represents both an urban scene but also a social scene, both in what is pictured but also in how it is pictured and what relation is established with specific viewers by the formal components of the image. Many scholarly studies have therefore taken photographs of different urban places and explored how their content and symbolic references affirm or contest other discourses defining the urban. Jane Tormey's recent book discusses this at some length (see, Tormey, 2012).

It is also important to note that this critical engagement with the politics of representation has taken visual form too. Many scholars of the urban have felt that, given the power of images in representing cities, they should respond in kind, with photographs. Allan Pred, for example, in his discussions of modernity's emergence in Sweden, uses collaged images to demonstrate the complex intersections of new and existing architectural and social forms (Pred, 1995). In a more contemporary vein, Yasser Elsheshtawy has written about Dubai and subtitled his book *Behind an Urban Spectacle* (Elsheshtawy, 2010); in it, he reproduces a few of the glossy marketing images through which Dubai visualises—and sells—itself to investors and tourists as a dazzling urban spectacle of sun, starchitecture and sand. However, he also includes a chapter of his own photographs, black and white images of the migrant workers whose labour sustains Dubai's economy and whose residential and work spaces are invisible in the city's dominant imagery. Here, images confront images: equally embedded in their relations with other forms of urban discourse, but suggesting very different versions of Dubai.

Thus, this approach to the visual representation of cities is valuable for its careful attention to images themselves, and for its critical capacity. In a world in which the urban—as well as the social and the economic—are increasingly represented visually, the interpretive tools offered by this approach are important and necessary.

However, this approach to visual materials is less effective in considering how specific images, or groups or genres of image, have specific effects with particular audiences in particular places and times. Its interpretation of what a photograph means tends to rely on a method drawn loosely from semiology and what I have elsewhere described as discourse analysis (Rose, 2011): it is a method that relies on a close reading of the photograph and other texts, figuring out what elements in the photograph relate to what other elements in, say, policy documents or the mass media or novels or some other discursive form. As an approach, it has little to say on what Appadurai calls the 'social life of objects' (Appadurai, 1986): how objects, let's say visual objects like a canvas, a photograph or a map, become embedded in circuits of social practice, and only have an effect in the context of that practice (Rose, 2012). It is not particularly interested in how images are understood by lively audiences. Hence efforts to counterpose critical visual work to oppressive forms of representation often seem to assume that their criticality is self-evident: that photographing workers, for example, is inherently to assert the value of labour. Paradoxically, this ends up not so distinct from arguments that claim that the photograph speaks for itself, and is therefore somehow objective.

Finally, before moving on to other bodies of work that assert different relations between photography and the urban, it is important to mention a specific tradition of photographing the built urban environment that exists within the social sciences. Some urban scholars also use photographs in order to document change

to the material urban landscape. Usually they are linked explicitly to a body of written urban scholarship, and their aim is to describe, visually and systematically, how a cityscape has changed over time.

An example of this kind of work is the project *Invincible Cities*, curated by Camile Jose Vergara and Howard Gillette. Vergara has been taking photographs of the New York neighbourhood of Harlem for years, and they are now all on the project's website, along with photos of Camden, New Jersey, and Richmond, California. The photographs are organised by location (and also by building type), and it is therefore possible to search the site and find a series of photographs stretching over two decades or more of a particular building or view. These scholars do not claim that their photographs are a neutral record of urban change, however. They concur that photographs—like any other form of image—are never windows onto a real world. Photos are created in a specific context: in this case, debates among urban studies scholars about the nature of change in urban environments. This is evident in a number of ways in Vergara's project. The *Invincible Cities* website has a long essay by Vergara on the changes visible in his Harlem photographs; he is clear that his photos construct an interpretation of that change, which is driven by globalisation and its persistent inequalities. While that particular project leaves the precise link between the photographs taken and that interpretive framework unclear, there are other projects that have addressed that link more directly. Charles Suchar, for example, in his study of gentrification in Chicago, has developed the notion of a 'shooting script' as the bridge between the social-scientific concept of 'gentrification' and the photographs he takes as a record of its material manifestations in the landscape (Suchar, 1997). Scholars using photographs of urban places in this way, then, are not doing so naively. They understand their form of photography to be representational, and its representationality is articulated through explicit relations to other texts. In this case, the texts are those works of social science that offer concepts with which to understand change in urban built environments.

This body of social science work is perhaps not as exciting as some other forms of urban scholarship that engage with visual media. Its images are not often particularly visually exciting or even aesthetically attractive. That is not their point. Their point is to work as a form of evidence for material change, a fuller and more detailed form of evidence than verbal description can provide. In addition, as evidence, their epistemological status is subject to explicit discussion and clarification. This, I think, is very important for social scientists interested in using visual images. Simply saying 'our culture is visual now, so we need to take photographs' is not an adequate methodology, as this body of work demonstrates. The links between concepts, methodology, evidence and interpretation need just as much puzzling over when the evidence is visual as it does when the evidence is, say, an interview transcript or a policy document.

Evoking the Urban

The previous section discussed a large body of work that is particularly focused on the representation of urban spaces. Clearly, there are many genres of photography that have been taken by urban scholars to be representational: documentary photography, photojournalism, art photography, and so on. Interpreting photographs, or other visual media, as representational is a methodological stance towards the image, not one driven by the image itself. Hence, as theoretical shifts create new methodological problematics, existing photographs can be interpreted differently—and photographs of city spaces can be created in ways that assert a different relation between the city and its imaging.

In recent years, two such shifts are evident to me. The first, which the next section will discuss, is the embedding of image-making and sharing in a wide range of everyday urban practices. The second, to be discussed now, is an approach to creating images of the urban has become more and more popular among

scholars influenced by the move in urban theory towards a concern with the embodied experiencing of urban spaces. This is an interest in the experiential and the sensory aspects of the urban: urban spaces as felt through the skin, smelt through the nose, seen through the eyes. A number of shifts has driven it in contemporary social theory, including work on embodiment, the sensory and the affective. In this work, visual images are used as a means less to decode the *representation* of urban spaces by linking them to other discourses—whether visual or textual, popular or social-scientific—but rather to *evoke* their affective feel. The claim is made in this scholarship that images—usually photography and video—are especially effective ways to do this. Images are seen as a means to convey visual affects but also to hint at tactile, auditory and olfactory affects; and of course video can also carry sound effects. The work of Sarah Pink has been very influential here (please see, Pink, 2009; 2011; 2012).

This argument suggests that images are not always and only representational. For scholars using photographs and videos to evoke urban affect, indeed, images are more-than-representational. Photographs and videos can convey feelings, emotions, states of mind, affective states, sensual effects: and all these are important in understanding the lively and enchanted materialities of urban places. These feelings and responses are difficult to express in words, but, according to these scholars, a photograph can evoke them. Photos are thus important analytical tools for scholars of urban affect.

Alongside this theoretical move towards an interest in the experiencing of urban spaces, there has been another shift of a different kind: the emergence of digital forms of creating, editing and distributing visual images. At the same time as urban scholars began to start thinking about urban places as affective fields or sensory landscapes, so digital cameras and websites for sharing photography and video like YouTube, Vimeo and Flickr have become pervasive. For some scholars, these two shifts are related. Mark Hansen, for example, argues that digital technologies necessarily entrain bodies—and are therefore affective—because bodies are the site through which digital data is processed (Hansen, 2004).

I prefer to keep the two shifts—the theoretical and the technological—analytically distinct. It is clearly the case that efforts to use photographs to evoke the sensory aspects of urban life continue to be made using 'analogue' technologies like disposable cameras and prints of photographs in journals. For example, Tim Edensor's writing in his book on derelict urban spaces is interspersed with his black and white photographs from those spaces: uncaptioned, they insert a powerful feeling of melancholy abandonment into his text as they show vacant buildings, the detritus of their past human occupation, and their slow succumbing to the plant life that is taking over these spaces (Edendor, 2005). The affective use of photographs depends more on theoretical orientation than ontological essence, it seems to me.

Nonetheless, it is also the case that digital technologies are enabling some urban scholars to experiment with new visual forms, and with new forms of distributing their work; and these new channels are allowing more scholars to use photographs for affective ends. The online distribution of photographs, for example (including online versions of print journals), allows urban scholars to work with colour photography in ways that has not until now been possible in an academic context. And the availability of cheap video editing software—as well as online distribution platforms—has made the making of videos much easier for social science scholars. Moreover, multimedia software and online platforms also allow for new forms of scholarly engagement with places. For example, Roderick Coover has discussed a number of examples of what he calls "digital panoramic environments" (Coover, 2011). Digital panoramic environments take a visual form that has historically been used to represent city landscapes—the panorama—and problematise its specific viewpoint by

layering in other images, text and sounds. Exposition—the traditional academic voice—can thus be supplemented, as Coover says, with poetry and narrative, music and games, ambient sound and graphics. Clearly, the multimodality enabled by such software technology allows the urban scholar to evoke more directly, perhaps, the colours and sounds and feel of urban spaces. Coover also argues that it dissolves the hegemony of the representational, as its explicit engagement with a range of forms of engaging with places makes the representational just one among several epistemological possibilities, possibilities which also include the evocation of the more-than-representational.

These are important arguments which are radically different from the body of work discussed in the previous section. There is no engagement with notions of representation in this work; there is little interest in discursive contexts, or the histories of visual genres. The assertion that photographs are necessarily more-than-representational is an ontological claim about the nature of the photograph as a specific medium. As Roland Barthes so famously did many years ago, these scholars ask: what is the essence of photography? (Barthes, 1982). And their answer is that "the visual has an explicitness and immediacy which delivers a multisensory impact" (Spencer, 2011, 32). This response suggests that looking at photos requires an aesthetic sensibility rather than a semiological/discourse-analytic one: a response that takes the form of a bodily and emotional stance rather than interpretive or hermeneutic work.

This essay is not the place to attempt to adjudicate between these very different approaches to photography. However, just as approaches to photographs as representational have their lacunae, so too do deployments of photographs as more-than-representational.

Of course, one issue for urban scholars turning to visual modes not only to create evidence but also, in effect, to convey their analysis, is that they require the sophisticated skills of a visual practitioner—and few have them, or have the time to develop them. Hence the increasing interest in collaborating with artists and filmmakers to convey senses of urban place (and such collaborations are also welcomed by many visual artists seeking conceptual frameworks and indeed funded placements for their own work). To date, however, there has been little explicit reflection in the social sciences on this process of collaboration between two different fields of professional practice, and even less discussion about what might constitute a 'successful' collaboration. The criteria for such a 'success' are complex, and differ between urban studies and fine art: what may be a successful project in one field may be illegible in another. Indeed, the whole question of how different spectators encounter more-than-representational images is not addressed in this move towards the visual evocation of affective urban spaces.

There is also the difficult question of how such academic work—work that engages with the non-representational by experimenting with what for academics are unconventional media—is evaluated by academic peers as 'social science'. There are two issues here. One is simply getting such experiments out to social science audiences so that they can be discussed widely. At the moment, most such experimental projects seem to be hosted on individual project websites; as far as I am aware, there are no sites that offer to host a range of different social-science-related projects and thus act as an online 'journal' for various multimedia projects (though the site photomediationsmachine.net has begun to act as such a site for more digital humanities-related work). Equally pressing, there is very little debate in the social sciences so far about how these experiments might be evaluated as social science. What counts as a robust, significant online multimedia output? And how does that relate to the aesthetic response that images as evocations seem primarily to require?

A further question often addressed to scholars using more-than-representational images to evoke urban experience is how such work

might be understood as 'critical' in some way. While scholars such as Nigel Thrift and Gernot Böhme have been arguing for some time that contemporary capitalism is itself investing heavily in the creation of affective brands, commodities and environments (Böhme, 1993; 2003; Thrift, 2011; 2012), it is not clear that the visual evocation of such affects can in and of itself challenge that 'aesthetic economy', to use Böhme's phrase. Such a challenge, according to those persuaded by these arguments, is not simply a question of 'resisting' the affective in some way. Instead, it requires the twisting, refracting, mediating, multiplying of the affective. If the mission of social science is at least to question taken-for-granted forms of social organisation, however, more experimentation exploring effective forms of such multiplication are necessary.

Performing the Urban

One thing shared by all the scholarship this essay has briefly reviewed so far is an overwhelming focus on images produced by what might be described as 'expert' visual practitioners. Most of this scholarship works with visual materials created by highly skilled artists, cartographers, architects, visualisers, photographers and filmmakers; some has certainly addressed amateur practice but most has not.

However, certainly since the invention of relatively cheap cameras at the end of the nineteenth century, photography in particular has also been a field inhabited by vast numbers of relatively technically unskilled individuals, who have nonetheless created huge numbers of images. Amateurs organised into film or camera clubs have taken some of these images. Many other images taken in everyday situations are usually described as 'family photography', and many family photo collections also contain images of urban spaces taken on holidays and on family outings. In addition, with the advent of digital cameras and cameraphones, the numbers of photographs of urban spaces now being taken has increased enormously. The emergence of digital forms of making, editing, storing, displaying and circulating into popular photographic practice in particular is the third area this essay addresses.

How might we think digital photography and the urban together? Again, this is not simply a question of new technologies driving a new relationship to the urban. For digital cameras participate in many different photographic practices, of course. They are used in photographic art practice as a means of documentation. The rise of 'citizen journalism' and the enthusiasm of the mass media for photographs taken not by professionals after events have unfolded, but by amateur witnesses of events as they happened, has not dimmed. They can even be used, with apps and hardware attachments, to take sophisticated photographs and to make and edit videos and films. Moreover, in terms of family photography, there has been little change between what was done with analogue cameras and what is now done with digital cameras: photographs are still taken by family members, of other family members, for circulation and display primarily among members of that same family.

In terms of sketching a third analytical frame for thinking about the relation between photography and the urban, though, I want to focus on a specifically digital form of photography, and suggest a specific way in which it is related to the urban: by performing it. In particular, I want to focus on the imbrication of photographs in many forms of social networking. Facebook, Instagram, Snapchat and Vine are all immensely popular sites and all are full of photos and videos, usually taken with cameraphones. Now, clearly the subject matter of these images is not often particularly 'urban'. However, their extensive use in urban spaces alongside other forms of online data—particularly various kinds of mapping apps—suggests that there may be an emerging imbrication of the photographic with the urban that deserves further scrutiny of a particular kind.

Geographers have paid attention for some time to the ways in which digital technologies are allowing popular and activist engagements with

urban maps. They are interested in the ways that online maps can be used as means of enabling and organising different forms of place representation, by allowing photographs to be added to specific locations, for example. This has spawned discussions of "neogeography", defined as map-making that does not depend on the distinction between professional and amateur cartographers (Wilson and Graham, 2013). It has been suggested that these particular practices tend to be about competing claims to know the truth of what a place is really like, and are probably best approached in terms of the first analytical frame presented in this essay: that of the politics of representing urban spaces (Elwood and Leszczynski, 2013).

However, there is another way in which popular photography—especially cameraphone photography—and urban spaces can be thought of together, which concerns the everyday social practices through which urban life is performed. This approach draws on a body of work interested in social practice: in the routine doings, sayings and feelings through which so much of social life happens. A theoretical interest on the practices of urban life focusses on the specific modes of talk, comportment, sensibility and gesture that sustain city life. In addition, it is clear that digital technologies that use images are increasingly integrated into those practices that perform the urban.

Digital technologies—especially smartphones—are becoming more and more central to the performance of urbanism, and particularly to ways of inhabiting urban spaces. These forms of inhabitation—of embodied practice, modes of comportment and sociability—are increasingly mediated by smartphones and specifically by the images that they carry. Here then we might think of cameraphones not as representing or even evoking the urban—though they can be seen to do these things too—but as enabling and mediating its performance. Given the frequent laments that online devices are diminishing public sociability, this may seem an unlikely possibility. Moreover, indeed, some uses of cameraphones may indeed contribute to a lack of attention to and engagement with the actual location of the cameraphone and its user. Many other forms, though, are about locating places, discussing places, arranging to meet in specific places, reviewing places and of course looking at photographs of, and photographing places (Graham et al., 2013). In this situation, the locations and social relations that enact the urban are being constituted through a specifically digital medium, that of the social network, with its reliance on images, brief texts, comment boxes, 'likes' and reviews. This is a lively, networked urbanism, constantly refreshed, updated and renewed, its landscape configured by multiple users enacting a network, in large part by taking and distributing simple photos.

This is an emergent form of urban visual culture, and its parameters remain uncertain. It offers some significant challenges to social science methodologies, however, in its scale, its dynamism and its complex negotiation between material places and their mediation by the affordances of multiple digital networks. It suggests that the qualitative methods of semiology, discourse analysis and aesthetic sensibility required by approaching photographs either as representations or as evocations are inadequate: methods are needed that can deal with the sheer numbers of images involved in these online networks. Methods are also needed that can engage with the dynamics embedded in the software platforms that structure these sites, as Jean Burgess and Joshua Green point out in their study of YouTube (Burgess and Green, 2009). Methods are needed that can engage with the social practices through which such mapping occurs; thus far, various versions of ethnographic participant observation have been deployed, but there are limits to how this method can engage with people distributed over distances, communicating via small screens (Kitchin et al., 2013). Finally, methods are needed that can engage with the ways in which so many of these photos that perform the urban in this way are taken casually and looked at casually. They are the visual

equivalent of the phatic forms of communication that Vincent Miller argues are typical of the internet more generally: "communications which have purely social (networking) and not informational or dialogic intents" (Miller, 2008). That is, these are images that do not convey meaning or expect engagement from their viewers: they are made simply to be used on a social networking site as a means of maintaining that social network. Neither the attentive interpretation required if an image is seen as a representation, nor the affective stance called for by approaching images as affective, are necessarily part of how these casually-created images are used to perform social relations. All this poses challenges to social scientists interested in studying photographs and urban visual culture; it also suggests that there is more work to be done theorising the relation between the visual and the urban that is about neither representation nor evocation.

Conclusions

The relation between photography, or any other visual technology, and the urban, has never been a relation between two distinct and knowable entities, such that 'the camera' photographs 'the city'. The relation between these two is much messier than that. Photographs interpret the city for us, and as urban scholars we understand the work that they do through both theoretical and conceptual lenses. Clearly, there are many ways in which photography in particular intersects with urban spaces. This short essay has argued that photographs can be understood as having three main relations with the urban. They can represent urban places; they can evoke urban places; and they can perform urban places. Each of these relations invites a rather different methodological approach from social scientists interested in the mediation of urban spaces by visual technologies. Understood as representational devices, photographs require interpretation in order that their meaning be decoded; understood as evocative devices, photographs require an aesthetic sensibility in order that their affect can be experienced; and understood as performative devices, photographs require an engagement with the dynamic network of social practices that their creation and distribution enact. What each approach shares, however, is a conviction that the photographic, the urban and the social-theoretical cannot be understood apart from one another.

References

Appadurai, A. (1986). *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press.

Barthes, R. (1982). *Camera Lucida*, trans. R. Howard, Jonathan Cape, London.

Bennett, J. (1997). 'The Enchanted World of Modernity: Paracelsus, Kant, and Deleuze', *Cultural Values*, 1(1): 1–28.

Böhme, G. (1993). 'Atmosphere as the Fundamental Concept of a New Aesthetics', *Thesis Eleven*, 36(1): 113–126.

Böhme, G. (2003). 'Contribution to the Critique of the Aesthetic Economy', *Thesis Eleven*, 73(1): 71–82.

Boyer, M.C. (1994). *The City of Collective Memory: Its HIstorical Imagery and Architectural Entertainments*. London: MIT Press.

Burgess, J and J. Green. (2009). *YouTube: Online Video and Participatory Culture*, Polity, Cambridge.

Coover, R. (2011). 'The Digital Panorama and Cinemascapes', in *Switching Codes: Thinking Through Digital Technology in the Humanties and the Arts*, eds. T. Bartscherer and R. Coover. Chicago: Chicago University Press, pp.199–217.

Edensor, T. (2005). *Industrial Ruins: Spaces, Aesthetics, and Materiality*. Berg, Oxford.

Edwards, E. (2012). *The Camera as Historian: Amateur Photographers and Historical Imagination, 1885—1918*. Durham NC: Duke University Press.

Elsheshtawy, Y. (2010). *Dubai: Behind an Urban Spectacle*. London: Routledge.

Elwood, S. and A. Leszczynski (2013). 'New Spatial Media, New Knowledge Politics', *Transactions of the Institute of British Geographers* 38(4): 544–559.

Gordon, E. (2010). *The Urban Spectator: American Concept Cities from Kodak to Google*. Hanover, NH: Dartmouth College Press.

Graham, M., M. Zook, and A. Boulton. (2013). 'Augmented Reality in Urban Places: Contested Content and the Duplicity of Code', *Transactions of the Institute of British Geographers* 38(3): 464–479.

Hansen, M.B.N (2004). *New Philosophy for a New Media*. Cambridge, MA: MIT Press.

Invincible Cities, Rutgers Ford Foundation, available at: http://invinciblecities.camden.rutgers.edu/intro.html (accessed 20 January 2014).

Kitchin, R., J. Gleeson, and M. Dodge (2013). 'Unfolding Mapping Practices: A New Epistemology for Cartography', *Transactions of the Institute of British Geographers*, 38(3): 480–496.

Lindner, C. (2010). *Globalization, Violence, and the Visual Culture of Cities*. London: Routledge.

Marcus, A and D. Neumann (eds), (2007). *Visualizing the City*. London: Routledge.

McQuire, S. (2008). *The Media City: Media, Architecture and Urban Space*. London: SAGE.

Miller, V. (2008). 'New Media, Networking and Phatic Culture', *Convergence: The International Journal of Research into New Media Technologies*, 14(4): 387–400.

Nilsen, M. (ed.). (2013). *Nineteenth-Century Photographs and Architecture*. Ashgate, Farnham.

Pinney, C. and N. Peterson. (ed.) (2003). *Photography's Other Histories*. Durham NC: Duke University Press,

Pink, S. (2009). *Doing Sensory Ethnography*, 2nd edition. London: SAGE.

Pink, S. (2011). 'Multimodality, Multisensoriality and Ethnographic Knowing: Social Semiotics and the Phenomenology of Perception', *Qualitative Research*, 11(3): 261–276.

Pink, S. (ed.). (2012). *Advances in Visual Methodology*. London: SAGE.

Pred, A. (1995). *Recognizing European Modernities: A Montage of the Present*. London: Routledge.

Rose, G. (2012). 'The Question of Method: Practice, Reflexivity and Critique in Visual Culture Studies', in *The Handbook of Visual Culture*, eds. I. Heywood and B. Sandywell, Berg, Oxford, pp. 542–558.

Rose, G. (2011). *Visual Methodologies: Interpreting Visual Materials*, 3rd edition. London: SAGE.

Spencer, S. (2011). *Visual Research Methods in the Social Sciences: Awakening Visions*. London: Routledge.

Suchar, C.S. (1997). 'Grounding Visual Sociology in Shooting Scripts', *Qualitative Sociology*, 20, 33–55.

Thrift, N. (2011). 'Lifeworld Inc—and What To Do about It', *Environment and Planning D: Society and Space*, 29(1): 5–26.

Thrift, N. (2012). 'The Insubstantial Pageant: Producing an Untoward Land', *Cultural Geographies*, 19(2): 141–168.

Tormey, J. (2012). *Cities and Photography*. London: Routledge.

Wilson, M.W. and M. Graham (2013). 'Neogeography and Volunteered Geographic Information: A Conversation with Michael Goodchild and Andrew Turner', *Environment and Planning A*, 45(1): 10–18.

METHODOLOGY OPEN ACCESS

Grounded Theory Approach in Social Research

Dr Venkat Pulla[†]

Abstract

This paper discusses Grounded Theory, which is one of the newer methodologies becoming popular with social researchers since its evolution in the late 1960s. The paper discusses the principles and processes of the Grounded Theory and then explores the nature of codes, coding process and the concept of saturation. It then goes on to discuss the pros and cons, arguments for and against the use of Grounded Theory methodology in social research and explores the applicability of this methodology in producing sound theoretical basis for practice. Selected narratives from the author's recent studies are used to explain the processes of Grounded Theory methodology.

Key words: Grounded Theory, qualitative research, data analysis, inductive research

[†] Senior Lecturer, Coordinator, Social Work Discipline, Australian Catholic University, Australia,
Emails: venkat.pulla@acu.edu.au and dr.venkat.pulla@gmail.com

Introduction

Social research concerns itself with people and those perplexing philosophical questions regarding knowledge, truth, values and being, and how these aspects govern human behaviours and activities (Somekh et al., 2011). In essence, social research allows us to discover who we are as people, why we act the way we do and what may be some of the outcomes of these actions and behaviours concerning others in our society and environment and the systems surrounding all of us. Thus, "social researchers seek to identify order and regularity in the complexity of social life; they try to make sense of it" (Ragin, 1994: 31). Social research includes variables such as time and space that our interactions occupy. Differing from the stringent methods of scientific research with its clear parameters and measurability, social research allows for interpretive analysis that incorporates how people think, feel and act. This is not to say that social scientists do not make measurement, they do. With the careful collection of data and subsequent interpretation of this data, findings provide considered answers to questions about human behaviour, people, communities and societies. I believe that Grounded Theory is a research method that seeks to develop theory that is grounded in data systematically gathered and analysed, and it is imperative in the method that a continuous interplay between data collection and analysis occurs throughout the research process.

Despite being in vogue for the last fifty years or less, Grounded Theory has become "the discovery of theory from data— systematically obtained and analysed in social research" (Glaser & Strauss, 1967:1). The methodological thrust of Grounded Theory is towards the development of theory, without any particular commitment to specific kinds of data, lines of research or theoretical interests. Rather, it is a form of doing qualitative analysis that includes a number of distinct features and uses a coding paradigm to ensure conceptual development and density (Strauss, 1987).

The first work in the new tradition of Grounded Theory was carried out with dying patients and resulted in a publication of *Awareness of Dying* (1965) by Glaser and Strauss. Subsequently, they released a methodology book titled *Discovery of Grounded Theory* (1967). Both of these are seminal works that have allowed for Grounded Theory to grow over the last five decades. Thus, a Grounded Theory is one, which has developed from the use of Grounded Theory methodology, as was intended by the theory developers who made clear delineation between the Grounded Theory method and the resultant theory (Bryant and Charmaz, 2007). Although for the purpose of this paper, we suggest that Grounded Theory refers to both the process or methodology and the resultant theory. This allows us to view Grounded Theory as a theory generating research methodology, even beyond the context of this paper that allows for the incorporation of scientific objectivity on one hand and the meticulousness into traditional subjective qualitative methodologies on the other to allow in for both credibility and validity in research outcomes (Hennink et al., 2011). With the use of Grounded Theory, we can see then the importance of maintaining traditional scientific precision for validity coupled with considered elucidation of perhaps not so readily measurable aspects of human life, thoughts, feelings, behaviours and interactions, and the meanings that people place on their life experiences.

It is expected that as a general rule, researchers that deploy Grounded Theory approach make sure that they have no preconceived theoretical ideas before starting on their research project. This does not mean that we ignore the literature review. The intention clearly is to make sure that researchers are not constrained by literature when coding. Researchers clearly avail the opportunity not to impose concepts on the data and instead wait for those concepts to emerge from the data. In other words, the research does not begin with a theory, the theory is the outcome. It is a set

of grounded concepts integrated around a central theme to form a theoretical framework that explains how and why persons, organisations, communities or nations experience and respond to events, challenges or problematic situations (Corbin and Holt, 2011).

Coding in Grounded Theory Research

Coding is an important phase in Grounded Theory Research. 'A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data' (Saldhana, 2012: 1-31). The following example is about a code generated from the description given by a research participant

Descriptive code

Housing

The bamboo poles, bamboo mat walls, bamboo made beds, plastic sheets and thatched roofs had clumsily protected us from heat and rain

The following illustrations will assist our understanding. In recent study, the author and his colleague were trying to understand the sense of 'identity' and or 'belonging' of the Lhotsampa community of Nepalese origin driven out of Bhutan in the late 1980s, accused of being illegal migrants, who has taken refuge in a third country after languishing in refugee camps in Nepal for more than two decades. The study was researching intergenerational perceptions and the precipitating factors behind those perceptions about home country and settlement in a third country. We started our journey in Grounded Theory. We had no preconceived logically deduced hypothesis. We constructed our codes as we moved on. Our sampling was aimed towards theory construction rather than population representativeness. We did conduct limited literature review after developing our independent analysis (Charmaz & Bryant, 2009). Just as we learned from our data, our research participants also made sense of their experiences. We coded our data based on bits of information that existed beyond the data such as the ethnography of the Lhotsampas that came through in our literature review. Our research as a result of 'intensive interviews' allowed us as interviewers to

- Go beneath the surface of the described experience(s)
- Stop to explore a statement or topic
- Come back to an earlier point
- Validate the participant's humanity, perspective or action (Charmaz, 2009: 26)

Interviews are contextual and remain negotiated that allow participants to recount their concerns without interruption. 'That is interesting, tell me more about it' is an approximate sentence after a nod that creates an ambience for new information to emerge from research participants—the result is a construction or a reconstruction of the reality (Charmaz, 2009). Interview stories do not reproduce prior realities (Murphy & Dingwall, 2003; Silverman, 2005). There is a clear difference between an intensive interview process and an ordinary disclosure in everyday life. Even research participants have clear opportunities to reflect, grow and receive their light-bulb movements and feel rewarded.

Ram Rani Dahal began narrating her 18 years of living in refugee camp.

> 'life and experience in camps had been painful not having enough to purchase good food and clothing; fear of accidental fires, rain and flooding. The bamboo poles, bamboo mat walls, bamboo made beds, plastic sheets and thatched roofs had clumsily protected us from heat and rain. We made several attempts to repatriate to Bhutan our country of origin but failed' but biggest of all always haunted by the identity crisis—where do I belong to?' (Pulla, 2014)

What do we learn from the above narrative? Identity questions were the research questions hence logically main codes in this research. However, new melancholic information that relates to 18 years of existence in the camps comes to surface. Although we are aware that

they have been living in camps, but were not significant to us in the original research questions around identity, we are compelled to ignore this valid information from research participants. "A researcher has a topic to pursue. Research participants have problems to solve, goals to pursue and actions to perform and they hold assumptions, ideas and feelings" (Charmaz, 2006: 33) Therefore, our research questions and mode of enquiry in Grounded Theory privilege us to shape our subsequent data and analysis. It allows us to reshape research questions and focus on the direction of the enquiry.

Unlike other qualitative methodologies, Grounded Theory does not test questions with a theory, it analyses data to produce a theory that answers those questions. Of importance and worthy of note, is that whilst Grounded Theory is a theory-producing method, the antithesis of other methodologies which begin with a theoretical underpinning, it can incorporate a general underlying belief or a value system. It is such an underlying belief that influences the questions that researchers ask and the structure that the research takes. It is important then to acknowledge these beliefs and values at the beginning.

We will revisit the previous illustration of the Lhotsampa study. The researchers were aware that the children of the Bhutanese refugees, born in Nepal in the last two decades did not have any legal identities—neither Nepalese nor Bhutanese, which by itself, is an issue for them. The study was attempting to understand the intergenerational perceptions around their identity but the participants of research led us into the precipitating factors behind their decisions to leave Nepal and allowed us to understand their perceptions about home country and settlement in a third country. We learnt about their eagerness to a futuristic resettlement in a third country possibly was closely linked to their perceived social status in Nepal while they continue to languish in the camps in eastern Nepal. When we heard a young participant say the following, we began to realise that we have new codes to add to and new orientation in theory to explain:

> I know nothing of Bhutan and have nothing to be called as mine in Bhutan. The most influential factor for my decision regarding resettlement is the fact that I do not want to live hard non-existent life like my parents and grandparents here in Nepal camps. I want to be regarded and respected as 'somebody'. I will build my own identity in new place—a new identity.

The above illustration from our research confirms that as researchers we were not focused on testing hypotheses taken from existing theoretical frameworks, but rather open to developing a new 'theory' grounded in empirical data collected in the field. As such, the data of the young participant above has deliberately privileged our theoretical orientations.

Social researches quite logically focus on a certain amount of literature review even in all qualitative research designs, and often mentors suggest to us that it is through a literature review we identify gaps and it is in those gaps there are myriad opportunities for research. However, early on, Glaser and Strauss (1967) explicitly advised against conducting a literature review in the substantive area of research at an early stage of the research process: "[a]n effective strategy is, at first, literally to ignore the literature of theory and fact on the area under study" (1967: 37). The idea I presume emerges from the notion not to be stormed by extant theoretical constructs and hypotheses but to allow exposure to naturally emerging categories from the data. The argument appears reasonable and as such sustained as ploughing early may be a "potentially stifling process" (Dunne, 2011: 114). Unlike most strategies of inquiry, Grounded Theory demands that data collection and analysis occur concurrently, rather than in a linear sequence affording a "dynamic interplay of data collection and analysis" (Payne 2007: 68). Having said this I do not advocate a puritanical approach to Grounded Theory-

based research. To me, a certain prior review of the area is fine as long as it does not consummate the researcher, and the researcher is sincerely open to the data to lead him into new pastures for theory development. I also do not advocate a Grounded Theory approach to a novice in social research, but certainly agree with Charmaz's suggestion that delaying the literature review can help "to avoid importing preconceived ideas and imposing them on your work" (2006: 165) rather encourages you to articulate your ideas.

Principles and Processes of Grounded Theory

Grounded Theory in reality provides a process for developing theory from research and is underpinned by the following principles:

- Data analysis is non-linear and revolves in a circular process, which may involve the researcher repeating or overlapping which allows for a depth in the research data.
- Interviews are transcribed verbatim, allowing for an emic perception of the data, an understanding and interpretation of the interviewees' own perspective.
- Data collection and analysis are interlinked, thus allowing for the circular process, which allows for not only analysis but also effectively, reanalysis and reinterpretation ensuring valid end product.
- Inductive analysis is used which does not make assumptions and allows the data to narrate the story.
- Continuing comparison is used to interpret data and evaluate concepts that arise, then further collect and interpret data, and so on in a circular motion.
- Analytic memo writing is used to track the theory development process.
- Analysis involves more than description and involves explanation and eventually theory (Hennink et al., 2011).

With the above principles at the core of the methodology, we must then discuss the process of Grounded Theory research. With a starting point and outcomes that differ from other methods of qualitative research, Grounded Theory must inevitably have a process(es) that distinguish it from other qualitative research methodologies. As such, Grounded Theory has a set of tasks that are repeated throughout the research process to produce the cyclical nature of Grounded Theory with the result of producing data that is thoroughly analysed. Overall, while it presents guidelines for collecting and interpreting data for the production of theory, these guidelines remain flexible and intended to be so to allow the researcher to react to the data as it is collected and analysed (Hennink et al., 2011). The set of original tools intended by Glaser and Strauss for Grounded Theory methodology were the following:

- Verbatim transcripts
- Anonymity
- Development of codes
- Definition of codes
- Coding of data
- Describe data
- Compare data
- Categorise data
- Conceptualise
- Theory development

In keeping with the flexibility and circular nature of Grounded Theory methodology, these steps may be followed in order, or not, and also reapplied as often as is necessary until the theory is produced. The key factor is the data, the collection with acknowledgment of researcher's beliefs and values, the analysis and interpretation of the data and the theory that arises from the data. In this way, we can see the evolution of theory about themes of social research that is discovered from within the data itself rather than imposed by ideas and values and beliefs of a researcher who is aiming to fit data to a research question. One could argue here quite validly that Grounded Theory presents perhaps the best means of discovering truthful theory from the real source of knowledge.

Data, Codes and Coding

The process of Grounded Theory begins with and is inextricably linked to data collection. This data takes the form of verbatim interviews (Hennink et al., 2011). The researcher must ensure that the interview is transcribed exactly as recorded. This is crucial for Grounded Theory where the end result, the theory, is derived not from concepts or ideas held by the researcher, but evolves from the ongoing, inductive motion of data collection and analysis (Oliver, 2012). Unlike other methodologies, the analysis can and should begin as soon as data is collected (Oliver, 2012). Upon receipt, the data is coded (Oliver, 2012), and every line is coded in detail in a process known as microanalysis (Hennink et al., 2011). Each interview transcript is coded in this way with microanalysis more beneficial at the beginning of the research to develop a list of concepts for further analysis. Strauss & Corbin (2008) describe this process as the means to break open the data so as to ensure all possible meanings are disclosed (Oliver, 2012). The whole process is qualitative, and coding then suggests naming segments of data with a label that simultaneously categorises, summarises and accounts for each piece of data. In the inset below is an example of narrative on the right side and the possible codes that we carried in the study example, Figure 1.

The logic of initial coding allows us to the questions:

- What is the data suggesting? Or "pronouncing" (Charmaz, 2006: 47)
- From whose point of view?
- What theoretical categories are emerging from the data under study?

Thus, initial coding sticks close to data and goes beyond any pre-existing categories in the data. The attempt is to code with words that reflect actions. This certainly is not to suggest an empty head but an open mind.

Memo Writing

Journey into research is expected to move on to the next stage of what is called memo writing. Memos are written throughout the research as a way to capture what the researcher is thinking about the data, to track concepts for further explanation and as a means of further analysis of the coded data (Hennink et al., 2011; Oliver, 2012). Eventually the memos can become data in and of themselves (Oliver, 2012).

From this data collection and concurrent analysis, a process known as theoretical sampling is then utilised to source new data with which the emerging concepts can be further explored (Oliver, 2012). It is this cyclical motion of data collection, immediate analysis and further collection that forms the very basis of Grounded Theory. It is this process that makes Grounded Theory unique in the vast array of possible research methodologies for social research. Another term that we use in Grounded Theory is called saturation by which it is suggested that the research process has ceased to yield no more new data (Morse, 2007). When the researcher feels that no new information is to be gained regarding a particular concept from the collected data, analysis can move forward to the next step and sampling ceases. The researcher knows when saturation has been reached when all the respective data has been analysed, the researcher understands all that has been identified, and there is consistency across the many forms (Morse, 2007).

Pros and Cons of Grounded Theory

Inevitably, Grounded Theory has both admirers and detractors. It is the stance of this paper that Grounded Theory presents an appropriate methodology for social research as well as a valid and practicable means of developing theory, but of course, as well it should be, it is the nature of the social researcher to explore these arguments. To consider the detractors first, it is necessary to explore the following criticisms of Grounded Theory, that it is a lengthy and often ambiguous process and that it places too much emphasis on the source of knowledge resting in social constructions.

Figure 1: Grounded Theory Coding Example

	Three Narratives:
Participants raise many open-ended questions—the raised questions have no answers. For many refugees resettlement is not an option. Leaving forever their national identity. Shifting to an alien land is traumatic. The senior population requires a separate analysis.	"I had always dreamt of returning home someday. We fought, we hoped. We patiently waited. And now I am confused like I never was in my life' (pauses a while, and continues to talk)—I am 64 years old. How would I describe how I feel about my current state of my mind regarding going to America? To me America is a compulsion, the last resort. I do not know what else I can do for my children. I do not want them to go through the same fate as I did. I lost my wife in the fight and now I cannot sacrifice their future for me. I will go with them for their better life." His voice fades and breaks.
Their reluctance and agony and their dilemmas. They want to be with their family. They do not want to go to foreign lands. A 'No choice'—choice of either languishing in Nepal camps or moving to another country. Ageing; Age related degenerative health Increased dependency on children to care	A woman participant aged 60 said, "A few weeks back, there was a huge discussion at my house regarding applying for resettlement. I resisted for years and now I am awaiting my name in the list. My cousins and sister-in-law are all in America. They are happy there and they have been asking me to come as well. I do not know what to do now when my sons have already applied for resettlement. I am old and in no way can support myself now. I have to be with my family. For that, I have to go with them. I am in the biggest dilemma of my life. I want to return home (Bhutan). But do I have a choice?"
Suffering in camps depicted as humiliation and indignity and degrading and dividing People	A third participant said, "The UNHCR advocates for the protection of human rights of the refugees like us, or that's what I heard. However, I do not feel like being protected. I feel like I am the dirt on a marble floor waiting to be swept away. These ideas of resettlement are dividing us. A deep hole is being dug between us. Our unity of refugees is being degrading in many ways. My identity is Bhutanese. I am against the idea of forever leaving Bhutan. Although, I feel that returning to Bhutan is a distant dream for me and others like me. I still hold on to my tiny bit of hope left after years of struggle. A home is a home. However, the family is everything. It is breaking

Dissatisfaction with the approach of resettlement Questions on Resettlement policy	us within to decide on what to choose for our future. I wish the international community could understand that. I wish we didn't have to choose between our hearts and our souls."

[redacted]

Grounded Theory is a time consuming and lengthy process (Corbin and Holt, 2011). It requires intensive interviews, textual analysis, remains a fluid, interactive and open-ended process while the researcher sits through transcribing relentlessly written memos, analysed and coded, memos re-written and then coded and analysed, and all until saturation is reached. Grounded Theory perhaps does not lend itself to a quick sampling of a small number of research participants. However, it is within this criticism that benefit may also be seen. Grounded Theory being a thorough exploration, whilst time consuming, may also be considered more meaningful due to the lengthy process. For theory that is developed from its embedded place with the data, surely uncovering this theory should involve a process that is comprehensive and exhaustive and involves painstaking analysis of collected data. To utilise an inductive process with interpretive and revelatory analytical progressions to arrive at sound theoretical concepts is surely of benefit more so than detriment. Thus, it is from this criticism that we may indeed also come to view a major benefit. Grounded Theory is inductive and begins with no preconceived ideas, it utilises meticulous exploration of precisely transcribed data, coded comprehensively to the point of saturation to arrive at sound and valid conceptual ideas upon which theory can be grounded. This must take time, it must inherently be a lengthy process but instead of framing this time consumption as negative, perhaps it is the very essence of why Grounded Theory is so applicable for social research.

The other critique of Grounded Theory that bears some exploration is that when compared to other methodologies for empirical research, it may be that Grounded Theory places too much emphasis on knowledge being based on what may be deemed social constructions (Oliver, 2012). Unlike research in the natural sciences, which uses a rationalistic, structured approach to determine how the natural world works, social scientists seek to determine not only how people behave but how they interact and think and make meaning from their experiences and contexts (Oliver, 2012). Once again then, we can see how a critique can be instead utilised to support an argument for Grounded Theory rather than to dissuade. People do indeed interact with their environments and make individual meaning from their experiences and perceive environmental stimuli in unique interpretations, which inevitably affect reactions and then ultimately behaviour. Therefore, to argue that Grounded Theory places much emphasis on knowledge that is collected from people and then analysed to explore these individual interpretations is, in reality, an argument against the concept of social research in entirety. One could make a counter argument that the very purpose of social research is to gather knowledge from the interaction of people with their contextual environs, and thus, the use of Grounded Theory as a methodology for such is indeed appropriate.

In support of Grounded Theory as a meaningful and purposeful methodology for social research are the arguments that Grounded Theory meets the wide range of philosophical and ideological requirements of researchers from a number of disciplines. Grounded Theory can be used by researchers who hold any number of underlying beliefs and values and may be coupled with numerous theoretical

underpinnings but as it is not guided by any theoretical base giving the Grounded Theory process great flexibility (Evans, 2013). As noted earlier in this paper, it is vital for the researcher to acknowledge underlying ideologies and beliefs due to the impact they can have on the structure of the research and the way in which the researcher conducts the research. So with some self-awareness, reflective practice and professional research ethics, Grounded Theory can prove to be a valid and effective research methodology for many subjects and across numerous disciplines.

The most convincing point in favour of Grounded Theory as a means of social research is that Grounded Theory, by its very nature, produces theory that is grounded in the data, which it has explored. Thus, the nature of Grounded Theory makes it applicable and valid as a means of generating theory, which can then be used for work with the very people from whom the data was collected in the first place. It appears quite apparent that Grounded Theory should be utilised for those researchers who are aiming to discover and develop theories for practice in which people are the core business.

Implications for the Social Researcher

For the social researcher, the implications of using Grounded Theory are important. For the student or beginning researcher, it may be necessary to garner some support from mentors or colleagues due to the vast differences between Grounded Theory and other research methodologies for social research.

Ethics committee may also require open and honest discussion of the validity of the Grounded Theory methodology, which of course, has no theoretical underpinning at the beginning and may well seem, to the committee member with little experience of Grounded Theory, a dangerous and unguided delving into the human behaviour. The researcher must, in this case, present a valid reason for using Grounded Theory and may need to provide some more information regarding the methodology and also the process and procedures it will entail.

The Grounded Theory methodology requires a question much broader than other qualitative methods, which may be a difficult concept for experienced researchers. It is a point worth noting however because the nature of this methodology is to refine the question throughout the process to the point where theory can be developed rather than beginning with a theory and testing a narrowly defined hypothesis.

The circular nature of data collection and analysis for Grounded Theory may well require second interviews for clarification from the same participant. This may be important to note at the first interview and be incorporated into the consent and information packages for ethical practice.

Conclusion

The use of Grounded Theory as a qualitative research methodology, although not by any means a methodology with as long a history as others, is a most appropriate methodology for social research. With a process that involves data collection and concurrent analysis in a cyclical motion to produce concepts from which a theory will evolve, it produces an end result that is embedded in the data from which it has been extricated. This is perhaps what makes Grounded Theory most appropriate for social research, that the theory, which is not assumed by the researcher at the beginning, evolves out of data given by a sample of people and is then refined for use for work with those same people.

References

Bryant, A. and Charmaz, K. (2007). Grounded Theory in Historical Perspective: An Epistemological Account. In A. Bryant and K. Charmaz (eds). The SAGE Handbook of Grounded Theory. London: SAGE Publications, pp. 29-57.

Charmaz, K. (2006). Constructing Grounded Theory: a Practice Guide through Qualitative Analysis. London: Sage.

Charmaz, K. & Bryant, A. (2009). Grounded Theory. International Encyclopedia of Education, 3rd ed. 406-412.

Corbin, J. and Holt, N.L. (2011). Grounded Theory. In, B. Somekh and C. Lewin (eds). *Theory and Methods in Social Research* (2nd edn). London: SAGE Publications, pp. 113-120.

Dunne, C. (2011). The Place of the Literature Review in Grounded Theory Research. *International Journal of Social Research Methodology.* Vol. 14, No. 2 (March 2011): 111–124.

Evans, G. (2013). A Novice Researcher's First Walk through the Maze of Grounded Theory: Rationalization for Classical Grounded Theory. *The Grounded Theory Review.* Vol. 12, No. 1: 37-55.

Glaser, Barney G. and Strauss, Anselm L. (1965). *The Awareness of the Dying*. Chicago: Aldine.

Glaser, Barney G. and Strauss, Anselm L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine.

Hennink, M., I. Hutter, and A. Bailey. (2011). Qualitative Research Methods. London: SAGE Publications.

Morse, J. (2007). Sampling in Grounded Theory. In A. Bryant and K. Charmaz (eds). *The SAGE Handbook of Grounded Theory.* London: SAGE Publications, pp. 229-244.

Murphy, E.A. and Dingwall, R (2003), Qualitative Methods and Health Policy Research, Transaction Publishers, Piscataway, NJ 08854

Oliver, C. (2012). Critical Realist Grounded Theory: A New Approach for Social Work Research. *British Journal of Social Work.* Vol. 42, 371-387.

Payne, S. (2007). Grounded Theory. In E. Lyons & A. Coyle (eds), *Analysing Qualitative Data in Psychology*. London: SAGE, pp. 65-86.

Pulla, V. (2014). *The Lhotsampa Studies* (Unpublished Memos)

Ragin, C. (1994). *Constructing Social Research*. Thousand Oaks: Pine Forge Press.

Saldhana, J. (2012). *The Coding Manual for Qualitative Researchers*. London: SAGE Publications.

Silverman, D, (2005), Doing Qualitative Research: A Practical Handbook, SAGE Publications, isbn 9781412901970

Somekh, B., E. Burman, S. Delamont, J. Meyer, M. Payne, and Thorpe, R. (2011). Research in the Social Sciences. In B. Somekh and C. Lewin (eds). *Theory and Methods in Social Research* (2nd edn). London: SAGE Publications, pp. 2-16.

Strauss, A. (1987). Qualitative analysis for social scientists. Cambridge, England: Cambridge University Press

Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage.

Acknowledgement

The author is grateful to Professor Saraswati Raju, Dr Rituparna Bhattacharyya. Mr Dhurjjati Sarma and other anonymous reviewers for their suggestions in finalisation of this paper.

METHODOLOGY OPEN ACCESS

Application of Social Network Analysis in Livelihood System Study

Sanchayeeta Misra,[†] Rupak Goswami,[Ī *] Debabrata Basu,[Ĭ] and Rabindranath Jana[ĭ]

Abstract

Social Network Analysis (SNA) has received growing attention among diverse academic fields for studying 'social relations' among individuals and institutions. Unfortunately, its application has remained limited in the study of livelihood systems of rural poor. Complexity in rural livelihoods has increased sharply in the face of increased pressure on natural resources and rapid shift in farm-based to non-farm based employments. This poses great challenge to successful livelihood intervention in rural areas. On one hand, rural development/extension needs to cater to diverse information and service need of the rural people; on other hand, rural institutions need to deliver livelihood-sustaining services more efficiently, which often need institutional restructuring at multiple levels. To achieve these challenges, a strong innovative analytical tool is required for understanding the complexity of rural livelihoods and the associated role of rural institutions. SNA provides excellent scope to analyse such complex systems and interactions among their components. This article proposes an outline of using SNA in livelihood system analysis. The analysis can provide answer to many questions of practical importance – Who are the influential actors in a livelihood system? Which are the key institutions contributing towards sustainable livelihoods? How do these actors interact among themselves? This will help rural development administrators to deliver livelihood-supporting services more efficiently through informed targeting and capacity building.

Key words: Sustainable livelihoods, Livelihood system, Social network analysis, Rural development, Rural extension

[†]Doctoral Student, IRDM Faculty Centre, Ramakrishna Mission Vivekananda University, India, Email: sanchayeeta1989@gmail.com, [Ī]Assistant Professor, IRDM Faculty Centre, Ramakrishna Mission Vivekananda University, India, Email: goswamirupak@rediffmail.com, [Ĭ]Professor, Department of Agricultural Extension, Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia-741252, Email: drdbasu@gmail.com, [ĭ]Associate Scientist – 'A', Sociological Research Unit, Indian Statistical Institute, Kolkata-700108, Email: rabindranathjana65@gmail.com
[*]Corresponding Author

Introduction

One of the survival strategies of rural poor, such as marginal or small farmers, sharecroppers, landless labourers, and marginalised sections of society is their potential and ability to be mobilised and act as a class in order to fulfil their needs or demands. On many issues, particularly the ones which are of collective interest or which require bargaining with those who have power and authority, mobilisation as a class plays a key role as a matter of their strategy. In course of daily life, situations often arise when a household needs to meet family requirements immediately, often by taking help from others. They interact with one another as neighbours, friends, kins, employers/employees, etc. and gradually build networks of regular interaction through these ties (Jana & Choudhuri, 2013). We label these networks as social networks. These social networks work at household/family level and play central role in the survival strategy of rural poor. Such flows of help and support operate in an unnoticed manner, directly, either pair-wise, or through intermediaries in the network. Thus, this process works beneath the surface, keeping a low profile, but steadily, to meet various urgent requirements of daily life and living that one cannot fulfil by one's own resources. Social networks, in this sense, provide a strategy of resource mobilisation from those with whom one has network connections. Understanding such networks is of immense importance for pro-poor research and development. Analysis of such networks – Social Network Analysis (SNA) – has received growing attention among diverse academic fields ranging from sociology, anthropology, economics, politics, to psychology, business, mathematics and physics (Freeman, 2004). A social network is a set of people (or organisations or other social entities) connected by a set of social relationships, such as friendship, co-working or information exchange, and SNA shows social relations as patterns of points and lines in a mathematical space with formal properties that can be analysed with precision (Crossley et al., 2009). The focus of inquiry consists of a set of actors and a set of relations between them (Wasserman & Faust 1994). SNA has developed as an approach for studying 'social relations 'rather than 'individual attributes' (Burt, 1978) that indicates the ways in which people are connected through various social familiarities ranging from casual acquaintance to close familiar bonds (Hanneman & Riddle, 2005). It focuses on the analysis of patterns of relationships among people, organisations, states and such social entities – both visually and mathematically (Jamali & Abolhassani, 2006). With the growing volume of applied empirical works with SNA, researchers have found it increasingly efficient in studying complex systems – be it natural or human-managed.

Livelihoods of rural poor is a complex system which requires materials, services and information to manage diversified uncertainties, and these are transmitted and shared in the form of complex networks. In fact, rural livelihoods in the developing countries have experienced rapid changes in the face of increased human pressure on natural resources, economic liberalisation, structural adjustments and climatic variations (Ellis, 2000). The complexity has increased further due to increasing shift of rural employment from farm-based to non-farm-based livelihoods (Lanjouw & Lanjouw, 2001; Lanjouw & Shariff, 2004). This poses two important challenges to rural development. First, rural extension services need to be expanded, so that diverse livelihood needs are efficiently met by the public funded programmes; second, rural development, which are largely governed by ill-coordinated line departments, self-governing decentralised bodies (panchayats) along with voluntary sector, needs to be better organised (or reorganised). Understanding the network of rural people that sustain their complex livelihood needs (at the micro level) and the network of stakeholders/institutions that delivers livelihood-sustaining information/services/materials to rural people are critically important for improving the rural livelihood systems. Institutional innovation also

becomes easier when we understand the sustainable livelihoods system in its entirety.[1]

Without a strong analytical tool, it is almost impossible to understand these unique and context-bound networks. The application of Social Network Analysis (SNA) is of particular importance for systems characterised by multiplicity of actors and diversity in their sharing of information and/or services (Scott & Carrington, 2011). Rural livelihoods, everywhere, is a complex system marked by huge diversity in public and private actors and unthinkable diversity in their sharing of information and/or services. Moreover, this diversity is linked to the macro realities (structures and processes) of a livelihood system. These need to be analysed for informed decision-making in livelihood intervention and institutional restructuring and reforms. Hence, application of SNA is of strategic importance for rural prosperity in general and for rural extension services in particular. This has important implications for extension programs, where information/service failure in public sector extension systems has reduced extension impact (Anderson & Feder, 2007). Unfortunately, application of SNA has particularly been limited or absent in analysing complex livelihood systems in spite of its great potential of exploring the complexity in livelihoods systems of rural poor.

Employing SNA to explore the complexity in livelihood systems asks for a conceptual framework within which the SNA is to be employed. For this to happen, we have taken up Sustainable Livelihood (SL) framework (DFID, 1999) as a starting point, since this framework has been widely used in development practices. Then, we have introduced the concept of 'system' before describing the SL framework. This is followed by a comparison of a 'rural livelihood system' with generic characteristics of a 'system' to establish the system characteristics of rural livelihoods, on which SNA may be employed. Then, we indicated the practical implications of using SNA in livelihoods system analysis with an explicit set of questions that might be answered with our analysis. The next section elaborates on the methodological outline that might be considered for using SNA in livelihood system study. This include – sampling, relevant variables to be used, measurement of relationship between actors/institutions, data collection and analysis. Then, we introduce the reader to the commonly used technical terms used in SNA and link them with the livelihood system study. This will help readers to relate the terminologies with the livelihood realities of rural poor. Since matrices and graphical representations may represent network data, we briefly demonstrate both the techniques in the article. We have also given the possible software that may be used in SNA.

A System

A *system* is a group of interacting components, operating together for a common purpose (Spedding, 1988). Checkland, the proponent of Soft System Methodology (Checkland, 1981) observed a system as model of an entity, which is characterised in terms of its hierarchical structure, emergent properties, communication and control. The *system approach* proposes a way to understand that entity and negotiate its problems for improved performance. In contrast to the Reductionist scientific enquiry that reduces phenomena into smaller

[1] Rural communities in marginal environments are increasingly being exposed to unforeseen and transforming trends and processes. This asks for an organisational environment that encourages and fosters innovations to cope up with such situations (Poole & de Freece, 2010). Innovation envisages application of knowledge of all types to achieve desired social and economic ends (Hall et al. 2001) and is essentially a social process where interaction with other members of the society triggers learning and adaptation of new ideas (Douthwaite, Carvajal, Alvarez, Claros, & Hernández, 2006). As a result, innovations generally arise out of a network of actors and relationships (Conway & Steward, 1998). It has become progressively evident that network structure embodying linkages between actors, frequency of their linkages, their roles in the networks and the degree of clustering (of actors) influence the institutional environment that encourage and foster innovation (Spielman, Davis, Negash, & Ayele, 2011). This has necessitated the use of analytical tools that helps in appreciating such networks quantitatively and paves possible ways to improve its efficiency.

components in order to study and understand them, Systems theory studies the whole system and relationship among its components. Biology and environmental science use its principles widely, as do other disciplines including systems analysis (Walby, 2007). This is applicable to almost any subject (Spedding, 1988) and empirical evidence is out there to establish its efficiency in analysis, management and improvement of existing system (Cavallo, 1982), be it agriculture (Ikerd, 1993) or rural development (Belshaw & Chambers, 1973). We aspire to advance the same for analysing livelihood systems (DFID, 1999), a much more complex and dynamic system than many other social systems where system analysis has been applied. We take a brief account of livelihoods frameworks in the next section and argue how a livelihood framework qualifies to be a 'system', thus, lending scope for application of analytical tools (such as Social Network Analysis).

Sustainable Livelihood System

A livelihood comprises of capabilities, assets and activities required for a means of living (Chambers & Conway, 1992). A sustainable livelihood allows to cope with and to recover from stress and shocks, to maintain or enhance its capabilities and assets to provide sustainable livelihood opportunities for the next generation. A household's assets consist of the stock of resources used to generate well-being (Rakodi, 1999). Assets include human capital (age, education and training, and family structure); natural capital (e.g., climate, water and land); physical capital (equipment, livestock, and electricity); financial assets (credit); location-specific factors (such as access to infrastructure and social services), and social, political, and institutional assets, including social and political networks, and social inclusion. A livelihood framework is a way of understanding how households derive their livelihoods. An easy way of thinking within a livelihood framework is using the household triangle of assets, capabilities and activities. Household members use their capabilities and assets to carry out activities for sustaining livelihoods. Household assets refer to the resources that households own or have access to for gaining a livelihood. Where capabilities are the combined knowledge, skills, state of health and ability to labour or command labour of a household. Household strategies are the ways in which households deploy assets, use their capabilities in order to meet households' objectives, and are often based on past experience. In the present article, we use livelihood framework to understand livelihood system. Hence, the terms 'livelihood framework' and 'livelihood system' are used synonymously for operational purposes.

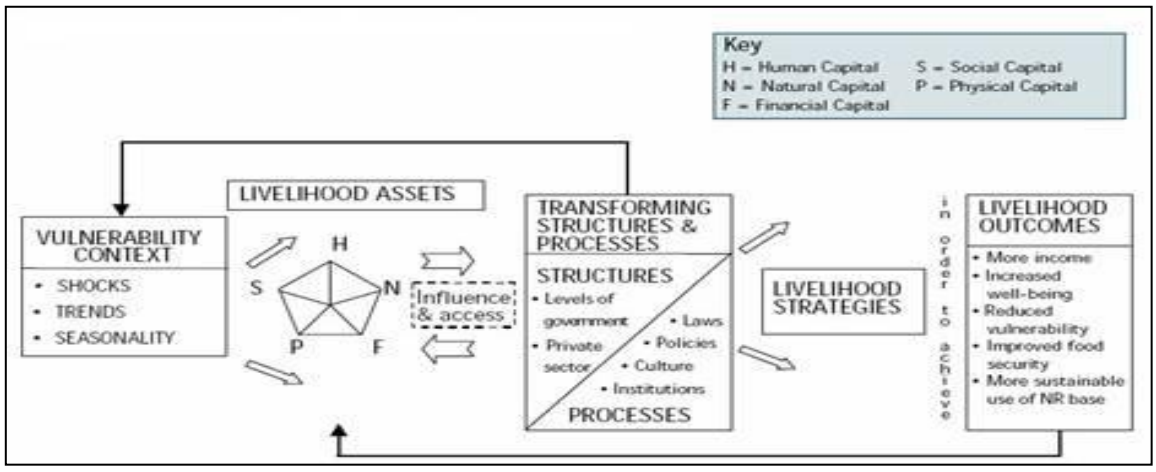

Figure 1: Sustainable Rural Livelihoods Framework (DFID, 1999)

Table 1: Comparison of a 'rural livelihood system' with generic characteristics of a'system'

A system	A livelihood system
It has a purpose (or purposes) - it exists for a reason and achieves some change, or 'transformation'.	A livelihood system sustains the need of individuals in a community, without causing negative externalities in social and ecological systems.
Its performance can be measured, and it can be shown to be more, or less efficient.	Food and Nutrition Security, Employment, Poverty, etc.
There is a mechanism for control - a decision-making process.	Households at micro-level and Institutional arrangement at meso- and macro-level makes decision based on contexts.
It has components - which can themselves be taken to be systems.	It has assets, capability, vulnerability, structure and processes, and livelihood strategy.
Its components are related, and interact.	Livelihood strategies are pursued based on assets which are used in the context of vulnerability and structures & processes.
It exists as part of a wider system or systems - its environment, with which it must interact.	Livelihood system is part of external systems such as, ecological system, policy framework, etc. These are, in fact, conceptualised in the livelihood framework (the micro-meso-macro linkage).
It has a boundary - which defines what is, and what is not part of the system.	A livelihood system has a hierarchy of boundary – individual-household-community-local administrative/ ecological units, etc.
Has its own resource.	Individuals have livelihood assets; institutions have staff, buildings, finance, etc.
An expectation of continuity, and can be expected to adapt to, or recover from disturbances.	Livelihood sustains when it adapts with or recovers from vulnerabilities and is achieved through changes in livelihood strategies.

Livelihood systems study needs to adopt system approach as a conceptual framework to characterise interactions among the institutions in a livelihood system, patterns and strength of interactions among them, and associated constraining factors. There is an explicit assumption that learning takes place in many parts of a livelihood system, and these can be diffused to other parts of the system through active linkages between organisations and people (see Temmel et al., 2003). Graph-theoretic approach used in SNS is used to investigate linkages between different components of the livelihood system and possible clusters and interaction pathways are also detected. This directly leads to generate corrective measures for enhancing system efficiency.

Implication of Applying SNA in Livelihoods System Analysis

SNA has been used to solve a wide range of problems in Sociology and Anthropology (Kossinets and Watts, 2006). Studies are also found in the Economics literature such as, studies on impact of networks on the adoption of innovations (Bandiera & Rasul 2006; Temel et al., 2003) adaptation to uncertainties (Beuchelt & Fischer, 2006) and success in finding a job (Granovetter, 1973). Apart from this, SNA has a strong tradition in understanding coping strategies of poor people against vulnerability vis-à-vis peoples' social networks.[2] Application of SNA has recently

[2] People in rural areas traditionally depend on social networks for their survival. This survival strategies are often related to food and nutrition security (Martin et al., 2004), co-management of scarce natural resources (Pretty, 2003), climatic variations (Adger, 2010), access to

been made in the context of institutional networks especially in the field of agricultural extension.[3] Unfortunately, this has rarely been used in the analysis of rural livelihoods, although cases may be found where network analyses have addressed a part of livelihood system (Cinner & Bodin, 2010). The analysis will help us understand the individual and institutional networks that sustain rural livelihoods, which lay ground for strategic communication and development intervention. Moreover, the first step in building capacity for networking in rural communities starts from helping the rural people and their service providers understand and visualize their existing networks (Douthwaite et al., 2006).

Application of SNA in livelihood system analysis helps us to answer following important questions:

a) Who are the important individuals (central and influential) in the social networks related to different livelihood information/service/materials?

b) How do these networks interact among themselves? Alternatively, is there commonality among the networks?

c) Who are the important institutions (central and influential) in the livelihood support systems and how do they interact with other institutions?

These questions then follow a compelling set of practical questions (see Mobarak et al., 2011) –

a) Can partnering with well-connected people/institutions in extension/rural development efforts enhance flow of information/service delivery/materials and hence improve sustainable livelihoods?

b) Is clustering of people/institutions in extension/rural development partner desirable?

Application of SNA in Livelihood System Analysis: A Methodological Outline

Sampling

Sampling Location

Before selecting the sites and deciding on their number, assumptions are to be made regarding the factors that account for the variation in livelihood outcome in a study area. These are the sampling factors. These might be as diverse as land distribution, agro-ecological conditions, presence of institutions such as credit institutions, schools, health, and NGOs, ethnic composition, population density, composition of population by gender, physical accessibility, local opportunities for non-agricultural employment etc. (see Ravnborg, 2002 for similar application in poverty research).

Data on all such factors are often only collected or available for areas larger than communities, such as Gram Panchayats (grassroots-level local self-governing body in rural India). The availability of data also varies from one sampling factor to another. For instance, detailed data on population density are often available from population censuses whereas data on land distribution are usually scarce. Some information is usually available for factors such as broadly defined Agro-ecological conditions, ethnic composition, literacy rate, etc. A study may adjust sampling factors according to the availability of such data in consultation with the local administrators, panchayat personnel, concerned academicians, NGO etc. If data on human development indices and/or livelihood zoning is available for sub-district level, they may be used directly for the purpose of site selection. Maximum diversity sampling is used to select study villages of unique sampling factor combination (Ravnborg, 2002). However, critical reflection of researcher is always important at this stage of research.

credit in distress (Servon, 1998), managing job in hard times (Reimer et al., 1997).

[3] Application has specifically been made in the context of Agricultural Knowledge and Information System (Spielman et al., 2009) that conceptualizes agricultural knowledge development as the product of interaction among multiple stakeholders. This has further been applied for understanding Agricultural Innovation Systems (AIS) of the developing countries (Spielman et al., 2011, Asres, Sölkner, Puskur, & Wurzinger, 2012). We believe that this application now needs to be extended to livelihood system analysis, of which AKIS and AIS are components.

Sampling Household/Individuals

One important distinction of social network data is that it is collected from the whole population instead of using the independent probability sampling (as is done in a cross-sectional survey). Network studies are likely to employ complete enumeration of actors within a defined/naturally occurring boundary. Since the whole population is studied in SNA, the selection of boundary is very important for making valid generalisation. Network data often involve several levels of analysis involving individuals embedded in a network that is embedded in other network. This is called a "multi-modal" structure (for e.g., a farmer network embedded in rural extension network) which is very likely to occur in case of livelihood networks.

Sampling Institutions/Organisations

Sampling of institutions/organisations associated with sustainable livelihoods is context-bound since non-government stakeholders do not follow uniform institutional environment like public funded extension/rural development services. This asks for – apart from extensive literature review – an exploratory phase that maps the stakeholders to be studied by SNA (Asres et al., 2012). Some professionals have used management tools like Stakeholder Analysis for the same (Aberman et al., 2011; Prell et al., 2009). Records are also available where PRA tools like Venn diagram have been used for identifying relevant institutions (Asres et al., 2012).

Sampling Ties

In situations when collection of full network data is expensive or time consuming, sampling of tie may be considered as a viable option. Snowballing, tracking down alters from an ego-centric network, or selecting egos from ego-centric network have been proposed as alternative options for identifying nodes (Hanneman & Riddle, 2005). For an understanding of relevant terminologies, see Table 3.

Variables and Their Measurements (Background of Respondents)

Following DFID's Sustainable Livelihood Framework (DFID, 1999), different variables may be included in the data collection instrument, which will help us to draw a clear picture of livelihood pattern in a rural setting. These variables are analogous to variables used in cross-sectional survey research. However, the network data is collected through a separate set of questions. These questions might be on different livelihood sustaining information/service/materials, which are explored by FGD/PRA. Measurement of the network data is discussed in the next section. A tentative list of variable, which might be of high relevance to livelihood systems study, is presented below:

a) Natural assets (Land, Water, Aquatic resources, Trees, Forest products, Wildlife, Wild foods & fibres, Biodiversity, Environmental services etc.), Social capital (Networks and connections, patronage, neighbourhoods, kinship, Relations of trust and mutual support, Formal and informal groups, Common rules and sanctions, Collective representation, Mechanisms for participation in decision-making, Leadership, etc.), Physical capital (Infrastructure: transport - roads, vehicles; secure shelter & buildings, water supply & sanitation, energy, communications, Tools and technology, tools and equipment for production, seed, fertilizer, pesticides, traditional technology etc.), Human capital (Health, Nutrition, Education, Knowledge and skills, Capacity to work, Capacity to adapt), and Financial capital (Savings, Credit/debt, Remittances, Pensions, Wages, etc.).

b) Vulnerabilities (Shocks - floods, droughts, cyclones, Deaths in the family, Violence or civil unrest, Seasonality, Trends and changes, Migration, Population, Environmental change,

Technology, Markets and trade Globalisation, etc.).

c) Policies, Institutions & Processes (Policies of government/of different levels of government/of NGOs/of interational bodies); Processes that - the "rules of the game"/decision-making processes/social norms & customs/gender, caste, class/language.

d) Livelihood strategies (Combining - the assets they can access/Taking account of - the vulnerability context/Supported or obstructed by - policies, institutions and processes.

These variables help us to describe/characterise the important actors in a network after the analysis of SNA data.

Measurement of Relationship (for Networks)

Data may be collected at different "levels of measurement", which are also common to a survey research. Given below are different levels of measurement for network data:

Binary measures of relations – Researcher is interested in examining whether a tie exists or not among two persons or institutions of interest. This is the most commonly used measurement in SNA. In many cases, scores are also dichotomised based on a 'cut-off' point. However, this incurs squandering of valuable data.

Multiple-category nominal measures of relations – This is used when the respondents are asked to choose from a list of alternatives (e.g. name of institutions, type of services, etc.). Each alternative is coded by its type. This is commonly analysed by creating a series of binary measures.

Grouped ordinal measures of relations – Mostly used when the researcher is interested in measuring the strength of relationship (e.g. frequency or intensity). Due to less availability of analytical tools, researchers often convert ordinal data into dichotomous data or assume it to be interval data for analytical purposes (Hanneman & Riddle, 2005).

Full-rank ordinal measures of relations – This is used when a complete ranking of all available choices (e.g., Rank '1' for the first choice, rank '2' for second best choice and so on) are possible to record. Most commonly, this kind of data is considered to be interval during data analysis.

Interval measures of relations – This may be done by asking respondents to report the frequency or intensity of ties with others by interviewing them. However, indirect measures like communication data (e-mail, letters etc.) are often found to be more reliable than self-reporting. A wide range of mathematical manipulation is possible with these data.

Data Collection

Preparation of Interview Schedule

Based on the pre-testing and depending on the objectives, preliminary interview schedule may be formed with the help of literature survey and discussion with the experts from relevant field of livelihood analysis and Social network analysis. The interview schedule may be divided into several sections, namely

Section A: Background Information, covering socio-demographic features of the household

Section B: Livelihood Asset, covering five types of assets

Section C: Livelihood Information Network: Questions on access to (individuals) livelihood information/service/material

Section D: Livelihood Knowledge Information Network: Questions on access to (institutions) livelihood information/service/material

Before starting final data collection, entire schedule needs to be pretested for elimination, addition and alternation with respondents in a non-sample area adjacent to study locations. This is especially important for the Section D, because of the location specificity of networks. Distinct network is expected to be found on information/service/material, which are relevant to the studied communities.

Techniques of Field Data Collection

Data may be collected at two levels – Micro, that is, at the community level (FGD and PRA); and at the Macro (interview with interview schedule), i.e., beyond the community level. For the network analysis, a whole community is taken up for study. Several such communities from different geographical locations and/or livelihood zones may be selected. For the Macro level, an exhaustive set of stakeholders affecting livelihoods of the given community are developed through Focus Group Discussion (FGD). This may be followed by interview with these stakeholders individually or, preferably, in the form of a workshop. FGD is also used for identification of livelihood-supporting information and services on which data from individual households are to be collected (through interview with interview schedule) for network analysis. Data should be collected from all the members of a household (who are operationally eligible to livelihood vocations and survival strategies) to understand multiplicity of livelihood of all the family members, which may help in examining gendered networks. Some others may collect data with an explicit temporal (seasonal) consideration, thus, exploring the seasonal dynamics of social networks.

Data Analysis

Conventional Data and Network Data Compared

Social Network Analysis approach, using both statistical and visual techniques, is undertaken to analyse the collected data. Before that, let us distinguish network data from conventional (survey) data (Table 2) with which the SNA-beginners have more acquaintance with.

Table 2: Difference between Conventional Data (e.g. Cross-sectional Survey) Network Data

Conventional Data	Network Data
a) Often use samples for study	a) Study the whole population on defined actors
b) Mostly, result of independent probability sampling	b) In general, actors are not sampled and results based on all actors within the study boundary
c) A rectangular array of measurements, the rows being the cases, or subjects, or observations and the columns being qualitative/quantitative scores of attributes, or variables, or measures	c) A square array of measurements, the rows being the cases, or subjects, or observations and the columns being the same set of cases, subjects, or observations
d) Data focuses on actors and attributes	d) Data focuses on relationship between the actors

Level of Network Data

Network data essentially describe the nodes and their inter-relations for bounded populations. In case of livelihood system analysis, for example, interpersonal relationship among villagers for sharing of livestock management represents a 'one-mode' network (see Fig. 4a). Now, this village exists within Gram Panchayat/Community Development Block that might in turn envisage relationship/network of Dairy Extension Officers, veterinary surgeons, Block Livestock Development Officers, Panchayat functionaries, etc. These Panchayats/Blocks are again situated within Panchayat Samity, Zilla Parishad/District livestock officers, which can be thought of as networks of stakeholders at the district level. Such networks, taken together, are called 'multi-modal' networks (see Fig. 4b). In the above example, individual animal raisers form one mode network, Panchayat/Blocks a second, district officials, a third, and so on. Individual persons are then embedded in networks that are embedded in networks that are embedded

in networks. However, very few analyses have attempted to work on more than two modes simultaneously (Haneman and Riddle, 2005).

Multiple Relations in Livelihood Systems Analysis

In a conventional data set of cross-sectional survey, cases/actors are described by variable(s), while in case of social network data set (actor-actor) only one kind of relation is described. However, just like a survey researcher might get interested in multiple attributes of actors (multi-variate case), researchers in SNA work with multiple kinds of ties that connect actors in a network (Haneman & Riddle, 2005).

When we are thinking about network ties among different actors in livelihood systems (e.g. agriculture, health, small business, etc.) in an area, we are often eager to identify common stakeholders in different livelihood networks. The positions that households hold in the web of affiliations are multifaceted. Importance of an actor in seed-sharing network may/may not be similar in networks on plant protection or treatment of livestock. This kind of multi-relational networks and the structure of networks composed of multiple relations are of particular importance in livelihood systems analysis.

So far, more elaborate works have been done on single relational data than on multi-relational. There are approaches and methods such as network correlation, multidimensional scaling and clustering, and role algebras that have been developed to work with multirelational data.

Common Terminologies Used in SNA

Now, we introduce some terminologies associated with SNA to make it easier to describe the features of data used in network analysis as well as its analysis and representation. We assume that the readers have basic orientation in SNA and will readily be able to connect the terminologies to livelihood systems. Else, we recommend readers to go through Haneman and Riddle (2005), a lucid and open-source text on SNA applications. Selected terminologies and their implications in livelihood system study have been given in Table 3. Please note, that the terminologies cover both directed (edges connecting nodes have direction) and non-directed (edges connecting nodes do not have direction) networks and the implications given for individual elements in this table are only demonstrative. There might be many other examples/forms of relationships, which is not given due to space constraint. We have only given examples having strategic importance in livelihood interventions.

Table 3: Social Network Analysis Elements and Their Implications in Livelihood System Study

Elements	Definition	Implication for/scope in/equivalence in livelihood system study
Node/actor	An individual, a household, an organisation, or other entity of interest within a network	A villager, a household, an SHG/farmers' group, Panchayat, Block Development Office
Tie	Interconnections between actors, may be directed or non-directed (Fig. 3)	A social relation between: Villager-Villager, Villager-Panchayat, Panchayat-Panchayat
Ego	Actor of interest within a network	An opinion leader, A panchayat member
Alter	Actor directly connected to an ego	SHG members connected to their Secretary
Dyad	Pair of actors linked by a tie	Information sharing between

		two farmers
Indegree	The number of ties directed towards an actor from other actors, e.g. the number of social interactions that an actor receives from other actors	No. of queries (on information/services) received by a farmer regarding plant protection; signifies actor's prestige/popularity in a network
Outdegree	The number of ties originating from an actor to other actors, e.g. the number of social interactions that an actor approaches to other actors	No. of services/information requested by a farmer to other fellow farmers; signifies actor's expansibility on the network
Network	Graphical representation of relationships that displays points to represent nodes and lines to represent ties; also referred to as a graph	A seed sharing network, An animal traction network NGO network
Ego Network	Network that only shows direct ties of the ego to the alters and not between alters (Fig. 5a)	A network of a rural leader with his followers
Network Size	Total number of nodes in a network	Total number of nodes in an Innovation System/SHG network
Network Density	Number of ties, expressed as percentage of the number of ordered/unordered pairs. When density is close to 1.0, the network is said to be dense, otherwise it is sparse (Fig. 6a & 6b).	Effectiveness of grassroots networks may be monitored
Reciprocity	If two actors are directly related to each other, then two nodes are said to have reciprocal relations (for whole network); total number of reciprocal pairs of the network are standardised probabilistically and deterministically to get the measure of reciprocity of the network (Rao & Bandopadhyay, 1987)	The cohesiveness indicates solidarity among the people constituting a network of a specific relation.
Centrality	Measure of the number of ties that a node has relative to the total number of ties existing in the network as a whole; centrality measures include degree, closeness, and betweenness.	Shows the important persons or institutions in the local livelihood system
Degree	Total number of ties a node has to other nodes. A node is central, when it has the higher number of ties adjacent to it (Fig 7a).	It signifies actors connected to maximum number of actors in a system; important for information dissemination
Closeness	Measure of reciprocal of the geodesic distance (the shortest path connecting two nodes) of node to all other nodes in the network. A node is "close" if it lies at short distance from many other nodes (as in being physically proximate) (Fig. 7b).	Important for disseminating service/information in emergency
Betweenness	Number of times a node occurs along the shortest path between two others (Fig. 7c).	A node can play the part of a liaison or broker or gatekeeper

		with a potential for control over others.
Eigenvector	A node's centrality is proportional to the sum of centralities of those it has ties to (Fig. 7d).	Shows importance and control over a system
Bridge	An edge is said to be a bridge if deleting it would cause its endpoints to lie in different components of a graph.	Important link between subgroups, helps in maintaining information flow; needs special attention for mainstreaming/ formalisation
Bridge of degree k	A tie that connects nodes that would otherwise be at least k steps apart	Helps in strategic intervention for reducing lag in information dissemination/technology transfer
Path length, Distance	Number of links between two nodes, length of shortest path between them (geodesic)	Important to anticipate the time/energy required for planned information flow/service delivery
Cliques	Every individual is directly tied to every other individual (Fig. 9)	Closed group might be of innovators; or organisations having understanding of resource sharing
Core	Cohesive subgroup within a network in which the nodes are connected in some maximal sense	The dominant part of a network; often spatially grouped or grouped by common interest;
Periphery	Nodes that are only loosely connected to the core and have minimal or no ties among themselves	Often found to be the marginalised section of the society
Structural hole	A structural hole occurs whenever a person (a) has a relationship with someone who is connected to a separate cluster of people and (b) has no other direct or indirect connection with the people in that cluster (Fig. 8)	A person who has a large number of structural holes in his or her network is likely to be exposed to more diverse information and opportunities than a person who has relatively few structural holes in his or her network, e.g. an SHG is connected to a distinct group via a District Rural Development Administration facilitator.
Structural equivalence	Actors are structurally equivalent to the extent they have the same in-neighbourhoods and out-neighbourhoods (Fig. 10)	Structural equivalence suggests similar intervention for equivalent structures (e.g. a value chain)
Clustering	All the actors who are directly connected to ego in a neighbourhood; when calculated for all the egos, gives clustering of the whole network	Important for controlling infectious diseases; targeting message for quick effect
Brokerage	A person connecting two otherwise unconnected people is a "broker" of	Capacity building of such person is crucial for rapid information

	information flow. Brokerage differs from structural holes in that (a) it does not assume that groups are unconnected and (b) it more clearly describes the flow of information.	dissemination; important for controlling vested interest

Sources: Wasserman & Faust (1994); Scot & Carrington (2011); Borgatti et al (2009); Davies (2004); Hanneman and Riddle (2005); Asres et al. (2012)

Representation through Matrices: An Illustration

This section introduces readers to several graph theoretical concepts used in the analysis of the Innovation Systems Study (Temel et al., 2001). We have adapted the approach for livelihood systems study as and when found suitable.

Let the linkage matrix S is defined as a matrix that maps cross-component linkages relating to sustainable livelihoods. The goal of livelihood system (LS) is to facilitate smooth delivery of information/services/materials that meets diverse livelihood need of a community. If the LS consists of 6 components: Policy (P), Research and Development (R), Extension (E), Credit (C), Marketing (M) and Voluntary services (V), the components are placed in the diagonal cells and their linkages are placed in the off-diagonal cells of the matrix S.

$$S=\begin{bmatrix} P & PR & PE & PC & PM & PV \\ RP & R & RE & RC & RM & RV \\ EP & ER & E & EC & EM & EV \\ CP & CR & CE & C & CM & CV \\ MP & MR & ME & MC & M & MV \\ VP & VR & VE & VC & VM & V \end{bmatrix}$$

The term PR in the 1st row – 2nd column of S represents the probable binary linkage (one-to-one) between representatives of organisations under Component P with representatives of organisations under Component R, which may or may not exist. Likewise, the term RP in the 2nd row – 1st column of S represents the probable linkage of the organisations under R with the organisations under Component P, which may or may not exist. These linkages can be flow of information, service, or materials.

Now this Matrix S can be used as a coded linkage matrix S[c], a matrix with binary codes: '0' for 'absent' and '1' for 'existing' linkages. For a hypothetical situation, the matrix might look like:

$$S(c)=\begin{bmatrix} P & 1 & 0 & 0 & 0 & 0 \\ 0 & R & 1 & 0 & 0 & 0 \\ 1 & 1 & E & 1 & 1 & 1 \\ 1 & 0 & 1 & C & 0 & 0 \\ 1 & 0 & 1 & 1 & M & 0 \\ 0 & 0 & 1 & 1 & 1 & V \end{bmatrix}$$

Examining along the row we see, P reports linkage with R, R reports linkage with E, and E reports linkage with all other components. If we examine along the column, E, C, and M

report linkage with P. Note that the links are directed and not symmetric (since, P reports linkage with R, but R does not report linkage with P). This often happens while working in field situation, where actors perceive their linkage differently (e.g., a grassroots level NGO may report linkage with Public extension department, while the extension agency might not report reciprocal linkage). The coded linkage matrix may be represented by a digraph having six nodes/vertices and 10 edges (Figure 2a).

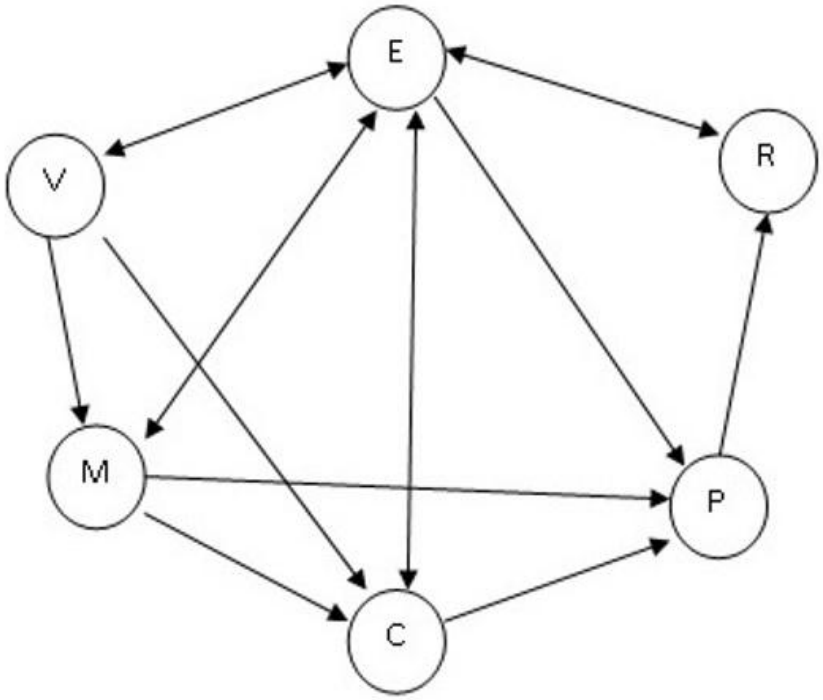

Figure 2a: Digraph Showing Linkage of Matrix S (c)

The matrix S[c] can be refined when measurement of linkage strength is available with the researcher. The strength is often measured through scale (e.g. '0' for a non-existent, '1' for a weak, '2' for a medium, and '3' for a strong linkage). If this procedure is repeated for all the organisations, a total of 6 vectors will be developed. When all the linkage strengths are reduced to an average vector for all the components, we get the following matrix. For the present example, assume that we have taken data from all stakeholders separately on the degree of linkage their organisations have developed with other stakeholders of the system. For P, we got scale value of 3, 2, 2, 3, and 3 from five stakeholders. The average of these scores was 2.6 (rounded to 3).

$$S(r) = \begin{bmatrix} P & 3 & 0 & 0 & 0 & 0 \\ 0 & R & 2 & 0 & 0 & 0 \\ 3 & 1 & E & 1 & 2 & 1 \\ 2 & 0 & 1 & C & 0 & 0 \\ 1 & 0 & 1 & 2 & M & 0 \\ 0 & 0 & 1 & 2 & 1 & V \end{bmatrix}$$

The row of P indicates its intensity of interaction within the system (reflected separately by P's interaction with other components i.e. E, C & M, in the system).

A researcher might also be interested to know the strength of influence created by a component on others. This might be recorded by measuring the strength in a scale (0=no influence (n); 0.33=weak (w); 0.66=medium (m); 1.00=strong (s)). This weight may then be imposed (by multiplication) on Matrix S (r) to give rise to an adjusted refined linkage matrix S (a). '3s' in S (a) indicates multiplication of 3 with the scale value for 'strong', that is, i.00, resulting in 3.0.

S (a)

P	3s	0w	0n	0w	0w
0w	R	2s	0w	0n	0w
3s	1m	E	1m	2w	1s
2s	0n	1s	C	0w	0w
1m	0n	1m	2s	M	0w
0w	0n	1w	2w	1w	V

=

P	3.0	0	0	0	0
0	R	2.0	0	0	0
3.0	0.66	E	0.66	0.66	1.0
0.66	0	1.0	C	0	0
0.66	0	0.66	2.0	M	0
0	0	0.33	0.66	0.33	V

This linkage matrix S (a) may now be represented as a directed graph (Figure 2b). The matrix (Figure 2b) clearly shows the influence of a component within the system. For example, Extension (E) shows high influence within the livelihood system; however, the intensity of influence varies with components of the system, Policy (P) being highly influenced by Extension. The analysis may be taken further to cluster similar institutions having same influence within the livelihood system.

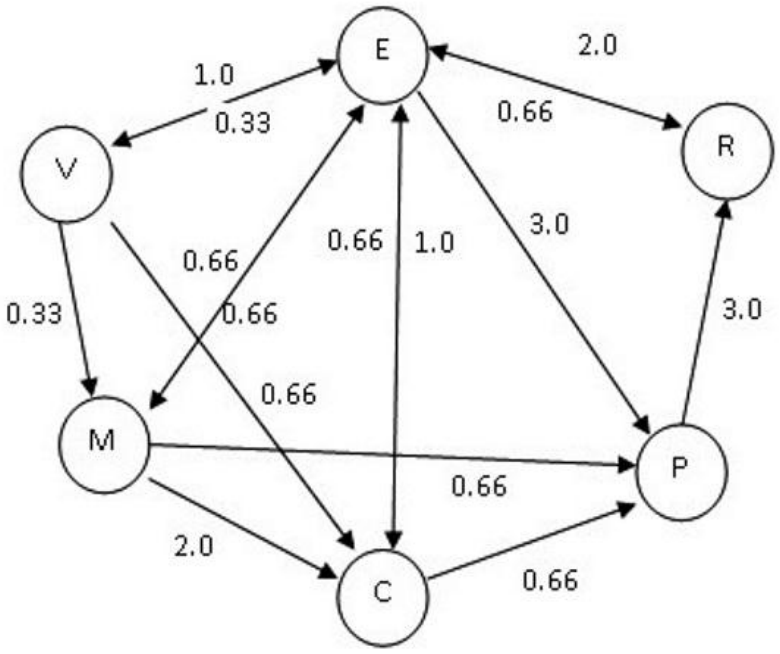

Figure 2b: Adjusted Directed Graph

Graphical Representation

Graphical representation of social relationship makes it easier (than matrix) for the viewer to understand complex social structures when the network size is small and simplex. The graph may be non-directed i.e. choices are made non-directional, and directed, i.e., choices made are directional (Fig. 3). Choices are shown with arrowheads in a directed graph. It is often beneficial to use directed graphs instead of non-directed, since two individuals may not perceive the tie between them similarly (a pregnant women may mention a choice for a midwife, which might not be reciprocated by the midwife). Again, a graph may be simplex, i.e. showing single relationship (e.g. information exchange), or multiplex, i.e. lines showing relationship on more than one type of relationship (e.g. information exchange and resource sharing). These relationships may also be shown in separate graphs. Depending on the levels of measurement, the graphs may be binary (presence or absence of relationship) or signed (attraction and repulsion) or valued (high, medium, low). A graph may also feature one-mode (Fig. 4a) and two-mode (Fig. 4b) relationship.

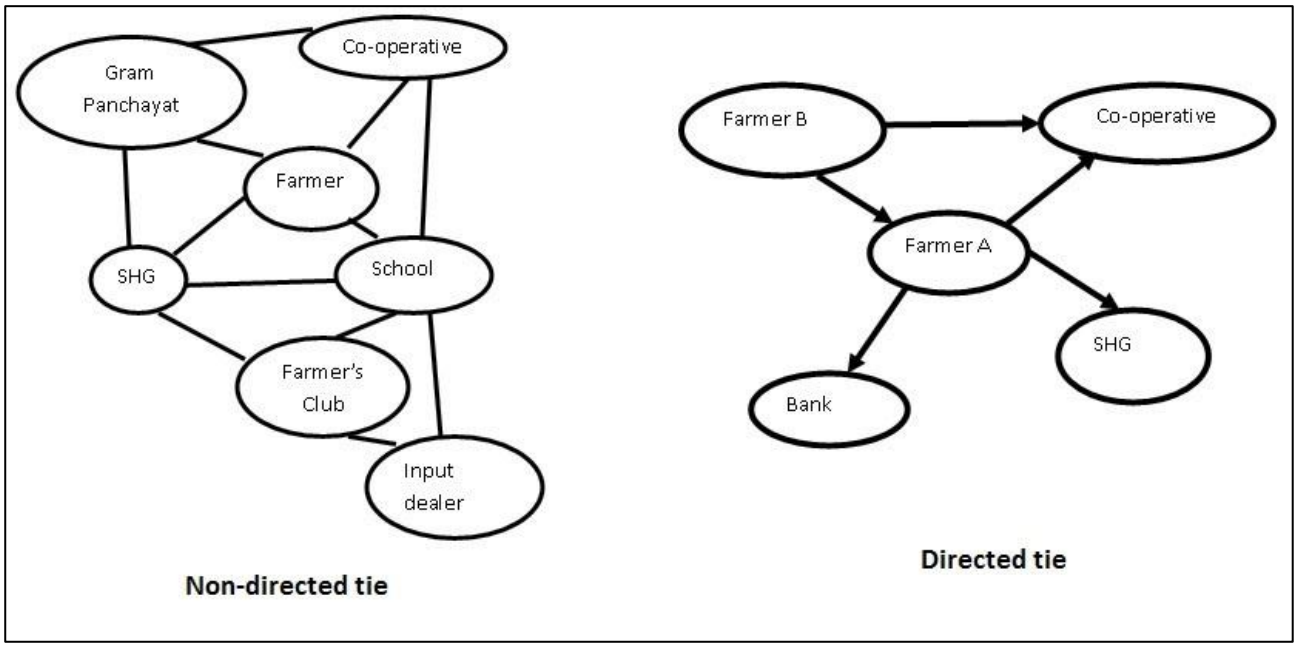

Figure 3: Networks with Directed and Non-directed Ties

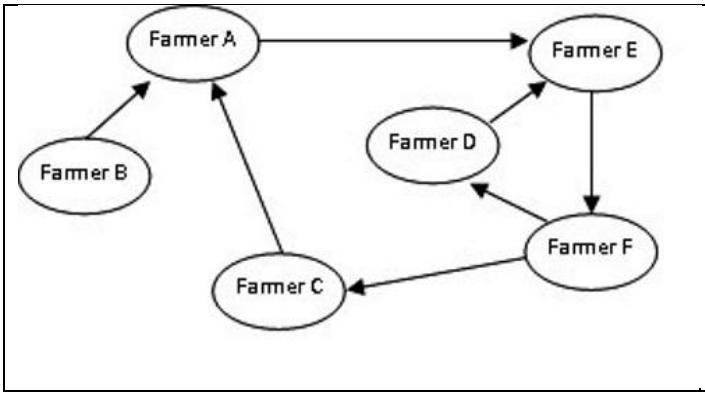

Figure 4a: One-mode Network

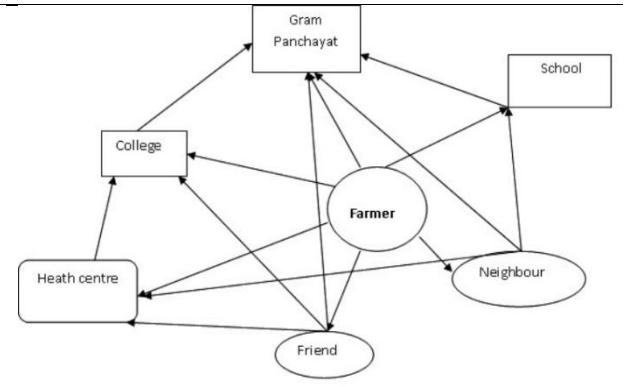

Figure 4b: Multimode Network

A graph can also represent a single node, i.e., the ego network (Fig. 5a) or the whole network (Fig 5b). While a whole network shows the overall pattern of interaction in a system, an 'ego network' indicates the role of a node in the social system. After working out the important nodes (as indicated by their

centrality), ego network may be studies for these individual nodes.

A clearly constructed graph reveals some strategically important characteristics of a system – connections among nodes, density of connections, 'cluster' of systems, etc. A series of figures are given below to understand the graphs, which are based on different group and individual attribute of the nodes and/or network. Borgatti (2002) summarises the social network concepts based on connections and similarity for whole network, subsets or individual actor (Table 4). Not all the properties have, however, been explained in the text. Refer back to Table 3 for the theoretical explanation of the concepts and its relation/scope in livelihood system study. In some SNA software, one can also find options to impose individual properties such as centrality score on node attributes, thus making the visualisation more meaningful (since more central nodes are shown proportionately larger than other nodes of the network) (Fig. 5b & 7e).

Table 4: Social Network Concepts based on Connections and Similarity for Whole Network, Subsets or Individual Actor

	Whole Network	Subsets	Individual Actors
Connection	Cohesion (Density, avg. distance, centralisation)	Groups (clique, n-clique, k-plex)	Centrality (degree, closeness, betweenness; structural holes)
Similarity		Structural equivalence	

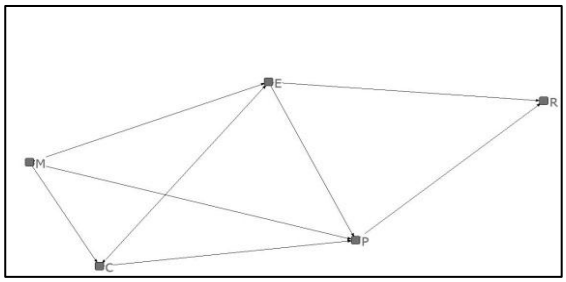

Figure 5a: Ego Network of P

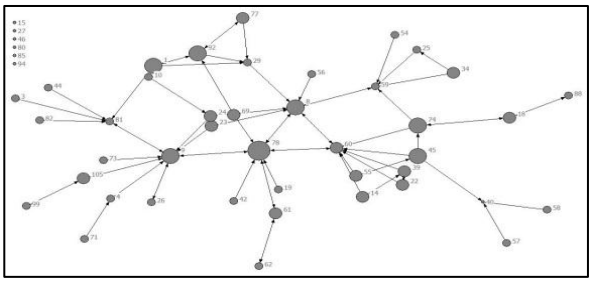

Figure 5b: Whole Network (Goswami, 2007)

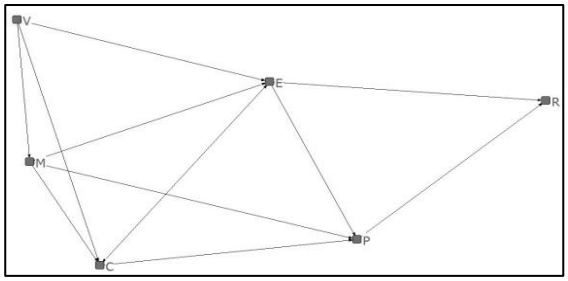

Figure 6a: Low Density Network

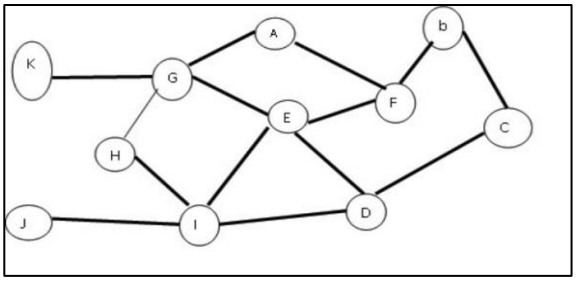

Figure 6b: High Density Network

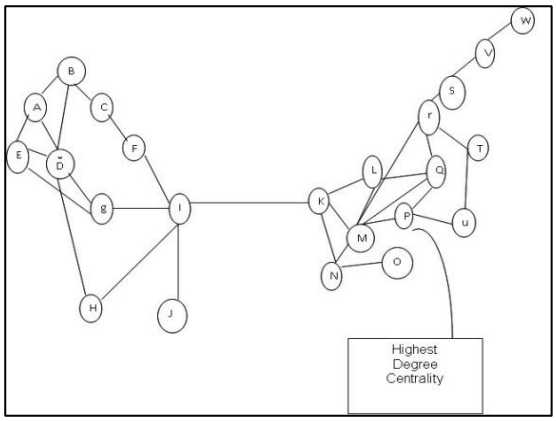

Figure 7a: Degree Centrality

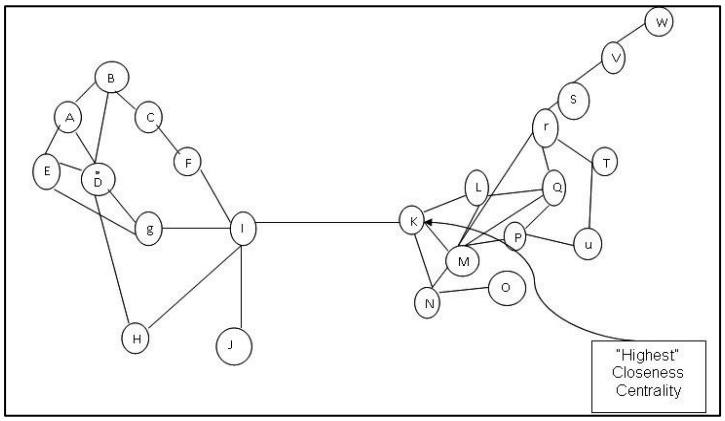

Figure 7b: Closeness Centrality

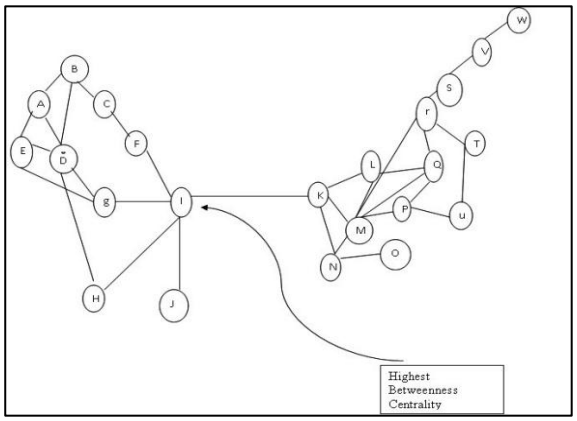

Fig. 7c: Betweenness Centrality

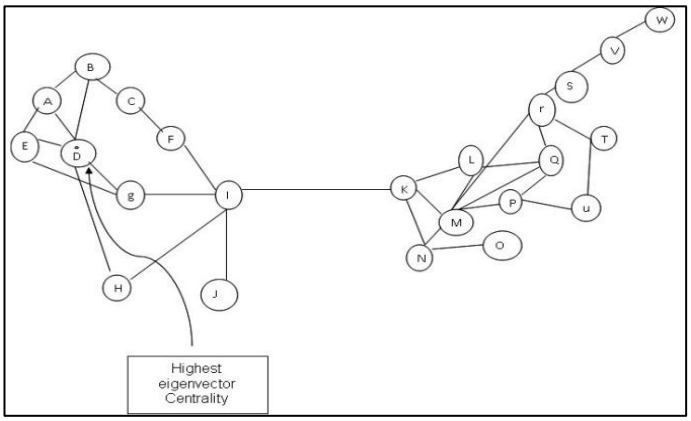

Fig. 7d: Eigenvector Centrality

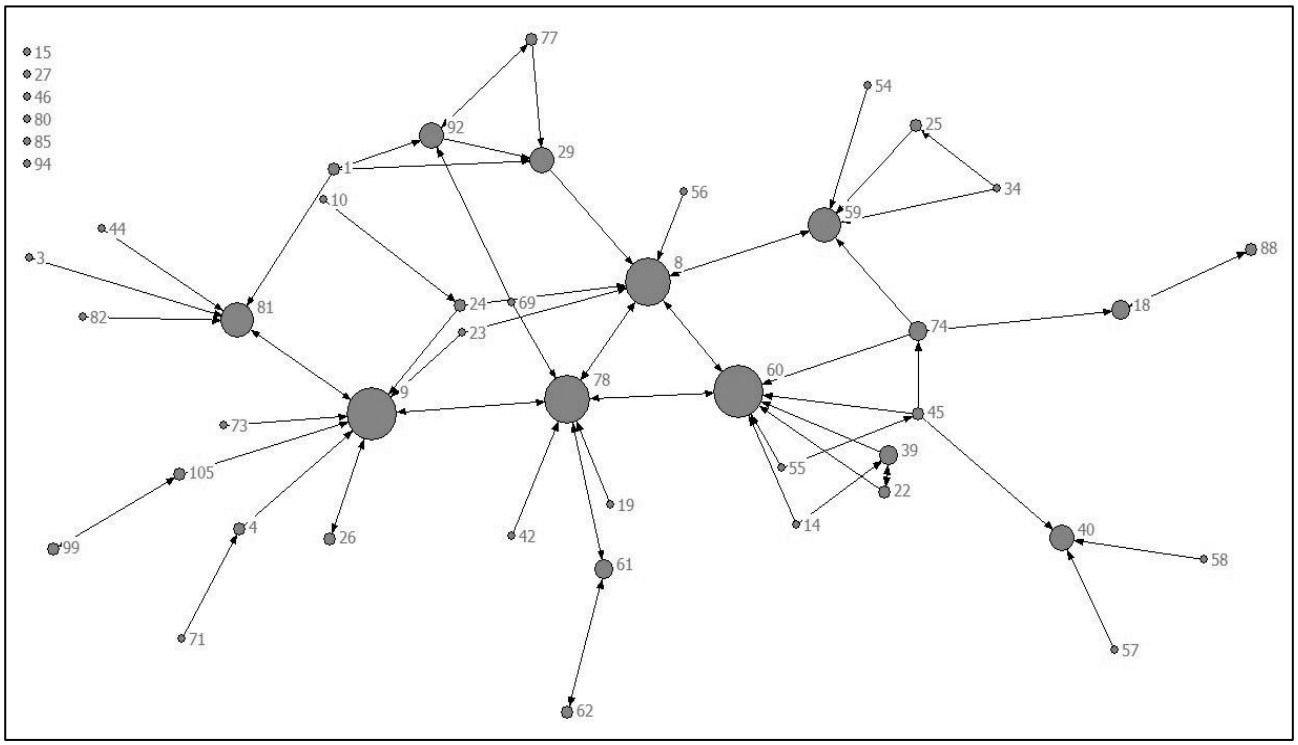

Figure 7e: Nodes Represented in Proportion to Their Betweenness Centrality (Goswami, 2007)

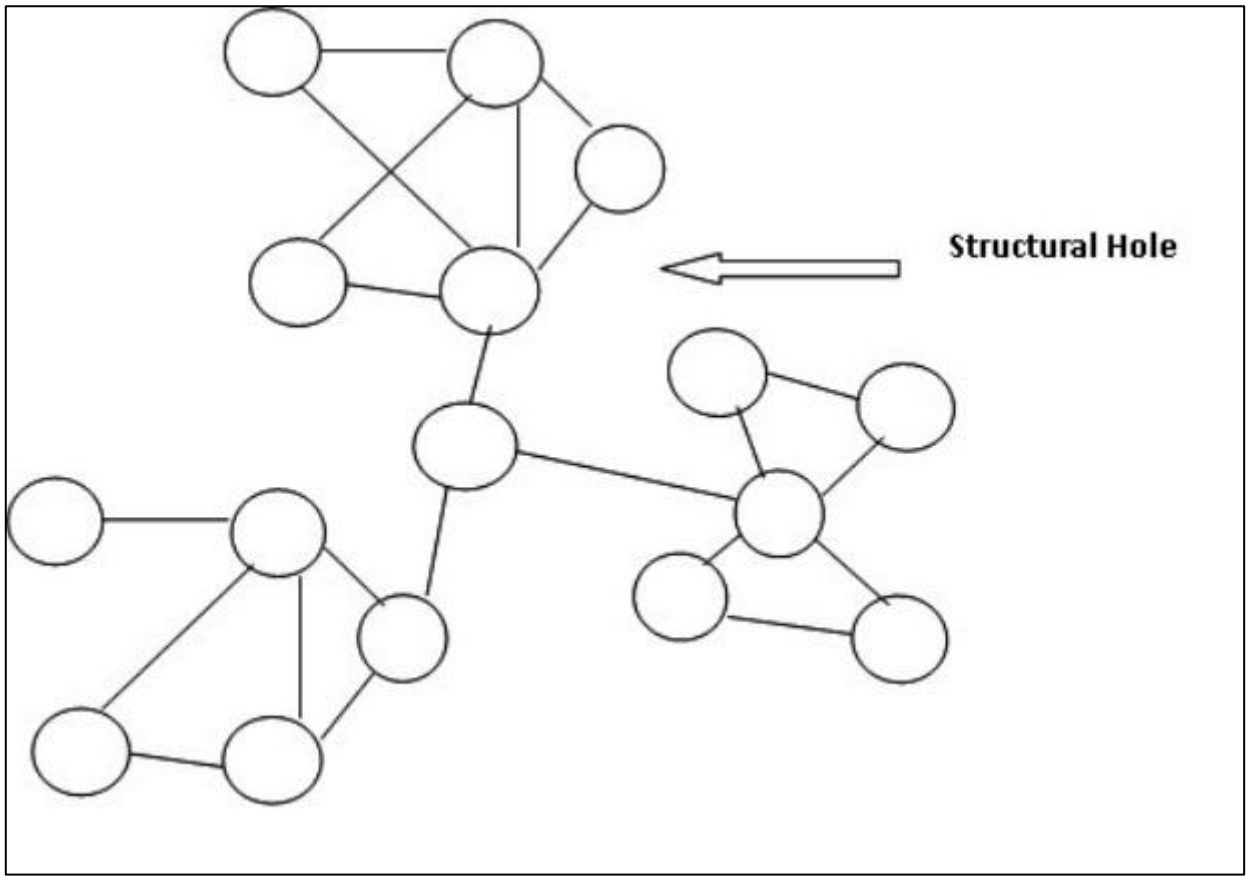

Figure 8: A Structural Hole

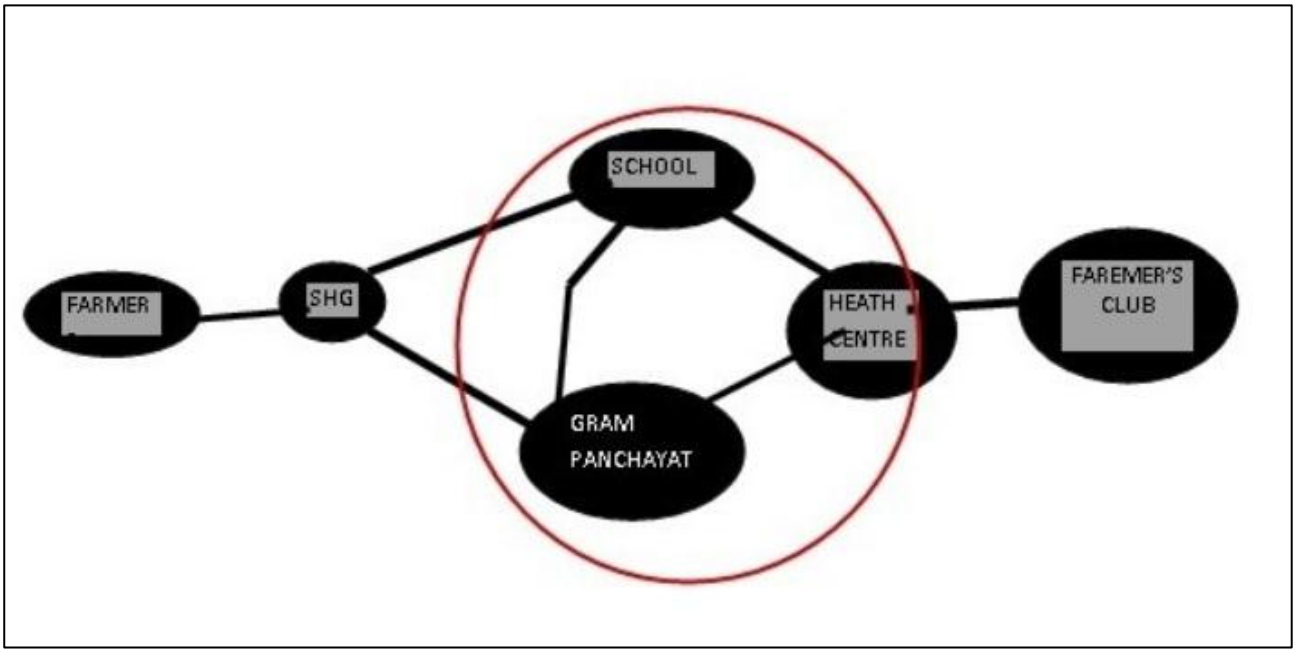

Figure 9: Clique

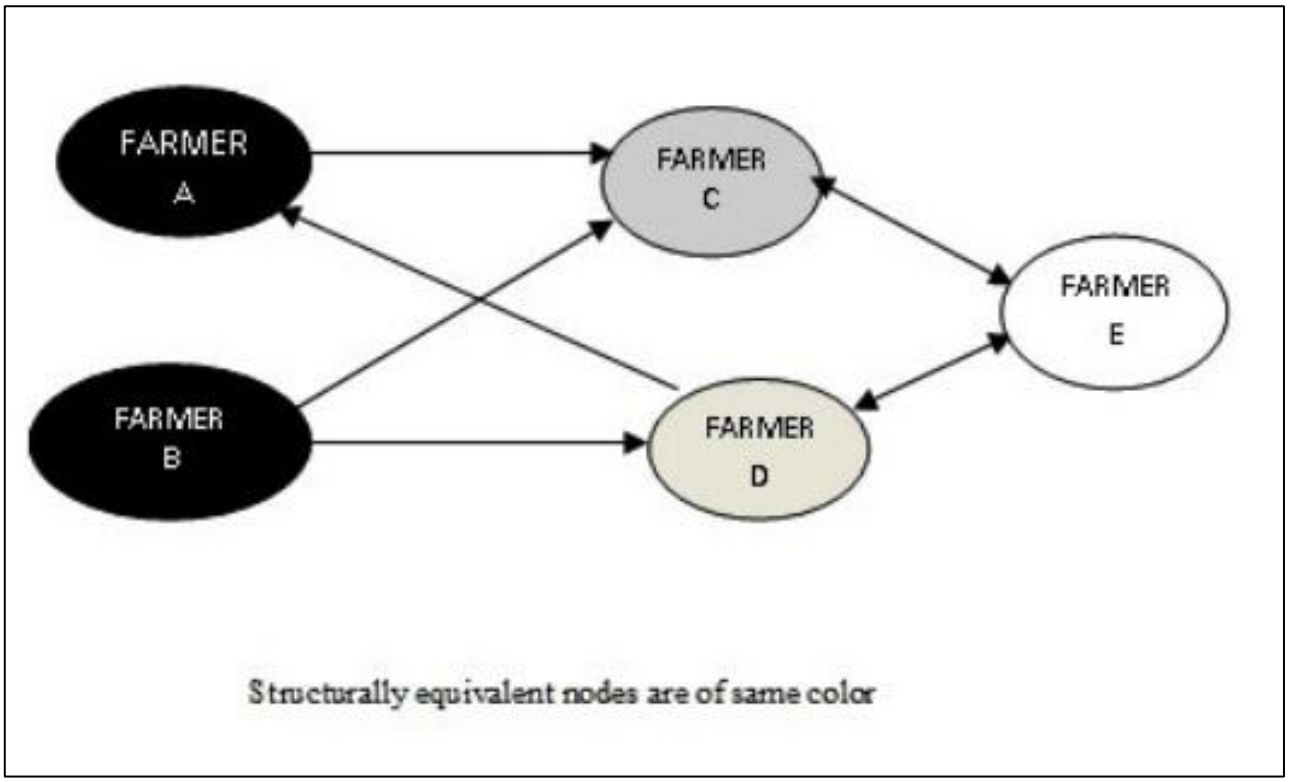

Figure 10: Structural Equivalence

Network data are now analysed and visualised through specialised software. Few of them are available for students'/researchers' use. Comparisons among few of these softwares are given below (Table 5).

Table 5: A Comparison of Commonly Used Software in SNA

	Description	Nature	Use	Proprietary
UCINET 6	Comprehensive social network analysis software	General	Academic	Free
Net Draw	Network Visualisation software, associated with UCINET	Visualisation	Academic	Free
Pajek	Program for large network analysis	General	Academic	Free
NetMiner3	Exploratory analysis and visualisation of network data	General	Commercial	Paid
Gephi	Visualisation and exploration platform	Visualisation	Academic	Free
SocNetV	Social Networks Visualiser	Visualisation	Academic	Free

Conclusion

Social Network Analysis research has been adopted in diverse academic disciplines, especially for solving practical problems. Since SNA is particularly effective in understanding complex systems, its application is being experimented in dynamic systems – be it social networking in web space or a weather forecast dissemination system for fishermen. This is also

being popularly employed for better coordination and control of organisational environment. However, application of SNA needs some serious training before applying in real world. However, a basic understanding of the analysis is often beneficial for functional purposes.

Livelihood system is not only complex due to its multiple interacting components and hierarchy of spread it has spatial and temporal variations also. With changes in any internal (health of principal earner in a family) or external conditions (withdrawal of subsidy on farm inputs) of the system, a livelihood system responds to both short and long terms. A large number of institutions associated with livelihood outcomes of a household or community adds to the complexity of the system. Decision makers must make informed decision for meaningful livelihood intervention in an area and promote innovation within the organisational environment. This will need capacity building of development professionals for better understanding of complex systems and practice this in day-to-day problems. At the methodological front, we recommend that training on SNA and its application be mainstreamed in rural development scholarship and profession.

References

Aberman, N., & Haglund, E. (2011). *A Stakeholder Map for Climate Change Adaptation.* Retrieved from http://womenandclimate.ifpri.info/files/2012/02/Mali_Net-Map_En_FINAL.pdf (accessed on 12 January 2014)

Adger, W. N. (2010). Social Capital, Collective Action, and Adaptation to Climate Change. *Economic Geography*, 79(4), 387-404.

Anderson, J. R., & Feder, G. (2007). Agricultural Extension. *Handbook of Agricultural Economics*, *3*, 2343-2378.

Asres, A. , Sölkner, J. , Puskur, R. , & Wurzinger, M. (2012). Livestock Innovation Systems and Networks: Findings from Smallholder Dairy Farmers in Ethiopia. *Livestock Research for Rural Development. Volume 24, Article #164.* Retrieved from http://www.lrrd.cipav.org.co/lrrd24/9/amla24164.htm (accessed on 12 December 2013)

Bandiera, O., & Rasul, I. (2006). Social Networks, and Technology Adoption in Northern Mozambique, *Economic Journal*, 116: 862-902.

Belshaw, D., & Chambers, R. (1973). A Management Systems Approach to Rural Development. Discussion paper, 161, Institute for Development Studies, University of Nairobi, Nairobi, Kenya. Retrieved from http://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/76/rc135.pdf?sequence=1(accessed on 23 December, 2013)

Beuchelt, T., & Fischer, I. (2006). What Do Vietnamese Farmers Do When a Crisis Occurs? Covering Lack of Resources through Social Networks. *Making Rural Households' Livelihoods More Resilient–The Importance of Social Capital and The Underlying Social Networks*, *34*, 45-57.

Borgatti, S. (2002). Basic Social Network Concepts. Retrieved from http://www.analytictech.com/networks/basic%20concepts%202002.pdf (accessed 9 February 2014)

Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network Analysis in the Social Sciences. *Science*, 323(5916), 892-895.

Burt, R. S. (1978). Cohesion Versus Structural Equivalence as a Basis for Network Subgroups. *Sociological Methods & Research*, *7*(2), 189-212.

Cavallo, R.E. (1982). *Systems Methodology in Social Science Research: Recent Developments*. Boston and The Hague: Kluwer Nijhoff Publishing.

Chambers, R., & Conway, G. (1992). *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*. UK: Institute of Development Studies.

Checkland, P.B. (1981). *Systems Thinking, Systems Practice*. Chichester: John Wiley and Sons.

Cinner, J. E., & Bodin, Ö. (2010). Livelihood Diversification in Tropical Coastal Communities: A Network-Based Approach to Analyzing 'Livelihood Landscapes'. *PLoS ONE*, *5*(8).

Conway, S., & Steward, F. (1998). Mapping Innovation Networks. *International Journal of Innovation Management*, 2(2), 223-254.

Crossley, N., Prell, C., & Scott, J. (2009). Social Network Analysis: Introduction to Special Edition. *Methodological Innovations Online*, *4*, 1-7.

DFID. (1999). Sustainable Livelihoods Guidance Sheets, Numbers 1–8, London: Department for International Development.

Douthwaite, B., Carvajal, A., Alvarez, S., Claros, E., & Hernández, L.A. (2006). Building Farmers' Capacities for Networking (Part I): Strengthening Rural Groups in Colombia through Network Analysis. *KM4D Journal*, 2(2): 4-18.

Ellis, F. (2000). *Rural Livelihoods and Diversity in Developing Countries*. UK: Oxford University Press.

Freeman, L. (2004) *The Development of Social Network Analysis: A Study in the Sociology of Science*, Vancouver, CA: Empirical Press.

Goswami, R. (2007). Understanding Farmer-to-Farmer Communication within the Sustainable Rural Livelihoods Framework (Unpublished Doctoral thesis), Bidhan Chandra Krishi Viswavidyalaya, West Bengal, India.

Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 1360-1380.

Hall, A.J., Sivamohan, M.V.K., Clark, N., Taylor, S., & Bockett, G. (2001). Why Research Partnerships Really Matter: Innovation Theory, Institutional Arrangements and Implications for Developing New Technology for the Poor. *World Development*, 29(5), 783-797.

Hanneman, R. A., & Riddle, M. (2005). *Introduction to Social Network Methods*, Riverside, CA: University of California, Riverside.

Ikerd, J. E. (1993). The Need for a System Approach to Sustainable Agriculture. *Agriculture, Ecosystems & Environment*, *46*(1), 147-160.

Jamali, M., & Abolhassani, H. (2006). Different Aspects of Social Network Analysis. In *Web Intelligence, 2006. WI 2006. IEEE/WIC/ACM International Conference on Web Intelligence* (pp. 66-72). Retrieved from https://www.cs.sfu.ca/~oschulte/teaching/socialnetwork/papers/SNA-intro-mohsen.pdf (accessed on 12 October 2013)

Jana, R., & Choudhuri, A. (2013). Studying Various Aspects of Social Networks with Socio-economic Changes in a Rural Area: A case study from West Bengal, *Guru Nanak Journal of Sociology*, 34 (1 & 2), 1-30.

Kossinets, G., & Watts, D. J. (2006). Empirical Analysis of an Evolving Social Network. *Science*, *311*(5757), 88-90.

Lanjouw, J. O., & Lanjouw, P. (2001). The Rural Non-farm sector: Issues and Evidence from Developing Countries. *Agricultural Economics*, *26*(1), 1-23.

Lanjouw, P., & Shariff, A. (2004). Rural Non-farm Employment in India: Access, Incomes and Poverty Impact. *Economic and Political Weekly*, 4429-4446.

Martin, K. S., Rogers, B. L., Cook, J. T., & Joseph, H. M. (2004). Social Capital is Associated with Decreased Risk of Hunger. *Social Science & Medicine*, *58*(12), 2645-2654.

Poole, N., & de Frece, A. (2010). A Review of Existing Organisational Forms of Smallholder Farmers' Associations and Their Contractual Relationships with Other Market Participants in the East and Southern African ACP Region. Retrieved from http://eprints.soas.ac.uk/8623/1/FAO_AAACP_Paper_Series_No_11[1].pdf (accessed 22 January 2014)

Prell, C., Hubacek, K. , & Reed, M. (2009). Stakeholder Analysis and Social Network Analysis in Natural Resource Management. *Society and Natural Resources, 22*, 501-518.

Pretty, J. (2003). Social Capital and the Collective Management of Resources. *Science*, *302*(5652), 1912-1914.

Rakodi, C. (1999). A Capital Assets Framework for Analysing Household Livelihood Strategies: Implications for Policy. *Development policy review*, *17*(3), 315-342.

Rao, A.R., & Bandyopadhyay, S. (1987). Measures of Reciprocity in a Social Network. *Sankhya, Series A*, 49: 141-188.

Ravnborg, H. M. (2002). *Developing Regional Poverty Profiles Based on Local Perceptions* (No. 291). International Centre for Tropical Agriculture, Cali, Colombia.

Reimer, B., Bollman, R. D., & Bryden, J. M. (1997). Informal Rural Networks: Their Contribution to "Making a Living" and Creating Rural Employment. In R. D. Bollman & Bryden, J. M. (Eds.), *Rural Employment: An International Perspective* (pp. 396-409). Wallingford: CAB International.

Scott, J., & Carrington, P. J. (Eds.). (2011). *The SAGE Handbook of Social Network Analysis*. London: SAGE.

Servon, L. J. (1998). Credit and Social Capital: The Community Development Potential of US Microenterprise Programs. *Housing Policy Debate*, *9*(1), 115-149.

Spedding, C.R.W. (1988). *An Introduction to Agricultural Systems*. 2nd ed. London: Elsevier Applied Science.

Spielman, D. J., Davis, K., Negash, M., & Ayele, G. (2011). Rural Innovation Systems and Networks: Findings from a Study of Ethiopian Smallholders. *Agriculture and Human Values*, *28*(2), 195-212.

Spielman, D. J., Ekboir, J., & Davis, K. (2009). The Art and Science of Innovation Systems Inquiry: Applications to Sub-Saharan African Agriculture. *Technology in Society*, *31*(4), 399-405.

Temel, T., Janssen, W., & Karimov, F. (2001). Agricultural Innovation System of Azerbaijan: An Assessment of Institutional Interactions (Discussion Paper No. 01-3). The Hague, The Netherlands: ISNAR.

Temel, T., Janssen, W., & Karimov, F. (2003). Systems Analysis by Graph Theoretical Techniques: Assessment of the Agricultural Innovation System of Azerbaijan. *Agricultural Systems*, *77*(2), 91-116.

Walby, S. (2007). Complexity Theory, Systems Theory, and Multiple Intersecting Social Inequalities. *Philosophy of the Social Sciences*, *37*(4), 449-470.

Wasserman, S., & Faust, K. (1994) *Social Network Analysis*, Cambridge: Cambridge University Press.

METHODOLOGY OPEN ACCESS

Critical Observation on Methodologies of Select Doctoral Research Studies

Dr Indrajit Goswami [†]

Abstract

The present article aims to critically observe and interpret the methodological deficiencies as found in randomly selected 14 doctoral theses submitted to two different universities in India. Despite their serious deviation from the expected methodological standards, all those theses were accepted and approved by the universities and scholars concerned conferred with PhD degrees. Undoubtedly, those theses kept in the reference sections at the respective university libraries would potentially misguide and mislead the future researchers. Some of the common technical deficiencies, as have been noticed, include (1) absence of careful thoughts in framing research titles, (ii) biased method of data collection, (ii) absence of logical explanation in favour of sample size and sample selection process, (iii) designing and execution of instrument for data collection, (iv) theory formulation in terms of framing of objectives, hypotheses and operational definitions etc. The article attempts to present the critical observations on case-to-case basis so that their conceptual, instrumental and procedural deficiencies and deviations are easily understood by the academicians, researchers and students. The content of this article is divided in to three broad sections. The first section deals with an introduction to quantitative and qualitative research methods and their advantages and limitations. The next section deals with the review of the selected theses followed by conclusion and suggested remedial measures. The objective of this article is purely academic and its scope is limited to enhancement of quality of future research studies in the domains and related fields.

Key words: Doctoral study, Methodological deviations and deficiencies, Title of study, Researchers' biases

[†] Director, Department of Management Studies, INFO Institute of Engineering, Sathy Road, Kovilpalayam, Coimbatore: 641107, Tamil Nadu, India, Email: idrgoswami@gmail.com

Introduction

Apart from their contribution to theoretical development in respective subject domains, the contemporary research in business/management studies and agricultural extension programs are expected to contribute substantially to 'decision making' in the respective fields. In recent times, the teaching, training, mentoring and discourses in management and agricultural extension education have developed an obsession to 'research' with a perspective of their diagnostic and curative functions (Goswami, 2012). There is a growing trend to apply for different research grants and an enthusiasm to pursue doctoral studies among academicians, scholars and other professionals. Several autonomous institutions and universities have been encouraging interested scholars to pursue doctoral studies through part-time mode. Undoubtedly, such opportunities have paved the way to register for supervised research study, but evidences reveal that the expected standard of such researches has neither been protected nor promoted for ensuring their present as well as future relevance.

There are four main aspects of the research methodology: research design and strategy; method of sampling; development of instrument and data collection; and determining the application of statistics and data analysis. If methodology is neglected and compromised, the results of a study could be misleading. To some extent, we can afford the limitations of a research study but never its compliance to scientific principles and the very basic fundamental deficiencies in methodology. While limitations may enable the researcher to suggest improvements in further research, methodological errors demand a complete review of the conceptual framework of the study being undertaken and redesigning of the execution plan. Methodological errors and inadequacy not only mislead the results of a research project but weaken the basic purpose of research as an academic subject and mislead the entire community of future researchers/scholars. The present article deals with 14 doctoral theses, selected randomly from the reference sections of two leading universities in Tamil Nadu, India. The objective of the paper is purely academic and here an attempt has been made to critically observe the methodology of the selected theses to understand the deviations from expected standards, if any, in the research methodologies of the selected theses.

Before entering into the methodological analysis, it seems essential to understand the characteristics of quantitative and qualitative methods in social research. The following section presents a brief review of literature on both of the methods.

The Quantitative Method

According to Babbie (2010); Brians et al. (2011); McNabb (2008), and Singh (2007), quantitative methods emphasize on objective measurements and numerical analysis of data collected through polls, questionnaires or surveys. It requires larger sample size for drawing conclusions and for generalisation of findings on the target population across different groups and communities. Hence, it is essential to scientifically explain the sample plan, design of tools, the validity of data and statistical applications. There are certain ethical obligations of the researcher. It includes: Reporting of unanticipated events that occurred during data collection; Explaining how the actual analysis differs from the planned analysis; and, Making it transparent about handling of missing data (Black, 1999). In addition, the researchers need not to be obsessive to statistical analysis and applications. They have to choose just minimal statistical procedure, which would be adequate for achieving objectives and testing hypotheses. Since data in the form of numbers and statistics are one of the major characteristics of this method, so deviation from the standard norms of convergent reasoning may dilute the very basic purpose and advantages of qualitative method.

Limitations of Quantitative Methods

- Quantitative data is efficient but may fail to address the contexts;
- The in-depth analysis is hardly possible due to its predominant empirical nature;
- Due to 'structural bias', many times the interpretation and discussion actually reflect the views of the researcher instead of the participating subject (Babbie, 2010);
- It is not effective for any micro-level analysis of social and behavioural problems; and
- It is unique in terms of its nature of replicability and repetitiveness; hence, it may encourage plagiarism among prospective scholars, who may be interested in pursuing MPhil or PhD studies.

The Qualitative Method

Qualitative research is often criticised as biased, small-scale, anecdotal, and/or lacking rigor. However, with this method, subjects can be examined in detail and in depth because it is flexible and does not contain any structural bias. It provides enormous scope to use researchers' professional wisdom and experience to plan, execute, understand, interpret and discuss the issues or problems at the individual or micro level. The reasoning and conclusion may not either require any quantitative measurement or calculating the statistical significance. If it is carried out properly, it can give us reliable, credible and rigorous insights and information. However, in qualitative research too, there needs to be a way of assessing the extent to which claims are supported by convincing evidence (Anderson, 2010). The validity of data is ensured by accurate and honest representation of the phenomena, whereas the reproducibility of the findings can establish the reliability of the study. Validity can be substantiated by a number of techniques including triangulation use of contradictory evidence, respondent validation and constant comparison (McNabb, 2008).

Limitations of Qualitative Research

- Research quality is heavily dependent on the researcher's skills and hence may not be free from researcher's personal biases;
- Issues of anonymity and confidentiality can present problems when presenting findings; and
- The process is often time consuming and findings cannot be generalised to a larger population.

The Review Plan

A total number of 14 doctoral theses, which awarded PhD to the respective scholars during 2002 to 2011, were randomly selected from two university libraries in Tamil Nadu. Those were studied thoroughly, especially the methodology part, by the author. Neither the scholars of those theses were contacted nor their research supervisors. Therefore, there was no primary source of data for writing this article. The data and descriptions as presented in those selected theses have been used in the present review. The names of the universities, research scholars, supervisors and places including districts and cities will not be mentioned in the article to protect their privacy. In addition, to ensure better confidentiality, the titles of the studies have been replaced with 'area of study'. The selected theses, hereafter referred as cases, have been divided under four broad categories, such as 'Market and Management Research', 'Market and Perception Research', 'Labour Market Research' and 'Miscellaneous'. The observations are presented as case-to-case basis and no attempt has been made either to compare the merits or demerits of the cases.

Market and Management Research

Case: 1

Area of Study: Implications of Change Management Practices at a Multi-specialty Hospital

Methodology

It was a case study and it used exploratory research design. Total 96 doctors were selected purposively as samples. A formal, structured and standardized interview schedule was used for data collection. In the words of the scholars, "questions and their sequence were pre-determined in advance". The interview schedule contained 163 items to be responded on different parameters such as five-point scale, nominal scales, ordinal scale, etc. As a part of 'limitations of the study', the scholar has mentioned that because of doctors' busy schedule, interview could not be conducted in length. In addition, many doctors expressed unwillingness during interview.

Observation

'Change management' is neither a new nor an unknown area of research. There is no dearth of literature in the domain. Just one attempt of search on 'Google' with key words 'change management theories' had shown 4,170,000 results (0.24 seconds) (checked on 29-1-14 at 07.45 pm). Theories, models, processes, etc. are available in plenty to understand and plan a study in the given subject. Hardly, there is any scarcity of earlier research studies and findings on the similar contexts. Hence, instead of identifying it as an 'exploratory' study, it could have been meaningful to accept it as a descriptive study. Further, a case study with an 'exploratory design' and a 'standardized', 'formal' and 'well-structured' interview schedule hardly would convince anyone. Rather a well-structured questionnaire or interview schedule could be used in a study, where the researcher would have clearly defined research objectives and questions similar to a quantitative or empirical research (Brians *et al*., 2011). Case studies in social science research, especially in behavioural science, are predominantly qualitative in nature. There interviews are not to be restricted to specific set of pre-decided or predetermined questions and/or measurement scales. In a case study, the contextual details are given more importance than testing hypotheses with quantitative data (Singh, 2007). However, the study under observation failed to provide substantial discussion on 'implications of change management' in the sampled institution. Apart from quantitative data and statistical analysis, there is hardly any in depth discussion on any particular issue or 'implications'.

The research mentioned that "total 96 doctors were selected purposively as samples". What was the purpose or rationale? Not yet explained in the method. In addition, the size of target population had not been mentioned anywhere in the thesis. Even after purposive selection of 96 respondents, the researcher reported some limitations in the form of inconveniences of the respondents. Neither the researcher could conduct interviews with all the 96 respondents, nor could she complete many of the interviews. The limitations she cited included (i) busy schedule of the doctors, and (ii) many expressed unwillingness to continue with the process of interviews. Firstly, the researcher could have avoided meeting all of them in hospital or could have taken prior consent for the purpose. Secondly, she could have avoided making so lengthy interview schedule with total 163 statements to be responded on different measurement scales, which included five-point scales, nominal scales, ordinal scales, etc. Hence, the limitations cited in the methodology chapter were not actually the limitations of executions of plan, but the drawback and weakness of the research plan itself.

Case: 2

Area of Study: Customer Relationship Management and Retention

Methodology

It was a comparative study with reference to motor insurance customers. The study used the descriptive research design and executed random sampling method to select 500 respondents. The scholar used systematic sampling method for selection of insurance products from ten stores. In addition, the scholar has mentioned that "the target samples were accessed through survey method and the survey was administered through personal interview method". As data collection tool, a structured questionnaire was used. The two research objectives read as "(i)…an in-depth analysis of customer satisfaction of motor insurance customers and try to identify the 'maintainers' and 'enhancers' of customer satisfaction, and (ii)... 'loyalty' among motor insurance customers".

Observation

The title of the study is not free from ambiguity. Customer retention is not something separate but an integral part of CRM strategy of any company. If CRM is effective, a positive impact will be better customer retention. Hence, retention can be an outcome of CRM. It is expected that the title of any research study, more so at the doctoral level, would be very clear, understandable and focused. Even if it is perceived that 'retention' has been accepted by the researcher as the outcome of CRM, the title does not establish that. Alternatively, it could be a comparison between 'CRM' and 'retention' status of customers at different motor insurance companies. However, from the methodology it has been understood that the scholar had not yet selected insurance companies to compare but he had selected insurance products from ten different stores. What he wanted to mean by 'stores', not yet defined. Further, there was no description on 'systematic selection method of insurance products'. Similarly, the selection process of respondents lacks objectivity. A combination of 'random sampling, survey method and personal interview' does not yet make any sense. In addition, it could not convince about how far an 'in-depth analyses' would be possible by a descriptive method and by using a 'structured questionnaire'. The terminologies like 'maintainers' and 'enhancers' are not yet defined and no further description has been mentioned about their measurement process.

Case: 3

Area of Study: Consumer Behavior towards Selected Household Products

Methodology

It is a descriptive study. The researcher used structured interview schedule and had taken a sample size of 500 consumers and 50 vendors. The interview schedule was 16 pages (standard A-4 size with 1.5 line spacing) long with 267 questions and statements framed to collect demographic data and problem specific data. It also included nominal scales, ordinal scales and Likert-type 5-point scales to measure consumers' satisfaction, attitude and several other attributes.

Observation

There had been no specific justification mentioned about how the size of sample came to be 550. The universe of the study was not defined and the locale of sample collection was not clearly specified. In addition, the researcher did not appoint or engage any field worker or interviewer to conduct interviews. It was done independently by the researcher. The methodology adopted could raise several questions such as (i) How far it would be justified to conduct interview with a comparatively larger sample size? (ii) Would it be feasible and technically acceptable to incorporate a large number of questions /statements in the schedule? (iii) How much time it would take to complete an interview process with a respondent? (iv) Whether respondents were comfortable to be with the interviewer until the end of each interview process? (v) Whether respondents answered to all the 267 questions/statement? (vi) Why vendors were included in the sample? There is hardly any explanation given in the methodology to satisfy the above questions. It had been indicative that the researcher was

over ambitious and hence compromised with the technical guidelines of scientific research. It had been apparently revealed that the researcher might have 'structural biasness' and 'sample biasness'.

Case: 4

Area of Study: Customer Relationship Management in Retailing

Methodology

The study was conducted with the customers in FMCG segment and it was based on descriptive design. A total of 510 retailers and 1140 customers were selected from a district as sample size. "The entire district was covered by using random sampling technique for retailers' survey." "For customers, convenience sampling was used." The scholar formulated hypotheses after defining his statistical tools used in the study.

Observation

Similar to the last case, the research process adopted in the study contradicts to the scientific guidelines of research. The 'contents' page in the thesis organized the process in the following sequence: (i) introduction and design of the study, (ii) review of literature, (iii) conceptual framework of CRM and … (vii) Bibliography and (viii) Appendix. There is no specific sampling plan mentioned in the report. Neither the scholar has mentioned about how many FMCG retailers are there in the district, nor did he define the population of customers. With these given circumstances, the selection of 510 retailers by random sampling technique, and selection of 1140 customers through convenient sampling do not make any sense. Either the number of sample or the process of their selection is hardly free from scholar's personal biases. In the given circumstances, the sample size might not be qualified as representative of entire population of retailers and customers in the district.

Case: 5

Area of Study: Emotional Intelligence, Adjustment, Decision Making and HR Perception of Marketing Executives in Engineering Industries in Coimbatore

Methodology

A combination of descriptive and diagnostic research designs was used. The sample size was 500. The researcher formulated 55 null-hypotheses for testing. A structured questionnaire was used for data collection. The tool was divided in to six sections, respectively on 'Personal Profile', 'Emotional Intelligence Measurement Scale' (Haggerty, et al, 1989), 'Self Adjustment Scale' (Sharma, 1972), 'Family Adjustment Scale' (Hatia and Chandha, 1998), Decision Making Scale' (Janis and Mann's, 1997) and questions on HR activity. There were 120 statements spread over six sections, which included questions on personal profile.

Observation

First, the methodology of the study does not clearly justify the rationale behind combination of two methods, i.e., descriptive and diagnostic. The diagnostic studies generally involve clinical insights and analyses and so it may be inadequate, if data are collected through questionnaires. More specifically the diagnostic observations may require a considerable degree of direct participation and intervention of the research investigator. Instead of a questionnaire, an interview schedule would have been a better option for conducting a diagnostic study. The review of methodology of the thesis reveals that it is nothing more than a descriptive study with an over ambitious plans of drawing some forced conclusions. It appears that the data actually reflects the view of the researcher instead of the respondents. There has been bias in deciding the sample size and sampling technique. There is hardly any mention about how the sample size has come out to be 500. There is a universal acceptance that under normal circumstances the rate of return of duly filled-in questionnaires is not more than 35-40 percent. However, the methodology of the thesis does not mention

about how many duly filled-in questionnaires have been returned and how many of them have been adequately filled to be considered for final analyses. The title of the study lacks focus and direction. The researcher has used many variables or attributes and has taken them for bivariate and multivariate analyses, but there is no operational definition given on each measurable variable in the report. The thesis does not provide any theoretical narration to show or describe any possible interdependence of the selected variables.

Market and Perception Research

Case: 6

Area of Study: Brand and Product Features as Determinants of Purchase Intention

Methodology

An empirical study with 500 samples collected through snowball sampling method. The researcher used a structured questionnaire and taken six months to complete processing of the data collected from the respondents. The following three objectives were included to address: a) the background characteristics of the households who have been using the durable products, namely, mixer grinder, television, refrigerator and washing machine; b) assessment of the influence of brand factors such as brand heuristics, brand loyalty, perceived quality, brand association and overall brand equity on buyer's intention to purchase branded durable goods; and c) the evaluation of the influence of product features on the purchase of the durable products such as mixer grinder, television, refrigerator and washing machine.

To achieve the above objectives the researcher formulated the following two types of hypotheses (H1a and H1b) for each product selected for the study. They are:

H1a: The brand factors such as brand factors such as brand heuristics, brand knowledge, brand trust, brand loyalty, perceived quality, brand association and overall brand equity has a significant influence on the purchase of specific brand of product.

H1b: The product features have a significant influence on the purchase of various brands of a product.

Observation

The study might be of contemporary importance but found to be planned with biased choices. Objectivity is lacking in terms of framing of objectives and hypotheses. The study objectives and hypotheses are overloaded with ambitious expectations of the scholar. Selection of four different consumer durables and seven different 'brand factors' from each product category do not make any sense. The 'brand factors' (perceived as variables) are not defined adequately. Hence, it had been difficult to understand the scope of the study. The title does not have any focus and it is very much subjective. It has not been clear from the methodology about the selection of brand and products. It could be different products of a single company or similar products from different companies. The methodology could not transparently discuss or address the requirements.

Case: 7

Area of Study: Customers' Perception towards Modern Shopping Centers

Methodology

A sample size of 500 customers was selected through convenient sampling method. The scholar used interview schedule as tool and attempted to conduct interview, while they were on shopping spree. One of the objectives of the study reads, "to study customers' ideas, opinions and preference towards the various aspects of modern shopping centers". The interview schedule was too lengthy with more than 100 items or statements to respond. It also included a five-point scale for measurement of perception. Neither the validity nor reliability of the instrument was tested nor was that any already used and tested scale.

Observation

The nature and scope of the problem is not yet defined with specific research questions. The

constructs such as 'perception', 'ideas', 'opinions' and 'preferences' are not synonymous words, hence they need to be defined with certain observable or measurable parameters. Similarly, the inclusions of words like 'modern shopping centers' in the title dilutes the focus of the study. The shopping centres may refer to anything like wholesale or retail markets, super market or hypermarkets, single brand or multi-brand stores, malls etc. At any doctoral-level study, it is expected that the title of the study would be very specific, purposive and one where the premise of study is to be made very clear and transparent. Even in the methodology part, nothing has been defined with objectivity. The shopping areas are generally busy areas where sellers and customers are engaged in selling and buying of different goods or products. The modern shopping malls are equipped with different amenities like restaurants, theatre, gaming zones, etc. Customers may visit such places for a specific need or varied purposes. It could be even difficult to approach them to talk on research. Hardly there is any logic to accept that the scholar has conducted a lengthy interview (peacefully and uninterruptedly) with 500 selected customers. When the sample is larger and scattered, we may administer 'questionnaire'. Alternatively, we may appoint required number of research assistants (as interviewers) to execute the plan. Why did the scholar follow convenient sampling? There is no explanation given in the method. The perception may differ across genders, age groups, income groups, etc. However, neither the objectives nor the hypotheses could make it clear, if scholar had any such plan to study and measure perceptual differences across groups.

Case: 8

Area of Study: Attributes, Choice of Business and Perception on Success of Women Entrepreneurs

Methodology

It is a descriptive study. The sample size was 630. A structured interview schedule was used for data collection from primary sources. The schedule had six sections, respectively on 'personal profile' (included 12 items to answer), 'business profile' (45 statements to answer), 'entrepreneurial attributes' (20 statements on three point scale), 'entrepreneurial success factors' (18 items to arrange in rank order), 'problems on women entrepreneur' (16 statements on five point scale) and 'satisfaction of women entrepreneurs' (09 statements on three point scale). The researcher included two open-ended questions at the end of the schedule. Total 96 null-hypotheses have been formulated for testing and to fulfil the study objectives.

Observation

The title seems to be very generic and ambiguous. It is not very much clear whether the study wants to measure perception of women entrepreneurs or perception of others on them. It does not clearly spell out about the category of entrepreneurs, i.e. whether they are first, second or third generation entrepreneurs. In addition, the title does not mention about the geographical coverage of the study. It lacks transparency when the researcher does not mention either the time required for each interview or total time required to complete all 630 interviews. The researcher's plan to conduct interview with a highly structured schedule does not find any justification in the given context of the study. All the measurement scales used in the schedule are framed by the researcher herself and their validity and reliability has not yet been checked. The sampling strategy is not well defined and it appears to be irrational when the researcher claims that respondents have been selected randomly. There has been no plan of stratification of the target population or any other type of categorization on the basis of their urban or rural domicile, or age group or level of education, etc. In addition, it is quite difficult to accept that all 630-interview sessions have been conducted flawlessly with a set of 122 questions at a stretch. There is doubt about how long the participant-respondent will maintain patience and honesty to respond to all

120-scale items. Moreover, it is not feasible to expect them to express freely and genuinely to two open-ended questions at the end of a so long interactive interview session. The researcher has used all common descriptive statistics, including association and correlation tests.

Labour Market Research

Case: 9

Area of Study: Performance of District Cooperative Milk Producers Federation

Methodology

The study used multistage stratified random sampling method. Only one district was selected out of all districts where Operation Flood Program-I was implemented. Out of 37 milk routes in the selected district, 30 were selected. Later selected 30 routes were divided into two blocks—one fertile block and one non-fertile block. Then 20 milk producers' cooperative societies were randomly selected from each block, i.e. total 40 cooperatives from two blocks. Further, 15 members were randomly selected from each selected cooperative. As a result, the sample size came out to be 600 (300 from fertile block and 300 from non-fertile block). All 600 respondents were interviewed personally by the researcher. It took around three months to complete the interview process.

Observation

Except sampling plan, nothing has been defined as a part of research method. As per the description recorded in the thesis, the cooperative societies are represented by small, marginal and big farmers. However, there is no mention about landless farmers turned milk producers. The selection of one district appears to be biased since rationale behind such selection has not yet been mentioned. Sample size does not adequately represent the population of milk producers in the district. Since the study was on performance of the 'federation' of cooperatives, it would have been better to start the process of sampling at the level of federation, not district. Further, the study and methodology fails to throw light on measurement of performance and related variations among small, marginal and big farmers. All the selections in round figures, such as 30, 20, 15, 300 and 600, appear to be intentional and purposive to make calculations easier and comfortable. Either, the selection of 30 milk routes from existing 37 or randomly selection of 20 cooperative societies is not adequately justified by any reason, logic or rationale. In addition, it has been noted that the 'cost of milk production' at the farmers' level has been ignored towards measurement of performance of federation.

Case: 10

Area of Study: Work-family Conflict among Merchandisers of Knitting Industries in a Selected District

Methodology

It is a descriptive study which used convenient sampling method to select 605 participant-respondents. A structured questionnaire was used for data collection. The tool was divided in to two parts. The first part had 14 questions to probe on demographic background of the respondents. The second part was a four-point measurement scale with 99 statements, distributed in to 13 sub-sections.

Observation

Every convenient sampling method may involve some biasness. However to make it a true non-probability method of selection and to make it more transparent and acceptable, we need to explain and justify the reason behind adopting convenient sampling method. Unless it is supported by a sound rationale, it remains potential for open criticism. The scholar in the study could not clearly narrate the justification of using convenient sampling. The variables taken for measurement and for tests of association and correlation were not clearly identified and defined. There is no mention about validity and reliability of the scale used.

Case: 11

Area of Study: Problems and Prospects of *Khalasi* Labourers with Special Reference to a District

Methodology

This part included only the sampling plan and sample size. No further description of research strategy, i.e. methodology in true sense, has been given. "Samples of 1000 labourers were selected from the district, based on the convenience of the researcher, by adopting convenience sampling method." A structured interview schedule was used for data collection from selected samples. "The samples included unorganized labourers and migrant labourers." The researcher used separate interview schedules for each category.

Observation

There is no justification about how the sample size came to be 1000. In addition, it lacks feasibility to accept that all 1000 respondents were interviewed by the researcher within the stipulated time period of around three months. It is nowhere mentioned about the target population. Hence, the sample size lacks credibility of being representative of a population. No operational definitions are given on 'unorganized labour', 'migrated labour' and 'khalasi labour'. The review of literature part is inadequate and does not clearly describe the research terms, their similarities and differences. The entire process of research here starts from confusions, since there is no theoretical explanation given on 'problems' and 'prospects'. It has been revealed from the analysis that it was basically a study of satisfaction of those labourers in their respective fields of labour. Hence, instead of putting the word 'problems' in the title, it could have been better to cite the specific research problem. The researcher mentioned that inadequacy of time was one of the limitations of her study. Time is indeed a scarce resource; however, an appropriate research plan can help us to estimate the required time. For example, time series designs may not consider time as constraint. It is imperative that 'cost-benefit analyses' is an inseparable part of decision making in research. Hence, the researcher must identify suitable alternative course of action as a part of research strategy.

Case: 12

Area of study: Satisfaction, Prospects and Problems of Women *Bidi* Workers with Special Reference to Two Districts in Tamil Nadu

Methodology

It has been revealed from the report that it was a descriptive study, but there was no mention about the research method in the thesis. "Out of four *bidi*-making districts two were selected because more number of women workers was there. The scholar used convenient sampling technique and selected 250 respondents from each district. An interview schedule was prepared and "circulated among HR Managers for verification". Interview was conducted with all 500 samples in a period of three months.

Observation

The research process adopted in the study contradicts to the scientific guidelines for social science research. The 'contents' page in the thesis organized the contents and process in the following sequence: (i) introduction and design of the study, (ii) review of literature, (iii) overview: Bidi industry, (iv) living and working conditions of *bidi* workers, (v) analysis and interpretation, (vi) findings, suggestions and conclusions, (vii) bibliography and (viii) annexure. Generally, the methodology is to be finally decided after working on introduction, literature review and formulation of objectives (and hypotheses, if required). The scholar claimed that the sample size was not adequate but she did not mention the (appropriate or approximate) population of women bidi workers, either in Tamil Nadu or in two selected districts. The *bidi*-manufacturing process is not as organized as other manufacturing industries. Still it is considered as an unorganized sector and hardly there is any HR Manager in those manufacturing units.

Case: 13

Area of Study: Quality of Work Life and Psychological Wellbeing among the Female Employees of Indian Private Banks

Methodology

It was a descriptive research study. The objectives were (i) to study personal profile of the respondents, (ii) to study their quality of work life, (iii) to study their psychological wellbeing, and (iv) to find out the relationship between QWL and psychological wellbeing. Only 19 banks (7 new and 12 old generation banks) were selected from a district of Tamil Nadu. 'Technology profile' of the banks was the determinant to distinguish between 'new' and 'old' banks.

The scale framed by NIOSH (National Institute of Occupational Safety and Health, USA, 2002) was used to measure QWL of women bank employees in Indian settings. The NIOSH's instrument includes total 72 items (or statements) but the researcher had taken it partially. Only 35 items were found suitable to Indian situations, so she used those 35 items on a 4-point scale. For measurement of 'psychological wellbeing', she used the scale developed by Carl Ryff. It had total 84 items distributed equally in 06 dimensions. The validity of this scale was checked with the help of HR managers and other bank officials. The researcher received 360 duly filled-in questionnaires out of total 560 distributed among respondents. Only 300 filled-in questionnaires were found complete and thus used for analysis.

Observation

First, all the rural-urban bias of sampled institutions was not addressed. While most of the old banks were located across the district, the new generation banks were situated in and around cities. The locale of study has not yet been mentioned in the method. The target population, i.e. women bank employees, is not defined. The pretest was conducted among 30 respondents, but there was no mention about whether those 30 respondents were included in the final sample or not. For achieving four research objectives, the scholar had formulated seven null hypotheses and for the purpose, she had taken many researchable variables. For data analyses and testing of hypotheses, she used ANOVA, factor analysis, Karl Pearson's Coefficient Correlation, Regression analysis, t-test, discriminant analysis and chi-square. It has been revealed that many variables were common to both QWL and 'psychological wellbeing' but were not defined separately according to their scope in the respective measurement tools. The scale developed by NIOSH was arbitrarily used by the scholar without any justification. How far the bank officials and HR managers could check the validity of another scale? Were they adequately qualified for that? No explanation to these questions has been given in the methodology chapter. As limitations of the research, the scholar mentioned that (i) "the respondents were hesitant to fill the questionnaires", (ii) "officials of private banks were reluctant to permit the scholar to collect data" and (iii) "respondents were busy during the banking hours, hence the scholar had to meet them outside". In the given context of the study, the first two limitations are irrelevant and the third one appears to be an inconvenience of the researcher, yet not the limitation of the study.

Miscellaneous

Case: 14

Area of Study: Developing a Strategy for Tribal Development

Methodology

The main objective was to do gap analysis between development of tribes habituating in Andaman and Nicober Islands and their civilian counterparts. Three categories of respondents were included in the study, viz. (i) primitive tribes, (ii) scheduled tribes and (iii) tribal development officials. The researcher purposively selected 55 (out of total 154 in Tirur) *Jarwas* and 14 (out of total 38 in Dugong Creek) *Onges* as primitive tribes and 111 *Nicobarese* (out of total 312 from Sawai, one of the 16 villages) as scheduled tribes. For the

third component of samples, the researcher used census method and selected all 30 officials available at the field level. As rationale behind sampling process, the researcher mentioned that "keeping in view the time available, a sample of '180 tribes' was fixed for the conduct of study". A common 'interview schedule' was designed and used for collecting data from tribes as well as from the officials. For conducting interviews with the tribes, the scholar engaged community leaders as interpreters, who used to know 'spoken Hindi language'. The schedule was divided in to three parts. The first part included questions for gathering demographic information. The second part included 26 statements on different three- and five-point scales for measurement of attitude, involvement in community activities, for testing of their 'cosmopoliteness' and 'localiteness', etc. In addition, it had 15 open-ended questions to probe in to their level of aspiration, social participation and intra-tribal communication etc. The third part of the schedule was designed with different scales to measure awareness of tribes on their developmental schemes, perception of usefulness of tribal development programmes, content and strategies of selected tribal development schemes, assessment of participation of tribes, reasons for effective participation and constraints in participation. In addition to 111 statements on different scales, the part three of schedule included 65 open-ended questions to be answered by the respondents.

Observation

First, the title reads like a book, not an empirical research. It would be difficult to understand the research focus from the title. Next to that, an elabourate list of objectives in the thesis appears to be very much confusing and diluted. The blue print of research, i.e. the methodology is not yet planned adequately. Neither the scholar defined the methodology used in the study nor did she mention about it anywhere in the report. In places, she has repeatedly cited that "the study was primarily anthropological in nature. So she relied more on 'observation' and 'participation' technique". However, there is no specific mention about any observation or participation technique used, except a too lengthy and interactive process of interview. Even it lacks feasibility, when the scholar claims that she has administered successfully such a lengthy interview schedule with the *Jarwas, Onges* and *Nicobarese* and got all required data/information with the help of their respective community leaders. The sample selection process is not at all scientific. While the *Jarawas* and *Onges* were selected purposively, the selection of *Nicobarese* was done randomly from one of the 16 villages. The population, as mentioned in the method, includes different age groups including children. However, the selected respondents include only elder male and female, who were in the age groups of 18 years and above, including aged. No 'excluding' and 'including' criteria have yet been defined to make the sample adequately representative and valid. In addition, it is apparent that such a lengthy interview with overloaded questions and scale items would hardly be conducted flawlessly with the selected primitive tribes.

Conclusion

From the given premises, it is well understood that quality of doctoral studies is being compromised beyond justifications. The scholars and their supervisors are proportionately responsible for such scenario. There is a trend of pursuing quantitative researches, more so descriptive studies, among the scholars of the institutions selected for the study. In most of the cases, the process of research started from personal biases of the researchers in terms of their convenience of a particular 'sample size' and 'sampling technique'. It would not be an exaggerated statement, if it concluded that most of the theses are 'junks' and do not have any substantial contribution to the respective domain of knowledge. Invariably all the scholars do not have adequate knowledge about 'research methodology' and scientific temperament to pursue studies at doctoral

level. It has been apparent that they are 'overambitious' with 'over-expectations' from their ill-conceived and technically paralyzed research studies. In most of the cases, the adopted 'tools', either questionnaire or interview schedule, are unexpectedly too lengthy to execute in real life situations. The review could satisfy that criteria. In most of the cases, the sampling process started abruptly without any adequate definition of target population for research. Such an endeavour is seriously harmful for the entire research community and misleading for the future scholars, when such theses are kept on racks of reference libraries at different universities and higher learning institutes. Are there any remedial measures to improve the situation? Obviously there could be some feasible and alternative solutions, provided 'the scholars/researchers' are granted the voice to raise their concerns and resentments. In addition, it requires interventions at macro and micro levels. At the macro level, we need to revisit the related policy guidelines where PhD has been declared as the mandatory qualification for pursuing career in academics. The appropriate authorities, such the education ministries, UGC and AICTE must consider prescribing a minimum requirement of 3-4 years of working experience for a candidate to qualify for a doctoral program. There must be some expert committee or board outside the jurisdiction of a university to decide the eligibility of a candidate to pursue doctoral studies. Such committee or board may have representation from the respective universities and registered supervisors of the applicant. At the micro level, each study must be guided by at least two supervisors, where one must be an expert in the subject domain and the other one desirably to be an expert or proficient in 'research methodology' and 'research statistics'. In no case, universities should allow the supervisors alone to submit the panel of experts for thesis evaluation. Rather, it must be the sole discretion of the university to set the panel, where the supervisors may be consulted and asked to suggest few experts to the panel. logic, justifications and rationale are grossly absent in the methodology of the selected theses. It is needless to mention that a strong theoretical foundation is essential to design an execution and measurement plan for an empirical study. None of the studies under

Similarly, for conducting the viva voce examination the same rule is to be followed.

References

Anderson, C. (2010). Presenting and Evaluating Qualitative Research. American Journal of Pharmaceutical Education, 74(8), p.141.

Babbie, E. R.. (2010). The Practice of Social Research. 12E. Belmont, CA: Wadsworth, Cengage Publications.

Black, T.R. (1999). Doing Quantitative Research in the Social Sciences: An Integrated Approach to Research Design, Measurement and Statistics. London: Sage.

Brians, C., Leonard,*et al*. (2011). Empirical Political Analysis: Quantitative and Qualitative Research Methods. 8E. Boston, MA: Longman.

Gay, L.R. and Peter, A. (2003). Educational Research: Competencies for Analysis and Applications. 7E. Upper Saddle River, NJ: Merril Prentice Hall.

Goswami, I. (2012). Collabourative Research in Management Education and its Inseparable Bond with Social Sciences. EXCEL International Journal of Multidisciplinary Management Studies, Vol: 2 (11), pp.231-239.

Hopkins, W.G. (2000). Quantitative Research Design. Sportscience,Vol: 4(1).

McNabb, D.E. (2008). Research Methods in Public Administration and Nonprofit Management: Quantitative and Qualitative Approaches. 2E. Armonk, NY: M.E. Sharpe.

Singh, K. (2007). Quantitative Social Research Methods. Los Angeles, CA: SAGE.

About the Author

Indrajit Goswami holds a Master's degree in Social Work from Visva Bharati University, Sriniketan, West Bengal, India. Later he

obtained his Post Graduate Diplomas in HRM and Industrial Psychology, respectively from Indian Institute of Social Welfare and Business Management, Kolkata and NIIRD, Chennai. He obtained his PhD in professional ethics in 2007 from JRN Rajasthan Vidyapeeth University, Udaipur, Rajasthan.

He worked across different fields and target groups, including HIV/AIDS, Drug and Alcohol Abuse, Child Labour and other marginalized sections of society. He served different types of organizations such as NGOs, Development Authorities, Universities and B-Schools. His areas of expertise include human resource development, behavioural science, professional and corporate ethics, CSR, Non Profit Project Planning and Management etc. He has presented papers in national and international conferences and published papers in journals of national and international repute. Some of his recent works have been published in Taylor and Francis's 'Practice: Social Work in Action (April, 2012); Cengage Learning (2013); Concept Publishing (2014) etc. He is a blessed disciple of Yogacharya Sri Swami Sadhanananda Giri.

PERSPECTIVE OPEN ACCESS

Historical Myths or Mythological History: A Fresh Approach to Understand the History of Assam

Dr Pranab Jyoti Sarma[†]

Abstract

This paper carries out a critical review of the trends of historical writings in Assam. The historiographical study reveals that the beginning of the historical phase was, in fact, late in the North East region. Moreover, in many of these historical writings, the importance of the local histories of the communities of the region was ignored. The author highlights the fact that a pan-Indian history for the region may not be authentic enough to understand the cultural dynamics of the complex society of the Northeast. The author also focuses on corroborating 'proper' historical source material for reconstructing the history of the region rather than deriving inferences from mythology and legends. However, the importance of recent trends in historiography such as selective utilisation of oral traditions, folklores and memory studies has been emphasised. An alternative and more precise periodisation of the historical phase has been provided which does not, however, project any clear marker between periods and eras but emphasises on slow and steady transformations. Importance of archaeological sources and material evidence has been kept in mind while deriving periodical divisions. Relooking at the history of the Koches, Kacharis has been emphasised.

Key words: Historiography, Kamarupa, Ahom, Kachari, Archaeology, Periodisation, Chronology

† Knowledge Manager, Indian Heritage Cities Network - IHCN, Mysore, India. Email: madhyaman@gmail.com

Introduction

While the growing boundary dispute between India and China was beginning to dominate the political and socio-cultural relationship between the two countries, Mao-ze-Dong once famously stated in front of a visiting Indian diplomat in Beijing that it was difficult to discuss history with the Indians as they often clash history with mythology. Although, Mao's statement has not been recorded anywhere and remains within the personal recollection of the delegate from the Foreign Ministry of India, what Mao observed has been reinstated time and again in Indian historical writings; Indians do have a general, well-known lack of historical consciousness. As has been observed by E. Sreedharan (2000: 309):

> The central defect of the intellectual life of the ancient Indians, in spite of the antiquity and developed character of their civilization, is an almost complete lack of its historical and chronological sense.

Keith rightly observes that despite having a rich repertoire of literature, history is so "measurably represented...that in the whole of the great period of Sanskrit literature, there is not one writer who can be seriously regarded as a critical historian" (Sreedharan 2000: 309). A definite exception to this was the tradition of chronicling that came from Kashmir; the *Rajatarangini* of Kalhana being the most notable example. The medieval period of India is also historically well represented, thanks to the numerous chronicles written in either Persian or Arabic, which have almost unanimously set the chronological order of the Islamic rule in India beginning with the Delhi Sultanate, on a firm footing. Perhaps another such trend of historical chronicles, although much less known in the Indian context, comes from the region of Assam in the form of *buranji*s, the recordings of major political events by the Ahoms who ruled a major part of the Brahmaputra valley for almost six centuries since the early 13th Century CE.

Nevertheless, it is important to understand that all these three independent trends of historiography were not indigenous developments, but were rather influenced by trends of history writing of other regions. The Islamic historiography of medieval India was definitely a continuation of the trend in the Arab world, wherein the notion that everything civilized began from the coming of Islam remains the most dominant factor of chronology (Mukhia 1998: 93). In Kashmir, which was a zone of influence of the Arab world, the historiographical trend developed somewhat independently. Likewise, the trend of Ahom history writing was also a continuation of the practice of the Tai-Ahoms in their original homeland. The fact that Indians in general never had a strong historical sense needs no re-emphasis; most of the 'past knowledge' of Indians continued in oral traditions without any definite and well-structured sense of chronology. Although oral traditions and folklore played an important role, it is an irony that these are so glorified and mystified that it becomes difficult at present time to carve out a proper 'historical' and 'chronological' sequence out of them.

The first-ever effort of writing the Indian history came from the colonialists, when James Mill wrote six volumes of *History* in 1818. Mill classified the entire Indian history into three distinct periods: Hindu, Muslim, and Civilization (under the British rule). Mill's *History* relies heavily on the condemnation of the Hindus and the Muslims in order to highlight the significance of the British rule (Sreedharan 2000: 402–3). Mills was followed by many colonial historians and, later, by nationalist historians, who more or less followed the chronological paradigm provided by Mill, however changing the nomenclature to Early, Medieval, and Modern periods of Indian history. The fact remains that this tripartite division of Indian history has hardly been challenged or questioned by Indian historians, a case which is true for Assam, too.

Nationalist historians like H.C. Raychaudhury, R.C. Dutt, R.C. Majumdar, among others, were well aware of the problem of chronology of Indian history and have tried to provide a holistic understanding of the same in their invaluable works. All the available sources of Indian history, including the quasi-historical *Purana*s, the classical literature, and accounts of foreign travellers, apart from the available inscriptional evidence were utilised to come up with a standard chronological order. The dynastic history as laid out by Raychoudhury (1923) became the backbone for all future history writings. R.C. Majumdar's *Cultural History of India* also remains a notable contribution (Majumdar 1964). The sources of Indian history, however, have been so exhaustively utilised that, even Romila Thaper, one of the leading historians of India today, was forced to comment in the preface

of her revised edition of *Penguin History of India*, that it was time to understand the importance of 'other' sources of Indian history (Thaper 1966/1976). She further emphasised that almost all the sources of Indian history had already been exploited and brought forth the importance of archaeological studies in order to restructure the conceptual frameworks of Indian history and culture.

The early as well as the late history of Assam and its adjoining areas have also been written on the basis of the conventional tripartite division of Indian history, and so have remained pan-Indian in its approach. A detailed look into the historiographical development of Assam since the colonial time is necessary here.

Trends in Historical Writings on Assam

The five-volume set of *The Comprehensive History of Assam*, edited by H.K. Barpujari, sums up almost all the known sources useful for the formulation of Assam's historical past and also provides a detailed description of the chronology that can be derived from these sources. However, the chronology more or less follows the division of history in the pan-Indian division of Early, Medieval and Modern periods. Barpujari's work is a continuation of the trend set by the nationalist historians, and even earlier by the colonialists.

Among the imperialist historians, the first mention must be made of Sir Edward Gait. His *A History of Assam* (1906) no doubt is one of the most important secondary sources for Assam's history, and has influenced generations of scholars. Gait was, however, not free from the assumption that the society at large in Assam during the pre-Ahom and the Ahom periods was static and the colonial rulers were the ones who could bring in drastic socio-economic change.

K.L. Barua's *Early History of Kamarupa* (1933) was one among the first few works that developed a distinctive trend of nationalist historians in Assam. Works of several other historians who followed this trend such as B.K. Barua (1951, 1952) and P.C. Choudhury (1959)—although important as they vividly recorded the political and the cultural history of Assam with the help of the available textual records and corroborating them with epigraphic and archaeological records—were not free from eulogising the achievements of the three main dynasties of Kamarupa (e.g., the Varman dynasty, the Salastambha dynasty and the Pala dynasty), the ancient name of Assam. History of the early period of Assam, as known and shown by the nationalist historians, was merely the dynastic history of Kamarupa.

There has been another notable trend within the nationalist trend of history writing, those by historians not belonging to Assam but from other parts of India—for example, N.N. Basu (1922, 1926, 1933), S.K. Chatterji (1951, 1955)—who tried to project the Assamese society and culture merely as an extension of the Ganga Valley culture, and thus avoided the minute differences that exist between the Hindu societies of the two regions and also the vast differences that existed among the tribal societies of Assam. The early period of Assam's history has been largely viewed as a Hindu history of Kamarupa, and in the light of the greater Indian history, a sort of a 'singular' history that has been hardly questioned and challenged in any form of history writing in Assam. The existence of a large percentage of non-Hinduised tribal population, and their possible role in the shaping of the history of the region, has categorically been ignored in these writings.

The later period of Assam's history is well represented, thanks to the numerous *buranji*s. This tradition of history writing of the Ahoms has helped immensely in outlining the chronological development of the Ahom dynastic rule of almost 600 years, beginning from the early part of the 13th Century CE. The role of the Department of Historical and Antiquarian Studies, Assam, in bringing out this storehouse of historical source material to public knowledge is immense. Many of these *buranji*s were edited and revived by S.K. Bhuyan, an exemplary contribution, indeed. The other kingdoms or principalities that existed during this period have also been studied, although to a lesser extent. For details, see Gait (1906), Gogoi (1968), Guha (1983b), etc. However, a general tendency has been observed among historians, who tend to project this entire period of Assam's history as being that of the Ahoms. The importance of the other two major kingdoms, that of the Kacharis in the eastern part and the Koch kingdom in the western part of Assam.

The theoretical framework of the discipline of history has undergone tremendous changes in the last 50 years. Not merely limiting their views to factual claims, historians today are concerned with a much wider range of issues. Attention has been given to the narrative, fictional and aesthetic

aspects of history writing, while the issues have spread to ethical, political and ideological components. A variety of non-academic ways of dealing with the past has also been tried; studies related to memory—individual as well as group—are among the most notable examples of such approaches. As the trends have been changing, the scope of history has also spread and multidisciplinary approaches are being considered more and more. On the importance of multidisciplinary approach, Funari et al., (1999: 9) write:

> There have been methodological debates regarding giving priority to written source or material source. Such debates have recently been undermined as a new multidisciplinary methodology has taken over. Introduction of oral history has also a part in this.

The importance of archaeological sources, in the above context, thus can be considered as extremely valuable and necessary for a holistic understanding of history. Archaeological records should be considered as integral to historical methodology, as opposed to the general trend among historians to treat these as mere corroborative or supporting evidence. Archaeological records, again by itself, do not lead us to a complete understanding of the past. Without a context, and more a historical and geographical context, archaeological records do not take us much further in our understanding. Hence, the methodology should be a cohesive one, which would include the existing evidence through every possible theoretical approach. Whatever said and done, the fundamental difference between archaeological sources to those of historical lies in the very nature of the records. While historical records are heavily dependent on the dynastic and chronological understanding of the past, archaeological remains lead us to a reconstruction of the material culture of the societies, and thus to a 'subaltern' cultural history. Is it possible to carry out such a holistic study in Assam and thus reconstruct the way the historical phase is looked at or viewed? This is the basic parameter that this paper seeks to examine.

The Problem of Periodisation

The historical writings of Assam have more or less followed the basic periodisation of Indian history: Early Historical Period (600 BC to 400 CE), Late Historical Period (400 CE to 700 CE), Early Medieval Period (700 CE to 1200 CE), and Medieval Period (1200 CE to the Colonization Period). There is no apparent difficulties whatsoever in following this specific periodisation in order to understand the dynastic history of Assam. Problems occur when we start seeking answers to certain questions in order to understand the socio-cultural formation of the Northeast and the dynamics involved among the various communities through various phases.

The absence of an early historical phase is an intriguing problem in the history of Assam. The earliest written evidence of the Northeast is dated to the 4th Century CE, that is, the famous Allahabad Prasasti of the Gupta Emperor Samudragupta, where Kamarupa and Davaka are mentioned as two independent frontier kingdoms of the Guptas. Kamarupa was the ancient name of Assam, while Davaka can be identified with another kingdom/principality that existed in the Kopili–Jamuna valley, a southward extension of the Brahmaputra valley in the middle of Assam. Archaeological excavations have so far been unable to provide any absolute date for any of the sites of historical importance, while no epigraphic records from Assam can be dated beyond 5th Century CE. Thus, with the present available knowledge, we will not be able to push back the history of Assam beyond 4th Century CE. Thus, it seems a contemporary period to the Early Historical Phase of Indian history was totally absent in Assam. Does it mean while the northern Indian Ganga valley witnessed the second urbanisation (Gupta 1973) and a full-fledged development of state formation which culminated with the formation of the Mauryan Empire and spread of Buddhism even to foreign countries, Assam still had a rudimentary phase of cultural development, more specifically a continuation of the early farming Neolithic period? The answer is difficult to gauge at present due to the lack of sufficient archaeological evidence and problem-oriented multidisciplinary research.

There is not enough textual as well as epigraphic evidence to fully understand the transition phase from late historical to medieval period of Assam. For convenience of explanation, historians have tended to distinguish the two with the arrival of the Ahoms in the Brahmaputra valley, in the year 1228 CE. The Ahoms came with a tradition of recording the important political events, known as *buranji*s in local parlance, along with their expansionist zeal. The *buranji*s provide us with authentic written evidence to easily reconstruct the history of the entire period of Ahom rule, and also of some of the other contemporary kingdoms. However, the lack of

evidence on the decline or dissolution of the Kamarupa kingdom is an intriguing problem that the historians have to face. We also do not have sufficient evidence to reconstruct the phases when the kingdoms of the Kacharis, the Chutiyas, the Morans and the Borahis, and also the kingdom of Tripura, came into existence, and thus rely on local beliefs, folktales, and even individual and group memory to construct any inference in this regard. In such circumstances, the early medieval phase of Assam remains far from clear, although scholars have tried to understand and explain the same in the light of archaeological evidence in the form of sculptural and architectural remains and copper-plate land grants. A scholarly discussion between Amalendu Guha and Nayanjot Lahiri on the pre-Ahom roots of the state formation process of Assam in the journal *Social Scientist* is notable, as both of them have tried to see the transitional phase from a more multidisciplinary point of view, and have highlighted the differences between the tribal subsistence pattern and the mainstream economy and the role these differences could have played in the state formation process.[1] Gupta's discussion on the trade network of Assam also throws light on a yet unexplored aspect of trade and economy and their importance in the development of the state in Assam (Gupta 1991). Momin's research on the political and socio-economic history of pre-Ahom Assam is also notable and brings fresh light into this apparently dark period of Assam's history (Momin 1998).

There is another problem in stating that the medieval period began with the arrival of the Ahoms. Mere availability of the *buranji*s cannot and should not be the marker of this entire period to be belonging to the Ahoms. The Kachari kingdom existed for most part of this period as an independent kingdom, always entangled in a tussle for supremacy with the Ahoms and sometimes even the more dominant—definitely until the middle of the 15th century. Historians, at times, tend to undermine the existence of a strong Koch kingdom in the western part of Assam bordering Bengal. It was under the patronage of Koch King Naranarayan that the Vaisnavite guru Srimanta Sankardeva preached his religious as well as socio-cultural messages. The role of Sankardeva in the formation of the Assamese society is immense and itself is a topic of extended research. The point that needs emphasis here is that the Koch kingdom had been an integral part of the Assamese identity through the medieval times, and Assamese historians so far seem to have undermined or neglected its role in the history of Assam.

The social set-up of Northeast India is very complex, so much so that the scholars have often tended to describe it as a 'mini India'. There is paucity of data to examine the symbiotic relationship that must have been there between the Tibeto-Burmese and the Indo-European populations. The process of assimilation between the people belonging to these two major linguistic groups started quite late in this region, and was at the early stages even during the latter part of 19th Century. The 1881 Census of Assam, which was the first exhaustive census done on this part of India, recorded the population on the basis of religion and caste and revealed that many of the dominant communities like the Bodos and Karbis were still not considered to be within the Hindu fold (Assam Census Report, 1881, pp. 22–34; pp. 63–102; cf. Guha 1974: 107). This gives an entirely contrasting picture of the society as against the majority historians' view that the society of Assam was largely Hindu that flourished as part of the Kingdom of Kamarupa. This leads us to surmise that the historical framework that we derive from textual evidence as well as epigraphic sources has so far undermined the role of the tribal communities in the formation of the Assamese society through the historical period. It has more or less remained the dynastic history of Kamarupa. The 1881 Census reports also present an entirely different picture as against the popular belief that the Assamese society was unified sans religious and ethnic boundaries under the socio-religious movement (the neo-Vaisnavite movement) preached by Sri Sankardeva and later by his followers since the 15th Century.

In such a situation, we need to re-examine the sources of history and try to understand the many local histories of the various communities in Assam as well as its adjoining regions. Archaeological sources, including excavation finds and ethnographic records, will help in reassessing this. The status of the archaeological work done so far in the Northeast will be examined in the following in the light of its importance in reassessing the

[1] This argument between Amalendu Guha and Nayanjot Lahiri started with the article published by Guha in *Social Scientist*, Vol.11 (1983a), which was followed by Lahiri's article in the same journal (1984). Guha's response to Lahiri's review was published in the December issue of the same journal (1984).

chronology of the historical phase of Northeast India.

Importance of Archaeological Records

The new trend of Historical Archaeology focuses more on 'archaeological study of all human societies in terms of interdisciplinary theories of material culture, but also recognises the methodological distinctiveness of studying societies with written sources' (Funari et al., 1999: 8). Following this new Historical Archaeology, it has been felt that the historical phase of Northeast India, too, needs to be reviewed and analysed with a paradigm shift in terms of methodology, and the traditional periodisation needs to be verified and examined from an archaeological point of view. However, keeping the paucity of material evidence into consideration, a modest attempt has been made here to come up with a possible periodisation of the historical phase of Northeast, especially Assam.

There has been three major archaeological excavations on sites of historical importance in the Northeast—the Ambari excavation in Assam, for one season in 1971 and then for three seasons from 1997 to 2000; the Sekta burial site excavation in 1991 in Manipur; and the Vadagokugiri/Bhaitbari excavation in 1992 in Meghalaya. Apart from the Ambari excavation, the details of the other two are found in printed reports (Sharma 1993, 1994). The Directorate of Archaeology of Assam has, however, brought out an interim report of Ambari excavation (Dutta 2006), which includes published articles and preliminary reports on various aspects of the historical site. Apart from these three sites, minor excavations or rather section analyses have been done in some sites in the Dhansiri–Doyang valley in Assam (Choudhury 1994, Dutta 1995), some sites in Arunachal Pradesh, Tripura and Nagaland—all of which have been reported in various issues of *Indian Archaeology–A Review*, published by the Archaeological Survey of India. The archaeological work done at the site of Mahasthangarh in Bangladesh is also important in order to understand the historical dynamics, owing to its strategic geographical positioning and being contiguous to the Brahmaputra valley (Alam and Salles 2001).

The site of Ambari, situated in the centre of Guwahati city, has been unanimously identified with the city of Pragjyotisa, the capital city of Kamarupa; although no absolute dating or any typifying artifacts have been obtained which can prove the inferences beyond any doubt. The stratigraphic sequence of Ambari has shown the occurrence of Neolithic strata below the historical phase, which could not be studied due to the rising level of groundwater. The material evidence shows a rich and developed society which saw the development of art and architecture of high skills. The pottery is uniform and does not show many varieties (Goswami and Roy 2006; Sharma et al., 2006; Sonowal 2006). It is difficult to ascertain a date for the site of Ambari merely on the archaeological evidence, but can be easily surmised that the earliest period of the historical phase at the site does not go beyond 4th–5th centuries CE. The sculptural remains mainly conform to this period if not earlier and post-Gupta traits are apparently visible, however with minor local variations. The pottery cannot be dated as no comparative pottery has been found elsewhere that has been dated.

The site of Sekta in Manipur has provided a lot of burial remains, which are associated with pots. The habitation site at Sekta has been destroyed and could not be excavated. The burial site, however, has yielded invaluable cultural material ranging from urn burials to a variety of artifacts (Sharma 1994: 23–26). The site of Sekta is very crucial in our understanding of the historical phase of Northeast India, as the cultural material here shows definite connection between people of this part of India with those of mid-Ganga valley as well as from South China and Myanmar. The site is also significant in our understanding of the trade network between India and China via the land-route of Myanmar and South China (Gupta 2006, Sarma 2006b).

The site of Vodagokugiri or Bhaitbari in Garo Hills, Meghalaya is very important as it is situated in the fringes of the Brahmaputra valley near Bangladesh, and is very near to the famous site of Mahasthangarh in Bangladesh, supposedly the capital city of the Pundravardhana kingdom of early medieval Bengal. The site layout and the material remains also show affinity to those of Mahasthangarh. Although no dates have been obtained from Vadagokugiri, a relational analysis with that of Mahasthangarh will safely put this site in the same period. However, we need to still understand the historical importance of this site as far as the Kamarupa kingdom is concerned; it is not clear whether this area belonged to the Kamarupa kingdom or Pundravardhana on the basis of the material remains. It is important to note that traits of Jaina influence have been observed in the architectural remains of Suryapahar. However, this

needs further examination as such a finding would entirely open a new dimension in understanding the history of Assam (Shastri 2000). It is interesting to note that when Hiuen Tsang visited the Kamarupa King Bhaskara Varman, he observed that people of this country did not believe in Buddhism (or Jainism for that matter) and there was no dedicated place of worship for that faith. Jainism, even in the modern period, is barely present in Assam. Hence, the claims of Jaina elements being discovered from Vadagokugiri need a fresh look.

Notable work has been done in the Dhansiri–Doyang valley. H.N. Dutta of the Directorate of Archaeology has recorded many sites in the valley and has surmised the prevalence of an independent kingdom there on the basis of epigraphical evidence (Dutta 2000). The earliest date of this independent kingdom could be assigned to the 5th Century CE on paleographic grounds. Sarma (2006a) carried out further studies in the valley on the premises of settlement pattern and did a systematic recording of the available archaeological record. He, corroborating the archaeological record with literature and geography has identified the archaeological remains of the valley to be belonging to the Kacharis, who saw tremendous socio-cultural development before the arrival of the Ahoms and became the rulers of this area much earlier, probably contemporary to the Kamarupa kingdom, and had independent status for a long period.

A Chronology for Assam's Historical Past

The available evidence—archaeological as well as textual—does not give a date prior to the 4th Century CE for the beginning of the history of Assam. Thus, from a pan-Indian viewpoint we are bound to state that the early historic period of the conventional periodisation of Indian history is totally absent in this part. Likewise, the state formation process also started here in the 4th Century CE only. Some scholars have tried to explain mythological inferences and tried to relate the legends of Narakasura and Bhagadatta with the earliest form of state formation in Assam. However, it is our firm belief that the danger of using myths as historical evidence has to be acknowledged and thus myths should not be considered as facts. It is time we acknowledge that history can be considered as facts only if we draw it with supporting evidence, not inferences.[2]

It is essential to acknowledge that the historical phase started late in this region as compared to that of the Ganga Valley. The paucity of written evidence is a clear marker when we posit this view. The late migration of the Indo-Europeans, especially the Indo-Europeans from the Ganga Valley, into the Brahmaputra Valley, could be a reason why the historical phase began late in the region. However, that does not necessarily mean that the tribal populations did not have developments, which can be called historical. However, such a possibility also remains in the realm of surmise due to lack of proper textual as well as material evidence. In fact, the local histories of the tribal populations in these early years are entirely based on myths and legends and thus cannot be considered as authentic historical evidence. More archaeological and similar supporting evidence will be required to authenticate this aspect. Hence, to properly understand and explain this period, we would suggest, it should not be classified from a pan-Indian viewpoint.

The same holds true for the classification of the medieval period; for the available evidence do not suggest any major shifts or change in the socio-cultural set-up through the entire period of the history of the region. The arrival of the Ahoms should not be the sole marker of dividing this phase from the earlier phase of history. Northeast India, especially the Brahmaputra Valley, saw a uniform development in the entire period of its history. However, for convenience of explanation in history writing,

[2] See Megill (2007) for a detailed discussion on what can be called historical evidence. Megill cautions the serious historian about the dangers of inferences or assertion through his critique of a 2003 *American Historical Review* article by William G. Thomas III and Edward L. Ayers in which the authors claim to show "by argument" something important about the way slavery brought about the American Civil War. Megill writes that contrary to what Thomas and Ayers claim, they "do not make an argument at all." He further argues that Thomas and Ayers "fail to understand what is required for something to be evidence for something else" (quoted in, Martin 2010).

the entire period can be classified into three periods, although without any characteristic dividing marker or events between them:

- **Early phase**: This phase marks the beginning of the state formation process, the earliest evidence of which can be found in the *Allahabad Prasasti*. Several independent states came up in various parts of the region, for instance the Kamarupa kingdom in lower Assam and the Dabaka kingdom in central Assam, both in the southern bank of the Brahmaputra. Other small kingdoms or principalities came into existence in the Dhansiri–Doyang valley as well as in the Sadiya region in the north eastern corner of the valley. In course of time, the Kamarupa Kingdom became powerful and controlled a large area from the eastern hills to the Bay of Bengal, as can be known from the accounts of Hiuen Tsang. This phase also saw the rise of the three main dynasties of the Kamarupa Kingdom—the Barmans, the Salastambhas and the Palas—who patronized the spread of the Hindu religion in the valley.
- **Transitional phase**: The rise and the gradual decline of the petty kingdoms of the Tibeto-Burman speaking communities, more or less, cover this transitional phase of Assam's history. The rise of these kingdoms incidentally coincides with the decline of the Kamarupa kingdom, the Pala dynasty to be more precise. The Kamata kingdom came into existence on the ruins of the Kamarupa Kingdom, especially in the western part of the Brahmaputra Valley (Gait 1906). We also have a few epigraphs of the early rulers of the Kamata Kingdom to support this view (Sarma 1981). In the meantime, the Chutia and the Kachari Kingdoms also rose into prominence in the eastern part of the Valley. We have paucity of textual as well as epigraphical evidence to reconstruct the early phases of these Kingdoms, but archaeological sources may provide us with significant evidence (Sarma 2006a). The socio-cultural and economic scenario during this phase remains an area that needs further multidisciplinary research.
- **Late Phase**: The late phase of Assam's history is marked by three important events: first, the arrival of the Ahoms and their gradual assimilation into the greater Assamese society and the consequent formation of a formidable state in the heart of Assam; second, the rise of the Koch kingdom in the west and many petty principalities of the Bhuyas in the central region of Assam, as well as the strong existence of the Kachari Kingdom in the Dhansiri and Kopili Valleys in the south of the Brahmaputra; and third the rise of the neo-Vaisnavite religious movement preached by the Mahapurush Srimanta Sankardeva in the 15th Century CE (Neog 1965) that would change the socio-cultural complexion of Assam entirely and also influence subsequent politico-social movements such as the Moamoria Movement that eventually threatened the very existence of the Ahom monarchy. The coexistence of two powerful state mechanisms in the west and the east eventually led to different landholding and revenue systems in the two distinctive regions (Guha 1991). The administration of the western part also remained under the Mughals for a considerable period in the 17th Century CE, which also contributed to the difference in landholding and administrative systems.

Many parts of Assam and other adjoining areas, until the beginning of its historical period, that is, the 4th Century CE, must have remained under the Neolithic, early farming phase. However, the two excavated Neolithic sites in Assam, that is, the Daojali Hading and the Saru-Taro, do not present any evidence of continuity to the historical phase. But the fact that the 'Neolithic'/early farming phase continued through the historical phase in isolated pockets

can be safely put forward on the grounds of oral traditions and memory of certain tribal populations in the region. In many of the tribal villages, people still refer to an old village, which is invariably in an isolated area in the foothills. Some of these deserted villages may not be even one hundred years old. In case of certain communities like Karbi, Garo and Tiwa, people often speak about a tradition of elaborate stone memorials (often misinterpreted as Megalithic stone burials), which they practiced till recent times but has now remained only in symbolic form. Although hypothetical, it can be surmised that sections of people lived in isolated pockets until late into the 19th century and remained outside the process of cultural assimilation with the Indo-Europeans for a long time. There is no recorded archaeological evidence to prove that these people were practising a Neolithic lifestyle. However, the fact that they lived in a community-bound social set-up and practised the traditions of early farming societies is certain.

In order to analyse this coexistence of Neolithic phase with that of a highly developed State within the Hindu fold in the light of the nature of interaction between the two and the impact this had on the socio-cultural complexion of the Northeast, we need to compare the distribution pattern of the archaeological sites of both the cultural phases. The tentative distribution pattern of both these phases shows a clear demarcation though. While the historical sites are scattered mostly in the valley areas, the Neolithic sites have been found mostly in the foothills of the mountains surrounding the Brahmaputra Valley and in some cases in the Shillong plateau (Sarma and Hazarika 2014). However, to testify any hypothesis on this particular issue, a detailed and multidisciplinary research will be the first priority. Corroborative evidence from linguistics, folklore and ethnography may also help in this.

It is obvious that the recorded history of Assam, be it the early phase or the later phase, do not speak about the population living in the hills; in fact, it is mainly confined to the dynastic achievements of the various kingdoms, mostly the Kamarupa Kingdom. It is an urgent need that a problem-oriented research be done in order to record these local histories, from whatever source is available now. Ethnographic studies on these communities have been done, but these have not been highlighted so far. Folklore is another aspect, which may lead us to many unknown facts of these communities. Toponymical studies have also great potential in understanding the prevalence and distribution of various tribes and also the process of social and cultural assimilation and admixture through the ages. Reviewing and carrying out intensive investigations based on earlier works like that of Peal (1879) will surely provide meaningful and interesting results.

A Note on the Kacharis

The representation of the Kacharis in the history of Assam has been an enigmatic issue. They have been sometimes described as the makers of the Hinduised Kamata or the Koch Kingdoms in the western part of Assam; while at some other, times have been associated with the Kachari Kingdom, which ruled in a vast tract from the foothills of Nagaland to the Kopili–Jamuna Valley, the Dhansiri–Doyang Valley forming the heart of their Kingdom. It is clear, in our current understanding, though, that the western Kamata and the subsequent Koch Kingdoms were founded by the Mech or the Koch communities, who are a Hinduised branch of the greater Bodo community of Assam. Likewise, the Kachari Kingdom of the Dhansiri–Doyang Valley was founded by the Dimasa Kacharis, another community that speaks a language belonging to the Tibeto-Burman linguistic sub-group of the Sino-Tibetan language family, like that of the Bodos. At present, two important divisions among the Kachari population of Assam can be seen—the Bodos (plain Kachari) and the Dimasas (hill Kachari). Both linguistically and culturally there can be seen sharp contrasts and differences between these two groups at present. Yet, while referring to the Kacharis, all the medieval chronicles as well as the colonial administrator-historians have failed to clearly

distinguish between these two as well as the other Kachari communities of Assam.

Hunter's *Statistical Account of Assam* (1879) and the 1881 Census are important in many respects. The Census of 1881, covering the length and breadth of the Valley, recorded the communities of the greater Bodo-Kachari group as separate ethnic groups. It documented 19 such communities: Bodo, Dimasa, Dhimal, Garo, Hajong, Hojai, Lalung, Madani, Mahalia, Mech, Matali, Moran, Phularia, Rabha, Sonowal, Sutiya, Saraniya, Solamiya, and Tipra, which formed the majority population in the whole of the Brahmaputra Valley, followed by the Kalitas, and then the Daibagnas and the Brahmanas. The Koches and the Rajbanshis were also included in the Bodo-Kachari group, but were considered as totally Hinduised tribes. Most of these Bodo-Kachari communities, classified in the 1881 Census, have now merged with the greater Assamese speaking society, only scantily retaining their original speech.

A concerted effort to knowing the individual histories of the various groups of the Bodo-Kachari communities have not come into sight, at least to the knowledge of the present author. That apart, the colonial historiographical tradition as well the nationalist historians have also failed to contribute to the knowledge of the early history of these communities adequately. Instead, many a historians have actually displayed and presented conflicting accounts and have confused with the identity of a particular tribe to another. An example of this is Endle's otherwise brilliant account of the Kacharis—mainly the Bodos of the northern plains of Assam (1911). Endle, while drawing the historical background of the Kacharis (Bodos in his case) have mistakenly identified the Chutiyas and the Kacharis as the same people. While referring to the defeat of the Chutiyas at the hands of the Ahoms, Endle states:

> …In the end the victory remained with the Ahoms, who drove their opponents to take refuge in or about Dimapur on the Dhansiri at the foot of the Naga Hills. There for a time the fugitives were in comparative security…[but] their ancient foes followed them up to their new capital, and about the middle of the sixteenth century the Ahoms succeeded in capturing and sacking Dimapur itself. (Endle 1911: 6)

That the Chutiyas and the Kacharis had separate Kingdoms, around Sadiya and in the Dhansiri Valley respectively, was obviously over-sighted by Endle, a fact which would eventually be established owing to the recorded chronicles of the Ahoms, the *buranji*s. In the above narration, Endle's obvious confusion between the two distinct communities may create historical errors. Apart from the *buranji*s, not many historical accounts have been successful in bringing out individual histories of these communities, a fact that needs serious reconsideration of the present lot of historians in Assam.

The point that needs emphasis here is that the Kacharis (including the largest group Bodos) were the most dominant population in the Valley throughout its history. That they were once very influential too, can be gauged from the fact that most of the place and river names of modern Assam continue to be that of Bodo origin. The prefix *Di*, meaning water in Bodo languages and dialects are invariably used in naming most of the rivers and places in Assam (e.g. Di-bru, Digboi, Disang, Dihang, Dikhou, etc.). The river Brahmaputra was also earlier known as Ti-lao or Di-lao.

Notwithstanding the current differences among the various Tibeto-Burman communities, there are reasons to believe that once upon a time, such divisions were not so distinguishable. Two characteristic similarities among these groups are conspicuous:

- All these groups speak dialects and languages belonging to the Tibeto-Burman (TB) language sub-group of the Sino-Tibetan Family. This takes us back to a single parentage to this entire group, which probably had originated in

the southern province of Sichuan in China in the prehistoric times.

- All these groups (barring the Bodos of Western Assam), until recently, used to pay an annual homage or tribute to the Kesaikhaiti Gosani Temple at Sadiya. This proves a single lineage of these various tribes, a religious knot to say more precisely.

The difference between the Bodos and the Dimasas is sharp at present. Traditions, however, indicates a single root to both. They have a similar tradition of the origin of the universe, which speaks of a flood and the subsequent creation of the earth. There is another tradition among the Bodos, which speaks of the existence of two groups, one of which happened to cross a big river because of some disputes. It seems probable that the Bodos were the ones who crossed the river and settled down on the foothills of the Himalayas and later were disowned by the Dimasas, who initially settled on the foothills of the Patkai, the Naga Hills and the Dhansiri and Kopili Valleys. In all likelihood, they entered the Brahmaputra Valley through the Patkai Hill Range.

This is, perhaps, the most intriguing issue, which eventually will dominate the archaeological and anthropological studies in Assam in the coming decades. At this juncture, however, certain questions may arise which may even baffle the most scrutinising minds. Is it possible with the current state of documentation, combined with a serious lack of historical sense of the tribal communities themselves, to draw individual histories for each of these communities? Is it possible that all these communities had a shared history and a single lineage? If at all they had a shared lineage, when did the separation begin and became so distinct that at present it is almost impossible, both culturally and linguistically, to link one community with the other; say for example the Bodos and the Dimasas? Was there any major outside influence? The antiquity of the Kacharis, it has been felt, is one of the most essential aspects of the history of Assam, which needs further research to understand the early history of Assam as well as the socio-cultural development of the multi-faceted society of Assam. The Kacharis should not and cannot remain an enigma, but be brought into the forefront of the mainstream historical tradition.

Concluding Remarks

An authentic reconstruction of the ancient history of Assam is as daunting task as writing a unilateral history for the whole world. The cultural composition of Assam is such that there is always a great danger of falling short in this responsibility. There are many local histories; as many, or even more, as there are distinctive communities within the greater cultural fold of Assam. Unless authentic documentations of these local histories are made, writing an all-encompassing history for Assam will continue to be difficult. Serious efforts in this regard should be made a priority. There is also a serious need to understand what forms an evidence for history writing and what does not. Over-dependence on quasi-historical sources such as the *Purana*s and the classical literature as well as myths will lead to nowhere, but will rather create further historical 'errors'. Unless a multidisciplinary approach is taken up for research into the past, which will include associated disciplines such as archaeology, anthropology, folklore and geography among others at both theoretical and the methodological levels, the history of Assam will continue to be either a 'historical myth' or, for the worse, a 'mythological history'.

References:

Alam, Md. Shafiqul and Jean-Francois Salles. 2001. 'France-Bangladesh Joint Venture Excavations at Mahasthangarh: First Interim Report, 1993–1999,' Department of Archaeology, Bangladesh.

Barua, B.K. 1951. *A Cultural History of Assam (Early Period), Vol.1.* Madras: G.S. Press.

Barua, B.K. 1952. *Early Geography of Assam*. Madras: G.S. Press.

Barua, K.L. 1933. *Early History of Kamarupa* (Reprinted in 1966). Guwahati: Lawyer's Book Stall.

Basu, N.N. 1922. *Social History of Kamarupa*, Volume I. Calcutta: The Jain Siddhanta Prakashak Press.

Basu, N.N. 1926. *Social History of Kamarupa*, Volume II. Calcutta: The Jain Siddhanta Prakashak Press.

Basu, N.N. 1933. *Social History of Kamarupa*, Volume III. Calcutta: The Jain Siddhanta Prakashak Press.

Chatterji, S.K. 1951. *Kirāta Jana Krti*: The Indo-Mongoloids: Their Contribution to the History and Culture of India. Calcutta: The Asiatic Society (Reprinted in 1974).

Chatterji, S.K. 1955. *The Place of Assam in the History and Civilisation of India*. Madras: G.S. Press.

Choudhury, N.D. 1994. 'Report of the Archaeological Exploration and Excavation in Dhansiri Sub-division of Golaghat District of Assam,' *Journal of Assam research Society*, 33 (2): 85–92.

Choudhury, P.C. 1959. *The History of Civilisation of the People of Assam to the Twelfth Century AD*. Guwahati: Spectrum Publications (3rd Ed in 1987).

Endle, Sidney. 1911. *The Kacharis*. Macmillan and Co. Available online at: archive.org/details/kacharis009491mbp (accessed on 30.12.2012).

Dutta, H.N. 1995 (published in 2001). 'A Report on the Archaeological Excavation conducted in the state of Assam during the year 1997–98,' *Journal of Assam Research Society* 34 (1 & 2): 251–61.

Dutta, H.N. 2000. 'Archaeological Importance of Doiyang–Dhansiri Valley of Assam,' *Puratattva*, 31: 92–97.

Dutta, H.N. (ed.). 2006. *Ambari Archaeological Site: An Interim Report*. Guwahati: Directorate of Archaeology Assam.

Funari, P.P.A., S. Jones and M. Hall. 1999. 'Introduction: Archaeology in History,' in *Historical Archaeology: Back from the Edge* (P.P.A. Funari, M. Hall and S. Jones eds), pp. 1–20. London: Routledge.

Gait, E.A. 1906. *A History of Assam*. Calcutta: Thacker, Spink & Co.

Gogoi, Padmeswar. 1968. *The Tai and the Tai Kingdoms*, Guwahati: Gauhati University.

Goswami, M.C. and S.K. Roy. 2006. 'A Report on Selected Potsherds from Ambari archaeological Site,' in *Ambari Archaeological Site: An Interim Report* (H.N. Dutta ed.), pp. 27–29. Guwahati: Directorate of Archaeology Assam.

Guha, Amalendu. 1974. 'Geography behind History,' in *Science and Human Progress (D.D. Kosambi Commemoration Volume)*, pp. 87–116. Bombay: Popular Prakashan.

Guha, Amalendu. 1983a. The Ahom Political System: An Enquiry into the State Formation Process in Medieval Assam (1228–1714). *Social Scientist*, Vol. 11 (December): 3–34.

Guha, Amalendu. 1983b. *The Ahom Political System*. Calcutta: Centre for Studies in Social Sciences.

Guha, Amalendu. 1984. *Pre-Ahom Roots and the Medieval State in Assam: A Reply*, *Social Scientist*, 12(6): 70–77.

Guha, Amalendu. 1991. *Medieval and Early Colonial Assam: Society, Polity, Economy*. Calcutta: Centre for Studies in Social Sciences.

Gupta, Chitrarekha. 1991. 'Trade and Markets of North-Eastern India: The Ancient Period,' in *Archaeology of North-Eastern India* (Jai Prakash Singh and Gautam Sengupta eds.), pp. 280–99. New Delhi: Vikas Publishing House Pvt Ltd.

Gupta, S.P. 1973. 'Two Urbanizations in India: A Side Study in their Social Structure,' *Puratattva*, no. 7: 53–60.

Gupta, Sunil. 2006. 'Indo-Chinese Crosswords: The Assam–Yunnan Axis in the Indian Ocean Interaction Sphere (1st–5th Century CE),' *Journal of Indian Ocean Archaeology*, No.3: 90–107.

Hunter, W.W. 1879. *A Statistical Account of Assam*. Available online at: archive.org/details/statisticalaccou01huntuoft (accessed on 30.12.2012).

Lahiri, Nayanjot. 1984. 'The Pre-Ahom Roots of Medieval Assam,' *Social Scientist*, 12 (6), June: 60–69.

Majumdar, R.C. (ed.). 1964. *A History and Culture of the Indian People*, Volume 4. Mumbai: Bharatiya Vidya Bhawan.

Martin, Raymond. 2010. 'Let Many Flowers Bloom: Review of *Historical Knowledge, Historical Error*, by Allen Megill,' *History and Theory*, 49 (October): 426–34.

Megill, Allen. 2007. *Historical Knowledge, Historical Error: A Contemporary Guide to Practice*. Chicago: Chicago University Press.

Momin, M. 1998. 'Studies in the Political and Socio-Economic History of Pre-Ahom Assam: Perspectives and Prospects,' *North Eastern Hill University Journal of Social Sciences and Humanities*, 1(1), January–June: 1–3.

Mukhia, Harbans. 1998. '"Medieval India": An Alien Conceptual Hegemony?' *The Medieval History Journal*, 1(1): 91–105.

Neog, M. 1965. *Early History of the Vaisnava Faith and Movement in Assam*. New Delhi: Motilal Banarasidas (reprinted in 1985).

Peal, S.E. 1879. 'A Peculiarity of the River Names in Asam and Some of the Adjoining Countries,' *Journal of Asiatic Society of Bengal*, 47: 258–70.

Raychaudhuri, H.C. 1923. *Political History of Ancient India: From the Accession of Parikshit to the Extinction of the Gupta Dynasty*. Calcutta: University of Calcutta (7th Edition, 1972).

Sarma, D. (ed.). 1981. *Kamarupasasanavali*. Guwahati: Publication Board Assam.

Sarma, Pranab Jyoti. 2006a. Archaeology of Early Settlements of Dhansiri–Doyang Valley, Assam: A Study in Regional Perspective. PhD Thesis submitted to Deccan College Postgraduate and Research Institute, Pune.

Sarma, Pranab Jyoti. 2006b. 'Roles Played by Two River Valleys of Assam in the Indo-Chinese Trade Network,' *Journal of Indian Ocean Archaeology*, No. 3: 108–16.

Sarma, Pranab Jyoti and Manjil Hazarika. 2014. 'Situating Northeast Indian Archaeology in Chronological Perspective: Fresh Observations,' in *50 Years after Daojali-Hading: Emerging Perspectives in the Archaeology of Northeast India—Essays in Honour of Tarun Chandra Sharma* (Tiatoshi Jamir and Manjil Hazarika Eds.), pp. 37–59. New Delhi: Research India Press.

Sharma, A.K. 1993. *Emergence of Early Culture in North-East India*. New Delhi: Aryan Books International.

Sharma, A.K. 1994. Manipur: The Glorious Past. New Delhi: Aryan Books International.

Sharma, H.C., A.A. Ashraf and H.C. Mahanta. 2006. 'Ceramic Tradition in Brahmaputra Valley, Assam: A Case Study from Ambari, Guwahati,' in *Ambari Archaeological Site: An Interim Report* (H.N. Dutta ed.), pp. 45–57. Guwahati: Directorate of Archaeology Assam.

Shastri, A.M. 2000. 'Bhaitbari Excavations—A Reappraisal,' *Puratattva*, 31: 79–83.

Sonowal, M. 2006. 'A Brief Report on the Potteries of Ambari Excavation, Guwahati-1, Kamrup, Assam,' in *Ambari Archaeological Site: An Interim Report* (H.N. Dutta ed.), pp. 83–86. Guwahati: Directorate of Archaeology Assam.

Sreedharan, E. 2000. *A Textbook of Historiography*. New Delhi: Orient Longman.

Thaper, Romila. 1966. *A History of India*, Volume 1. London: Penguin Books (Revised in 1976).

Vasu, N.N. 1922. *Social History of Kamarupa*, Volume I. Calcutta: The Jain Siddhanta Prakashak Press.

Vasu, N.N. 1926. *Social History of Kamarupa*, Volume II. Calcutta: The Jain Siddhanta Prakashak Press.

Vasu, N.N. 1933. *Social History of Kamarupa*, Volume III. Calcutta: The Jain Siddhanta Prakashak Press.

BOOK REVIEW OPEN ACCESS

Mystical Survival: The Geography of the Infinitely Near

Dr Paulo Barone

Pilgrims Publishing, Varanasi, 2012, 113pp. INR 250/-, Paper, ISBN 978-81-7769-994-4

Dr Anuththaradevi Widyalankara[†]

"Ekam sat vipraha bahudha vadanti"

"Truth is one. The Sages call it by many names."

[The Sanskrit hymn, *Rig Veda* I.164.46]

This timeless dictum of the *Rig Veda* was resonating in my mind with a peculiar insistency as I waded through this small book written by Dr. Paulo Barone undoubtedly for a very large purpose. I use 'wade through' with a cautious delight. This little book of 113 pages has a long title *The Mystical Survival: The Geography of the Infinitely Near.* It is a collection of nine essays based on papers presented by Dr. Paulo Barone at academic conclaves in and out of India.

The nine essays taken together constitutes a painstaking effort to map a cohesive or perhaps a more pronounced direction 'along interrupted paths and intermittent times towards mutant places which seem to be solid and then reappears as gaseous part of a special geography which is not marked on current maps', his words (synopsis).

Dr Paulo Barone, in his role as a map maker and explorer of eternal truth, ageless wisdom and universal values known to us as '*Sanathana Dharma*', identifies two core values for deeper excavation through his memories and experiences: Tolerance and Pluralism.

Hinduism, Buddhism and Jainism - the three great religions that sprang from the deepest recesses of the Indian subcontinent are uncompromising in their adherence to the core elements of Tolerance and Pluralism. They make up the distilled essence of Hinduism, Buddhism and Jainism. The author who cites Raimon Panikkar little further into the voyage of spiritual discovery deftly acknowledges this. The sub title of the book '*Geography of the Infinitely Near'* is no riddle after the reader manages the introduction. At this point I willingly succumb to the temptation of quoting Walter Benjamin, "memory is not an instrument for surveying the past but its theater. It is the medium of past experience, just as the earth is the medium in which dead cities lie buried. He who seeks to approach his own buried past must conduct himself like a man digging" (Benjamin, 2006: 17).

Dr Paulo Barone commutes between two human settlements - Milan and Varanasi. Milan is a thriving metropolis with a history of memorable encounters with science, art and literature. Varanasi is the human habitat of 'spiritual luminance' and is the oldest living city in the world and the spiritual capital of the Indian subcontinent - home to three great religions Hinduism Buddhism and Jainism.

I should be forgiven for not traversing all the territory that the map-maker Paulo Barone discovers and marks. As he himself states in the introduction "the unpublished map of this singular territory, to be drawn up, must go as far as to almost be confused with it. It's mapping out begins from the most unthinkable and remote localities, in the small marks of each person; it proceeds by replacing their primitive borders (personal histories) by means of distant images…" (p.12). He concludes the introduction with reassuring words:

> Much as it is variable, I remain convinced that the map is oriented in only one direction. It is searching out Benares, the nebulous heart of things, our singular *golden parasol*. It is a *passing* map. (p.12)

[†] Senior Lecturer, Department of History, University of Colombo, Sri Lanka, Email: anuwidya@yahoo.com

Why in search of Benares in the city of Varanasi? To each of us Benares offers a different idea, a brighter promise and a new experience. The waters of the Ganges can be tranquil or turbulent. The sun rise over the eternal city remains neutral to the prayers offered from ancient 'Ghats'. The thousands of shrines on the high banks of the river will remain impassive while one seeks to discover Existence, Consciousness and Delight or what the sages called '*Sachithanada'*.

Paulo Barone embarks on his journey in search of a mystical survival after making this rather complex proposition in his introduction. In it, he also makes a reference to Edward Said's landscape in ruins remark albeit in passing. It is no exaggeration to call it the city of the past, present and the promise of the future. It is indeed the city of eternity and continuity.

Then why does the author Paulo Barone see a landscape of ruin in it? (p.08). Then he proceeds to discover a second image of a 'compelling cherry flower about to fade and a third image as described by the poet Bharevi in Lotus pollen (Bharavi, *Kiratarjuniya*, Verse, 39). The ruin, the falling flower and the golden parasol according to the author makes an indivisible 'triptych-ruin'. In this triptych, he discovers the elements that make up the 'original machine' (p.08). The author despite the tortuous path taken arrives at a pivotal point where he abandons the Eurocentric perspective of the landscape – 'a visual dimension of space'.

The Benares he is in search of is a 'singular golden parasol' that cannot be reduced to visual dimensions. The City of light and the fountain of Hindu philosophy regard itself as a luminous space. Its luminosity exemplifies wisdom. It eradicates the darkness of ignorance. In this luminous space sin cannot be washed away in the Ganges or by prayer offered from the Ghats and Shrines. Immortality is possible only through wisdom and understanding. The City of light is not visible in darkness. The City of eternal wisdom through which the river of life meanders through does not defy the laws of physics. It however is the home to the *principle of non-contradiction* (p. 31).

In the first essay "Vishva Darpana: East West Atlas, Notes on the Image of the World/ the Rest" (pp. 13-24), he dismantles Rudyard Kipling. Instead of attempting to make the twain meet the author makes it a confluence. In this essay his lament or rather his diagnosis of our predicament finds a natural setting in bustling Milan and in sedentary Varanasi with remarkable ease. He writes 'we allow meaning to inherit only in the accurate gesture of a handshake or expression in some one's eyes and still suffer the affliction of a general sense of exile' (p.32) .

The author is deeply influenced by Raimon Panikkar. I am no avid reader or follower of this great Indo Spanish savant. Yet, navigating the rapid currents of the author's tireless reasoning, I was compelled to discover Panikkar afresh. It was not in vain. He is matchless on the subject. He says "philosophy could be understood as the activity by which man participates consciously and in a more or less critical manner, in the discovery of reality and orients himself within the latter" (Panikkar,2000: 1-3).

In this essay, he makes some startling discoveries. He refers to 'illusions produced when only a moment is extracted from a complex process and rendered absolute while the rest is obscured' (p.15). This essay does not make easy reading. The complex thoughts are presented in equally complex lines. Yet, your patience is soon rewarded. He begins the essay with a peg on James Joyce's Ulysses where Joyce uses the since famous phrase "light crumpled throwaway". The author decides that it is an "appropriate image of the contemporary world" (p.13). It is no easy journey but it has exciting prospects. Walter Benjamin and James Joyce are invoked arriving at life liberated '*Jeevanmukta'* (p.19). The 'crumpled throwaways' become 'remainders', and the reasoning is intricate. To see the Irish writer and the Jewish Marxist in the luminous setting of Varanasi is fascinating. As the author concludes, "[i]t is a specially made 'empty jar,

an Atlas dedicated only to 'remainders' capable of holding them without asking anything of them in a semi liberated, semi redeemed state". To exhibit Barone suggests that "the East-West Atlas must work like a laboratory" (p.19).

The essay 'Dagdhabijabhava: The State of the Burnt Seed" (pp. 25-38) begins with a description of a visit by Rabindranath Tagore to a Danish School. Tagore, it is said, had exclaimed, "Why do you teach so many subjects? One would suffice: Hans Christian Anderson" (p. 25).

Tagore was a creative giant at ease with Western culture. He had a deep insight into Western poetry and science. He was a remarkable Indian sage who combined the best of East and West and a human repository of ancient and modern knowledge. He held his own in a debate with Einstein in 1930 on the then emerging principles of quantum mechanics. The author Barone speculates on the reasons for Tagore's admiration for the Danish writer of fairy tales. Hans Christian Andersen is the acknowledged father of the modern form of fairy tales. He was absolutely enchanting due to his extraordinary gift for noticing and depicting the whimsical and the wishful that mesmerised children and captured the imagination of adults.

The author speculates, "It would indeed be nice to think that Tagore had once read one of Anderson's *fairytales* and had been struck by a sudden, pervasive enchantment, of the sort generally reserved for children, whom he never forgot. Tagore might be said to have *devoured* Anderson's fairytales" (p. 25).

He picks the term 'devour' from an observation made by Walter Benjamin in his "A Glimpse into the World of Children's Books". Hans Andersen's ingenious story of 'The Flax' becomes a commentary that is emblematic of the violent fragmentation that characterises the reality in which we live. Then with remarkable conviction he asserts that, "it also accurately represents the ever increasing speed with which modernity has managed to dissolve ancient rhythms and structures" (p. 27). Appreciation of Tagore's refrain in the Danish school that Andersen's stories provide an adequate education requires me to provide a synopsis of the story *The Flax* by Hans Christian Andersen. Started with a small incident and passing through long but interesting dialogues, the ballad was finally over [*The Flax*, (1849) http://hca.gilead.org.il/flax.html]. Just as what Hedge Stake warned. When the flames died invisible elements danced over the embers. Wherever their feet touched, their footprints, the tiny red sparks, could be seen on the ashes of the paper. However, the tiny invisible beings cried, "The ballad is never over! The children could not either here or understand that. Just as well. Children should not know everything" (p. 28).

In my review I take pains to provide the synopsis of Andersen's story *The Flax* as it is necessary for me to explain how I understand Tagore's mind when he announces that Hans Andersen's stories as providing a wholesome education. The fables in the *Panchatantra* (re-print 1991), the stories in the *Jathaka Mala* (re-print 2003) and the *Fairy Tales of Hans Andersen* (re-print 1993) all provide a great pool of accumulated wisdom that constitutes a perennial philosophy. They are all adventures in the human story. Sarvepalli Radhakrishnan says of Tagore "in interpreting the philosophy and message of Rabindranath Tagore we are interpreting the Indian ideal of philosophy, religion, and art, of which his work is the outcome and expression" (Radakrishnan, 1919: 12-15).

Here, I must digress. In order for me to appreciate the thesis of Paulo Barone I must take this avenue of citing an extract from the famous conversation between Tagore and Einstein. The conversation between these two eminent scholars was central to the nature of reality. *Jathaka* Stories, Fables of the *Panchatantra* and Hans Andersen's fairy tales are all part of the human entity which according to Tagore is "depending for its reality upon our consciousness" (Conversation between Einstein and Tagore, *New York Times*, August 10, 1930).

In next essay 'The Ant-hill Fraternity' (pp. 39-44), the author uses the formation and functioning of the Anthill the abode of the industrious ants to present a world view. He commences the discussion by a reference to the Italian poet Giacomo Leopardi's composition '*La ginestra*' or broom plant. According to the author, the poet Leopardi considered the broom plant as the only form of life surviving on the slopes of Vesuvius, which destroyed a human civilization that was Pompeii and Ilocano in 79 AD. Leopardi wrote the poem while residing in a villa on the hillside of Vesuvius. It was to be his moral testament as a poet. *La ginestra* ("The Broom Plant") is contemplated by the poet as the flower of the barren slopes of the volcano. It describes desolation and the poet alternates between enchantment and melancholia of a starry night. It describes the nothingness of the world, the orphaned man and his precarious existence and the capriciousness of nature. These are not intended intentional evils but are continuous and constant. This commentary is followed by his thoughts on mankind, history and nature. The hapless plant Ginestra lives on in desolation typical of the Vesuvius without surrendering to nature. Here it personifies the ideal man who rejects illusions about himself and does not plead for help from the heavens.

Leopardi is not well known in the English-speaking world. Yet, he certainly could enter the ranks of the greatest enlightenment period thinkers. He perceives the flower of a broom plant growing on the arid slopes of the volcano Vesuvius as confrontation with the delusions of his time, which believed in a 'magnificent progressive fate' – and those who failed to recognise the malignity of Nature towards humans. Paulo Barone reads another dimension to his poetry. He believes that the 19th century poet was concerned and commented on the extreme ease and rapidity with which things vanish and the relentless fragility to which they are subject and the illusive nature of edifying visions. Leopardi in his poetry refers to tribe of ants, carved out of soft soil, with vast labour. The poem gives a sense of a 'concluding remark' saying that "it's for no other reason than that mankind is less rich in offspring" (Grennan, (Tr.) (1997) *Leopard's Selected Poems*, 'La Ginestra'). The task of philosophy (*filosofia dolorosa ma vera*) is to educate humanity first to openly recognize the ills of life and then to mitigate them through participation in the culture of time. It is the message encoded in 'La Ginestra' (the Broom Plant). Leopardi calls for a great alliance of all human beings a 'social chain (social catena) that unites all against the brute force of nature. Leopardi refuses the idea of Divine Providence and all the silly ideas of his proud and simple century. Our author Barone impressed with this philosophical view encapsulated in the *La Ginestra* but locates his thought somewhere in explaining the illusive nature of edifying visions.

Barone says the analogy with the anthill is well known in India. He cites Brahmavaivarta Purana Krisnajanma Khanda as remembered by Heinrich Zimmer in his *Myths and Symbols in Indian Art and Civilization* (1972). In the Upanishads we discover Indra swollen with pride. He decides to build a palace that will testify to his great powers. However, the construction drags on. The head carpenter discovers that this would take a life-time. Surely, Indra must be persuaded to be a little modest in his dreams of grandeur. He consults Brahma, the God of Creation. They decide on a strategy. A mysterious person appears one day and Indra proudly proceeds to show the guest around. The visitor is impressed and declares that it is the finest abode any Indra has ever built. Any Indra? Indra was confused. I am the only Indra. Am I not? The visitor obviously a messenger from Brahma the creator points to a procession of ants walking in orderly formation over the palace floor. "Those ants," the messenger says, "are all former Indras!" It is the way of the world. A god in one life time can be reincarnated as an ant in another. One must avoid being too comfortable in one's own esteem as one never knows as to what kind of karma one is building upon in the present life.

Buddhist texts too have relied on the symbolism of the Anthill. There is an anthill

burning day and night. A Brahamin directs another person Sumedha "Take your tool, Sumedha and dig." (*Vammika Sutta, Majjhima Nikaya,* 1, 23). As they dig deep he comes across a door-bar, a frog, a forked path, a strainer, a tortoise, a butcher's knife and chopping block, a piece of meat. They throw these findings away and dig deeper. They finally find a cobra. The Cobra is not harmed but treated with honour. They are baffled by these findings. At the behest of a deity (*Devata*) the riddle is referred to the Buddha. The enlightened one unravels the riddle. The Ant Hill is the body. The Brahmin is the Arahat. The Knife denotes wisdom. The digging is the effort. The door bar is ignorance. The fork in the path is doubt. The sieve is the five mental hindrances; the tortoise is the five aggregates of clinging. The butcher's knife and the chopping block represent the fivefold pleasures of sense. The piece of meat is lust and delight. The Cobra is the Arahat Monk (*Vammika Sutta, Majjhima Nikaya,* 1, 23). The Anthill the product of effort to overcome adversity, consistency in application to life, commitment to ethical conduct by the miniscule insect that is oblivious to its own existence has captured the imagination of both the oriental and occidental exponents of human frailty and human endurance.

In the essay 'White of India' (pp. 45-58), the author enters exciting territory- the impact of India. Here it must be stressed that in his impatience to unburden himself of the vast array of observations, inferences and determinations of his subject he does not seriously consider the limited faculties of the reader to fully grasp his message. The language and the construction of thoughts can at times be arduous. He writes "by far the majority of the numerous accounts of the impact of India (which is the East, but is definitely much more, and East which is never really India, but always much less) reveal a common trait. While the overarching message is discerned, the reader feels a sense of helpless despair that nags the mind. What if the conjecture is incorrect? That said Paulo Barone should be seen as a serious explorer of the 18th and 19th century East-West philosophy encounters. –He deals with what he calls the 'emblematic case of Hegel' (p. 46). -Hegel was no student of Hindu Philosophy. His views are confined to his review of Wilhelm von Humboldt's lectures on the *Bhagavad-Gita* at the academy of Sciences, Berlin in 1827. Humboldt praises the *Gita* as the greatest, most beautiful, and philosophical poem in all known literatures. For the purpose of this review of Paulo Barone's book that deals with East West concept of God and Man let us see how the *Gita* and Hegel visualised and interpreted God.

In the *Gita*, Krishna is God incarnate. Krishna, is one (and many), supreme, infinite, all-encompassing, all-pervasive omnipotent , the beginning less and endless, immortality and death being and non-being and beyond neither being nor non-being source of all and especially of all that is excellent, personal, self-revealing, in-dweller in human beings saviour of sinners, the guardian of eternal sacred duty, destroyer and dissolution. God is the universal father, mother, friend, lover, grandfather. God is manifest in nature and mind, as the sustaining life force, a teacher, illuminating the entire field.

Hegel does not subscribe to this conception of god. If God is to be truly infinite, truly unlimited, then God cannot be 'a being', because 'a being', by definition is already limited by its relations to the others. But if God is not a being', what is God? If finite things fail to be real, what it is to be depends on the relation to other finite things? (Lauer, 1983: 37-40) Hegel's God performs something akin to what is traditionally understood as 'creating'. However, as the Hegelian 'creating' takes place throughout time, rather than only 'in the beginning', it finds itself consistent with what astrophysics and biology informs us about the universe (Lauer, 1983:39). Thus, even Karl Marx- the atheist can describe Hegel as an inspirational guide.

These are random meanderings in which I found myself immersed when trudging along the 113 pages that Paulo Barone has produced. It is indeed the sum of a lifelong quest of discovery. Paulo Barone in his *Mystical Survival*

offers a revelatory prism through which to view the present situations, conditions and in overall the current and evolving conceptions of human thought and interactions. This is an exciting journey for the initiated and a rather mystical journey for the uninitiated such myself. I am glad that I read it. I look forward to an amplified version where he explains his wanderings shall we say as Hans Anderson tells a story to children.

References

Benjamin, Walter (2006), 'Excavation and Memory', in *Berlin Childhood Around 1900*, Harvard: Belknap Press of Harvard University.

Bhāravi (1885), Nārāyaṇa Bālakṛishṇa Godabole & Kāśināth Pāṇḍurang Paraba, (eds.), *The Kirâtârjunîya of Bhâravi: with the Commentary (the Ghaṇtâpatha) of Mallinâtha*, Nirṇaya-Sâgara Press.

Bickersteth, G.L. (Text, Translation and Commented), (1923), *The Poems of Leopardi*, New York: New American Library.

Grennan, Eaman. (Tr.) (1997), *Leopard's Selected Poems*, Princeton: Princeton University Press.

Haksar, A.N.D. (2003), *Jathakamala: Stories from the Buddha's Previous Births*, New Delhi: Harper Collins India.

Heidegger, Martin (1996), *Being and Time*, (Trans.) Joan Stambaugh, New York: Suny Press.

Lauer, Quentin, (1983), *Hegel's Concept of God*, New York: Suny Press.

Marianoff, Dmitri. "On the Nature of Reality: Albert Einstein in Conversation with Rabindranath Tagore", Extracted from "Einstein and Tagore Plumb the Truth: Scientist and Poet Exchange Thoughts on the Possibility of its Existence without Relation to Humanity", *New York Times*, August 10, 1930.

Owens, Lily (ed.) (1993), *The Complete Hans Andersen's Fairy Tales*, New York: Gramercy, Avenel.

Panikkar, Raimon (2000), "*Religion, Philosophy and Culture*", *Polylog*, V, Germany

Radakrishnan, S. (1919), *Philosophy of Rabindranath Tagore*, London: McMillan & Company Ltd.

Sarma, Visnu. *Panchatantra*, (Tr.) (1991), G.L. Chandiramani, New Delhi: Rupa & Company.

The Middle Length Discourses of the Buddha: A Translation of the Majjhima Nikaya, (2005), (Tr.) Bhikku Nanamoli and Bhikku Bodhi, USA: Wisdom Publishers.

The Flax, (1849),

http://hca.gilead.org.il/flax.html

Zimmer, Heinrich. (1972), *Myths and Symbols in Indian Art and Civilization*, Princeton: Princeton University Press.

PUBLICATION WATCH OPEN ACCESS

Hi Readers,

In this special issue on methodology, we bring you the news of resources on methodology that is available free in the internet. These include on-line resources, e-books and journal articles. The following are the free resources:

1. A Guide to using Qualitative Research Methodology, http://fieldresearch.msf.org/msf/bitstream/10144/84230/1/Qualitative%20research%20methodology.pdf
2. Chereni Admire (2014). Positionality and Collaboration During Fieldwork: Insights From Research With Co-Nationals Living Abroad, Forum: Qualitative Social Research, 15 (3),http://www.qualitative-research.net/index.php/fqs/article/view/2058/3717
3. Caretta, Martina Angela (2014). Situated knowledge in cross-cultural, cross-language research: a collaborative reflexive analysis of researcher, assistant and participant subjectivities, Qualitative Research, http://www.diva-portal.org/smash/get/diva2:734525/FULLTEXT01.pdf, doi: 10.1177/1468794114543404
4. Fletcher, Amber J. and Marchildon,Gregory, P. (2014). Using the Delphi Method for Qualitative, Participatory Action Research in Health Leadership, International Journal of Qualitative Methods,13, http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/19025/16138
5. Fahie, Declan (2014). Doing Sensitive Research Sensitively: Ethical and Methodological Issues in Researching Workplace Bullying, International Journal of Qualitative Methods,13, http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/19018/16139
6. Guion, Lisa, A., Diehl, David, C. and McDonald, Debra Conducting an In-depth Interview, University of Florida, IFAS Extension, http://edis.ifas.ufl.edu/pdffiles/FY/FY39300.pdf
7. Guion, Lisa, A., Diehl, David, C. and McDonald, Debra Triangulation: Establishing the Validity of Qualitative Studies, University of Florida, IFAS Extension, http://edis.ifas.ufl.edu/pdffiles/FY/FY39400.pdf
8. Hannan, Andrew Questionnaires in Education Research, http://www.edu.plymouth.ac.uk/resined/QUESTS/index.htm
9. Hayes, Denis Case Study, http://www.edu.plymouth.ac.uk/resined/Case_study/casest.htm
10. Heath, Helen and Cowley Sarah (2004). Developing a grounded theory approach: A Comparison of Glaser and Strauss, *International Journal of Nursing Studies*, 41, 141–150
11. Hohmann, Ulrike Quantitative Methods in Education Research, http://www.edu.plymouth.ac.uk/resined/Quantitative/quanthme.htm
12. Hussein, Ashatu (2009). The use of Triangulation in Social Sciences Research: Can qualitative and quantitative methods be combined?, http://jcsw.no/local/media/jcsw/docs/jcsw_issue_2009_1_8_article.pdf
13. Jick, Todd,D. Mixing Qualitative and Quantitative Methods: Triangulation in Action, http://faculty.washington.edu/swhiting/pols502/Jick.pdf
14. Mannay, Dawn (2010). Making the familiar strange: can visual research methods render the familiar setting more perceptible, Qualitative Research, 10(91), 91-111
15. Niglas, Katrin Quantitative and Qualitative Inquiry in Educational Research: Is There A Paradigmatic Difference Between Them? http://www.leeds.ac.uk/educol/documents/00001487.htm

16. Nolas Sevasti-Melissa (2011) Chapter 2 Grounded Theory Approaches, In N.Frost (eds.) *Qualitative Research Methods in Psychology-Combining Core Approaches* (pp.16-43). London: Open University Press
17. Olsen, Wendy Triangulation in Social Research: Qualitative and Quantitative Methods Can Really Be Mixed, http://research.apc.org/images/5/54/Triangulation.pdf
18. Papathanassis, Alexis and Friederike Knolle (2011). Exploring the adoption and processing of online holiday reviews: A grounded theory approach, *Tourism Management*, 32, 215-224, http://202.120.224.199/picture/article/179/bc/0c/ca58cbde4e718fcb4f835a0bf9b7/bba035aa-a0bc-42a8-87ba-715d9df1360c.pdf
19. Tracey, Sarah, J. (2013). Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact, Oxford: Wiley Blackwell http://www.atibook.ir/dl/en/Others/Education/9781405192026_qualitative_research_methods.pdf
20. Woods, Peter Qualitative Research, http://www.edu.plymouth.ac.uk/resined/qualitative%20methods%202/qualrshm.htm
21. Wiles Rose , Coffey,Amanda, Robison, Judy and Prosser, Jon (2012). Ethical Regulation and Visual Methods: Making Visual Research Impossible or Developing Good Practice? *Sociological Research Online*, 17 (1) 8 <http://www.socresonline.org.uk/17/1/8.html>10.5153/sro.2274