2. A Non-Representational Approach

DDS’s biodiversity conservation can be classified as what Nazarea (2005:17) refers to as in vivo or conservation as a way of life as opposed to conservation by design. Hence, it is not just plant genetic resources or seeds that need preservation. Such an approach to conservation of diversity requires the unearthing of knowledge, practices, rituals, and skills –cultural and agricultural, which are connected to these seeds/crops. It would be safe to say then, that these practices, rituals, and skills are embedded in messiness and the grime of everyday life. Not only are these symbolic gestures or utterance, but they are also embodied utterances and gestures. A similar proposition was made in the introduction vis-à-vis our relationship with technology. Andy Clarke (2003) suggests that we are constantly inserted in a social biotechnological matrix. As an illustration take Connerton’s (1989: 76-77) analysis of the act of writing. For him, writing with a pen or pencil is constituted by both the muscular action of inscribing letters on a surface, as well as the symbolic component of alphabets- i.e. acts of incorporation and inscription respectively. To quote Connerton (Ibid: 76-77):

For it is certainly the case that many practices of inscription contain an element of incorporation, and it may indeed be that no type of inscription is at all conceivable without such an irreducible incorporating aspect….Each of these acts, none the less, is accompanied by a corresponding muscular action. The way in which we generally adhere to the same method of forming the same character in handwriting demonstrates that writing entails a minimal muscular skill; and if we begin to write in an unfamiliar way, as when printing our letters instead of writing them longhand, we will be alerted to the fact that every character we form entails a bodily action.

The current study is interested in two fields (biodiversity and media technologies) that require an emphasis on the material- on things as well as the body performing various actions (visible and visceral). This study requires us to look at the everyday as well as the embodied practices, habits and rituals of the people and objects involved. There is a need to go beyond the symbol, the textual, or the representational. Attention needs to be brought to various things and entities we come into contact with and the relationship we build with them in our daily lives. So the seeds, radios, phones, soil, farm animals etc. each extend our capacities in infinitely different ways. It is these relationships which also lie at the heart of in vivo conservation in this particular case.

The emphasis on things here, finds its basis on what Harvey and Knox (2014) identify as a rejection of the Kantian understanding of things. They state that scholars, who choose to talk about things, as is the case here, connect their inquiry to debates founded in a distinction between Kantian and non-Kantian understanding of things. For Kantians, Harvey, and Knox (Ibid: 4) write, things as perceived by human beings are, “…the passive object of human appropriation”. A rejection of such a stance would mean considering things as a, “…subject of its own movements and capacities, existing independently of human being, unknowable and autonomous” (Ibid: 4). Further, such inquiry into things, the scholars (Ibid: 4) argue, is in an, “…interest in attending to how things act back on the world, manifesting resistances, capacities, limits and potentials, and thereby challenging the
normative subject/object dichotomy”. This study is located within the riffs of such a debate. It looks at how the relationship between biodiversity, memory, and media may work to extend the capacities of a community within a social justice movement. Hence, the move away from an anthropocentric understanding of our world helps highlight these relations. Blackman and Venn (2010) make a compelling case as to why such a consideration of things and practices might need a different set of methods. They write (Blackman and Venn 2010: 9):

… some established methods for studying bodies may not do justice to, or, importantly, may perform an exclusion of processes which might be characterized as less visible to the particular technologies of observation, seeing and listening that characterize the humanities, and particularly the reliance of many of our qualitative methodologies on language and sight. This is characterised as a form of ‘representational thinking’, which assumes that narrative, and producing a discursive representation of our research object(s), is enough to illustrate the mediated nature of matter, or what we might also call the ‘matter of mediation’. However, this could be likened to a particular academic and analytic training in attention, which excludes other ways of ‘noticing’ and attending within our research endeavours.

In short, we need a methodological approach that helps map embodied actions as well the relational aspect of interactions between things and people. In the following section, I take a critical look at some theoretical approaches that are classified as representational approaches and how they may be slightly limited in achieving the above.

**Representational Approaches: A Critique**

Different philosophical approaches have either emphasised the Individual over the Society or vice-versa. Some theories emphasise the System or Society as independent of the individual, subsuming of the individual, and shape her/his behaviour. And on the other hand, philosophical approaches like Phenomenology and Symbolic Interactionism among others, state that society is continuously constituted through and by interacting subjects. This reverses the emphasis back on to the individual’s actions and interpretations of things around them. Massumi (2002) in his comparison finds the latter set of positions to be “foundationalist”. They “…conjure away society with the fiction of an atomistic flock of individuals who forge relations with one another on the basis of normative recognition of shared needs and common goods” (Ibid: 68). He criticises such approaches for appealing to the myth of origins (Ibid: 68). He also argues that theoretical positions emphasising society/system are no less foundationalist (Ibid: 68):

In privileging such notions as structure, the symbolic, semiotic system, or textuality (they) look first to what the other wing puts second: an intersubjective framework. Society now figures as an a priori, a principle of intersubjectivity hatching individual subject-eggs.

Hence, these theories swing from a time axis to a spatial or position axis respectively. He stresses that individuals and societies are strictly simultaneous and consubstantial (Ibid: 71):
It is an absurdity even to speak of them (individuals and societies) using notions of mediations, as if they were discrete entities that enter into extrinsic relation to one another, let alone to wonder which term takes precedence over the other in determining stasis and change.

Nick Srnicek (2007) makes arguments similar to Massumi, on issues related to Philosophy of Science and Political Science. He points to the same inadequacies within Social Constructivism as well as in Critical Realism. Srnicek (Ibid: 9) builds a critique of social constructivist ontology as so:

For the social constructivists, the object of study is never fully present; in studying the social world, the other’s subjective meaning is never available to us in-itself (sic). Instead, we always have to undertake an interpretive process in order to understand it; meaning therefore becomes a problem insofar as the ‘objective’ meaning of a sign cannot be considered as identical to the ‘subjective’ meaning that was intended. In a social constructivist’s ontology, it is argued that there are ultimately no pure objects, but only signs that refer to the intention they represent. As a result of all these factors, the social constructivist argues that there must necessarily be a focus upon the ontological givens of language (and semiotics as the general science of signs) and the construction of meanings.

Srnicek rightly points out that such ontology has risen out of a criticism of Positivism and lays stress on the “actors who constitute the social world and the interpretations and meanings they ascribe to their actions” (Ibid: 9). He however, argues in favour of the mind-independent world that Critical Realist ontology offers, but says it is limited by their essentialism and dynamic ontology. For him, this is resolved by folding into the mix, ideas of Deleuze (Ibid: 9). Srnicek (Ibid: 9) argues that both paths are limited in terms of the ontological stance they can offer, often stressing epistemology over ontology. While his interest lies in applying this to the field of Political Science, it can be extended to this project. For both theoretical traditions, “…their primary mistake is to tie their ontology too closely to subjective experience”, (Ibid: 9). Further, in his view, “…both commit the fallacy of projecting anthropocentric images onto the nature of being” (Ibid: 23) (emphasis added).

This is an important point, for a move away from an anthropocentric bias allows us to look at questions of social change differently, especially in relation to nature, things, and technologies. Like Srnicek, de Landa (2010: 31) warns us of essentialism in the asserting a mind-independent world:

When one asserts the mind-independence of the material world a crucial task is to explain the more or less stable identity of the entities that inhabit that world. If this identity is explained by the possession of an atemporal essence then all one has done is to reintroduce idealism through the back door. Thus, a coherent materialism must have as its main tool a concept of objective synthesis, that is, of a historical process that produces and maintains those stable identities.

The call made here by these scholars is to start from the middle, the in-between. And, while we are in this in-between, they ask us to shift our focus from the system and the individual to the event. Immerse ourselves in the processes and flows that crystalize and fuel these systems and individuals; for these systems, structures and persons arise from and feed back into these processes. And this rising and feeding back is not done in some staid, mundane cycle but in a space of infinite possibilities forever at the brink of actualization. It is a call for a new kind of a materialist ontology; a non-representational approach.
Affect and Assemblages

The idea of a non-representation approach I choose to adapt here is best elaborated in the many works of Nigel Thrift (e.g. 2000, 2008), within the field of Human Geography. He states that this is a style of thinking rather than a new theoretical approach. As he writes (2000: 216):

Note that I use the world ‘style’ deliberately: this is not a new theoretical edifice that is being constructed, but a means of valuing and working with everyday practical activities as they occur. It follows that this style of working is both anti-cognitivist and, by extension anti-elitist since it is trying to counter the still-prevalent tendency to consider life from the point of view of individual agents who generate action by instead weaving a poetic of the common practices and skills which produce people, selves, and worlds (emphasis original).

Not only does Thrift (2000) press upon us the importance of common practices and skills, but also that it is such actions and relationships that produce both people and things. This straight away resonates with the arguments of Massumi and Srnicek discussed above. In fact, the above quote from Nigel seems to dismiss traditional understanding of how the ‘self’ is produced (which I turn to a little later). The stress on relationality here stems from the idea that when one interacts, comes in contact with, or builds a relationship with an ‘other’, this other produces a change in our capacities and potential, as much as we produce such changes in this ‘other’. To put it another way, it displaces the ‘self’ or ‘man’ as the centre of all experience. Manual de Landa (2010) explains this idea of relationality with the illustration of a simple knife. The knife along with certain properties such as weight, length or sharpness, also has capacities. But what these capacities might be is difficult to ascertain till one knows what or who else the knife interacts with.

To quote de Landa (Ibid: 70-71):

A sharp knife… also has capacities, like its capacity to cut. Unlike sharpness, the capacity to cut need not be actual, if the knife is not presently cutting something, and may never become actual if the knife is never used. And when a capacity does become actual it is never as an enduring state but as a more or less instantaneous event. Moreover, this event is always double, to cut-to be cut, because a capacity to affect must always be coupled to a capacity to be affected: a particular knife may be able to cut through bread, cheese, paper, or even wood, but not through a solid block of titanium. This implies that while properties are finite and may be put into a closed list, capacities to affect may not be fully enumerated because they depend on a potentially infinite number of capacities to be affected. Thus, a knife may not only have a capacity to cut but also a capacity to kill, if it happens to interact with a large enough organism with differentiated organs, that is, with an entity having the capacity to be killed. (Emphasis original)

This is in effect, the basic Spinozan notion (and also a Deleuzian notion) of the power or ability “to affect and be affected” (As cited in Massumi and McKim 2009:1). To clarify, affect is “an outcome of an encounter between two or more bodies (which can be human or non-human, organic or inorganic), which either increases or decreases a body’s capacity for action” (Ash 2010:657). It serves to say that all entities in a given relationship affect and are affected simultaneously. These bodies then, which/who are defined by their capacities to affect and be affected, force us as Blackman and Venn (2010: 9) argue, to consider them as, “thoroughly entangled processes”.

Blackman and Venn (Ibid: 9) also provide a case for why the studies of such bodies which are
“entangled processes” also need to closely consider practices. For one, they argue that a body’s capacities are, “mediated and afforded by practices and technologies which modulate and augment the body’s potential for mediation” (Ibid: 9). But second, and most importantly they state, it “…invites us to consider how practices might ‘work’ or operate without the reification or invoking of bodies as ‘dumb matter’, or relying on understanding of embodiment which are rationalist, cognitivist and, importantly, thoroughly disembodied” (Ibid: 9).

Affect also has another dimension, one that Simpson (2009: 2558) calls “the not-already-qualified registers of experience present within everyday practices” (emphasis added) or what is described as a “prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body’s capacity to act” (Massumi quoted in Dewsbury 2012: 78). Thus, it refers to aspects of us and our encounter with others (things and people) that is not registered (and cannot always be registered) in our conscious minds. It is these dimensions of affect that help pin down to some extent the embodied aspect of practices, rituals, skills, and habits or bodily automatisms.

To make more explicit this connection between relationality, affect and embodied actions, take the following example. A friend of mine, while stating to me that she was going to write a letter, used gestures to indicate the same, as she was standing a little distance away. The gesture or action she used to depict writing however was not that of an (invisible) pen scribbling across (invisible) paper. The gesture that she used was that of punching keys across an (invisible) keyboard. Born in the mid-1980s, I belong to a generation (or cohort) that has seen a rapid increase in of using laptop or phones to produce worded documents as opposed to using pen and paper. Given my (and my friend’s) constant use of (or interaction with) a keyboard to ‘write’ has gradually led us to collapse the bodily gestures for ‘writing’ and ‘typing’ into one- i.e. typing. This is a miniscule indicator of how our relationships with the things lead us to affect and be affected.

Take as another example, a study by Paul Simpson (2009) on the most basic bodily practice of listening. Simpson studies the practice of listening in connection with a musical performance or musical experience. In attempting an affective exploration of listening to a musical experience, he seeks to “decentre the role of interpretation in recent academic accounts of listening and in doing so approach an understanding of listening that is not predicated on the pursuit of meaning or the act of interpretation (Simpson 2009: 2558)” (emphasis original). Thus, Simpson arrives at a different understanding of practices of listening and subsequently a different understanding of the ‘subject’. He states (Ibid: 2559):

I am then less interested in the judgements made of the sound of music, with it being good or bad, suitable or unsuitable, or with the ways in which identities are made in practices of listening, but rather want to think about the ways in which the subject listening is constituted in its relations to, or with… this materiality of the sound itself (Emphasis original).
Simpson places a particular experiment carried out by the Washington Post on the 12th January 2007 as a background to his arguments. A well-known classical violinist, Joshua Bell played some classical pieces at a metro station for about forty-three minutes, dressed as a busker, earning him about thirty-two dollars (USD). Not many people stopped at this time to listen to a musician whose shows otherwise sell at much higher rates. Just a lone man stopped for a while to listen and a follow-up interview revealed that neither was he interested in classical music, know any music theory, nor did he know Joshua Bell (Ibid: 2556-2557). This experiment received various comments and analysis with one even bordering on what Simpson calls “cultural snobbery”¹ (Morrison quoted in Simpson 2009: 2257). It is this sort of understanding of practices of listening that Simpson sets out to challenge.

In short, Simpson attempts to move towards a post-phenomenology of sound or sonorous presences, and away from a more traditional, phenomenological understanding. Extending the philosophical work of Jean-Luc Nancy to his own, Simpson (Ibid: 2558) argues for the need to focus on listening rather than hearing, where listening is not tied to interpretation. The focus thus, not only “falls on the body subject listening to music, but also, more on the sound itself” (Ibid: 2558). Affect then, becomes central to such an endeavour. This is not to say that interpretation should be completely ignored or shunned, but that it “…disposes a self to be open to being affected in various ways….there are times when we refrain from interpretation and that it is therefore not a necessity- and that there is something of significance in such uninterpreted experiences” (Ibid:2562). Further, our bodies (or we) are affected by sound in many different ways. He asserts, that we ‘listen’ with our entire body, with the ear being a ‘focal organ’ of listening (Ibid: 2568-2569). The important points to note here is that we are constantly immersed in sound, or rather, in sonorous presence and it resonates with us in infinite ways.

To simplify this, take one’s experience of watching a scary or horror movie. The background score is often what makes one’s ‘skin crawl’ so to say, or plain uneasy. Here, it is not just our ears but our entire body immersed in such a sonorous presence. Another example is how we might feel deep bass notes of music in our gut or stomach when it is played on a loud speaker. Similarly, some dancers claim that they feel music in different parts of their body. That is, different parts of music and different kinds of music resonate with them in different parts of their body (Field notes, November 2014). What we can take away from Simpson’s study are two important points. Firstly, that the subject “is not seen as a stable ground, but as a temporal unfolding- it differs from itself, differentiates itself from itself” (Ibid: 2566). Secondly, along with resonance, emphasis is laid on the timbre of

¹ Simpson here quotes commentator Richard Morrison at The Times, who writes, “that most people have no recognition factor whatsoever” and that Western civilization is “so dumbed down” only around twenty or so people among a thousand have “the perception to recognise that a sublime musical experience is being performed brilliantly in front of their noses.” (Morrison as quoted in Simpson 2009: 2257).
sound, where it is “the most significant affective element of sound” (*Ibid*: 2569) (emphasis original). With these he arrives at a post-phenomenology of sound where listening is not always ‘listening to’ but rather a ‘listening with’ (*Ibid*: 2570). Thus, our body resonates with sound or reacts to sounds it encounters in many different ways. It is in the light of such discussions that Simpson asks us to reconsider the experiment involving Joshua Bell. “Stopping is not the only mode of showing that a body has been affected”, argues Simpson (*Ibid*: 2568). The question is not then, if this music fell on “a thousand pair of deaf ears”, but rather, whether it “resonated with a thousand bodies in a plurality of singular ways” (*Ibid*: 2568). This in turn, takes us away from the cultural snobbery where it is not about whether music is good or bad, but what music does to us. In conclusion, Simpson states (*Ibid*: 2571):

It is about listening to it- to its materiality, rhythm, and timbre, and how this resonates in us and perpetually makes and unmakes us. This is in a sense exemplified in our listener who did not know music theory, did not know who Joshua Bell was, did not really like classical music, but nonetheless found himself briefly in his resonance with the notes being played. This listening may make us ‘feel at peace’ like our lone listener, but it may equally disturb or unsettle us; it may make us feel like dancing or it may make us feel like falling asleep. Further, as with many of the listeners to the opening event, it may have little noticeable impact at all.

The point Simpson makes with this study is vital, especially in approaching the study of media technology. Very often, even to date, most analysis tend to end up as variants of the classic ‘hypodermic needle’ model, where the consumer of media technology is often a passive receiver or are easily manipulated through popular media. To provide one more example of how a non-representational approach can draw out a different set of patterns as compared to representational approaches, consider the study of a popular commercial video game by James Ash (2010). Addressing debates surrounding media-affects, his study asserts that “videogame designers actively manipulate spatiotemporal aspects of the game environment in an attempt to produce positively affective encounters for users” (*Ibid*: 654). Further, in relation to the previous argument, Ash attempts to complicate two accounts of media-affect. One is the microbiopolitical account as exemplified by Thrift (2000) (discussed earlier in this section), and those that are similar to the hypodermic model that view media consumers as passive receivers. The case Ash (*Ibid*: 655) chooses is where:

….affect is actively produced and manipulated for explicitly economic ends. I show that affective manipulation is a necessarily fragile achievement that is prone to failure and always reliant upon being continually reworked in the creative response users develop in relation to the designed environments with which they interact. In this way, I decentre the position of the designers in the design processes, designers are not all powerful architects….who can simply and successfully design affects into an environment and manipulate responses to that environment.

Ash (*Ibid*: 656) states that through the many processes and practices of videogame testing, the attempt is to render contingency visible. While designers work to subsume this contingency within a “logic of calculation” (*Ibid*: 656), they have to put in an effort to guard the contingent as a positive force, as this aspect is central to the commercial and critical success of videogames. In conclusion, Ash (*Ibid*: 668) argues that “the body is shaped through the creative responses generated by users in relation to the
images they experience, rather than the images themselves” and that these responses are “…not negative or manipulative; they positively bring into being different bodily capacities and modes of attunement, which cannot be intentionally determined by those who produce the images through the processes of design” (*Ibid*: 668). Ash gives us here, another way to understand a body’s immersion into a video gaming environment, as well as how we consume different media.

The discussion thus far has related to human and non-human actors organised at a slightly smaller scale. How can one use the above notion - the *ability to affect and be affected* to understand entities of a larger scale (such as communities or associations) and interaction between them? How do the individual and system (or parts and wholes) feature within a non-representational approach? For this I turn to Manuel de Landa (2010) and his rendering of the Deleuzian concept of *assemblages*. While many scholars have written about this, I use the works of Manuel de Landa because of how he breaks down Deleuze’s rich philosophy into lucid, easily digestible pieces and adds to this his own innovative insights. To begin with, de Landa conceives of *wholes* as having properties that are not present in their parts. Rather, they *emerge* when *parts* interact with each other. Such a model, de Landa argues, removes that possibility of micro-reductionism, but is still open to macro-reductionism. To block this, the parts need to share relations of exteriority between them. Here, the parts then subsist/exist independently of their wholes and ‘being part of a whole’ is not the only defining characteristic of the part (de Landa 2010: 3). This way we “conceive of emergent wholes in which the parts retain a relative autonomy, so that they can be detached from one whole and plugged into another one entering into new interactions” (*Ibid*: 3-4).

In other words, we can compare the composition of entities to playing with Lego blocks. Each block has a different shape, size, colour, and possible ways of fitting into the other blocks. And each of these blocks can be plugged and unplugged into each other in infinite number of ways to form countless number of structures - from robots and castles to pyramids and planes. What makes an individual different from say an association then, is the scale at which they are organised. This in particular also helps us deal with a criticism levelled against realist and/or materialist ontology - i.e. “essences acting as formal causes” (de Landa 2010: 84) for the existence of objects (a point also made by Srnicek as stated in the earlier section). An assemblage then:

…is a multiplicity which is made up of heterogeneous terms and which establishes liaisons, relations between them, across ages, sexes, and reigns-different natures. Thus the assemblage’s only unity is that of a co-functioning: it is symbiosis, a ‘sympathy’. It is never filiations which are important, but alliances, alloys: these are not successions, lines of descent, but contagions, epidemics, the wind (Deleuze and Parnet as quoted in de Landa, 2010:10).

Again, take two studies here by way of illustration. Both these studies engage with the concepts of governmentality and security. Both studies use ideas of affect and assemblages to understand these phenomena, providing a very different understanding of the ‘Age of Terror’ debates, which surged in
number post the 9-11 attacks in the United States of America. Bissell et.al (2012) consider as a case study, the Air New Zealand’s *Bare Essentials* in-flight safety video and marketing campaign (specifically the television advertisement). The authors state that since the September 2001 terrorist attacks in the USA, there has been an increase in scholarship on issues of security and mechanisms of power. “The empirical locus for many of these studies” they argue, “has been the tracing of techniques and assemblages of securitisation and control at key nodes in global flows of people, information, and goods” (*Ibid*:694). As a consequence, spaces of air travel or ‘aeromobility’ is one of the most scrutinised spaces. An in-flight safety demonstration (like the Air New Zealand one used in this study) in this light could be seen as a natural extension of this assemblage of securitisation and control.

The authors however, argue otherwise. When connected with the larger marketing campaign of Air New Zealand, the safety demonstration “does more than just enrol passengers in a culture of safety management and risk-aversion” (*Ibid*: 695). In their analysis, the safety demonstration, “…is oriented at least as much to entertainment as it is to information delivery…” (*Ibid*: 695). Further, the authors, “…seek to open up the multiple valences of the safety demonstration as a form that necessarily exceeds its imbrication within overarching assemblages of control and securitisation often deemed to characterise these spaces of aeromobility” (*Ibid*: 695). This is done by bringing the marketing campaign and the larger airline corporation into the picture. The campaign includes a television advertisement, the airline website which contained not just the videos of the safety demonstration and the advertisement, but also the ‘making of’ and ‘bloopers’ videos of the two. It is in tying all these elements together that:

…the in-flight safety demonstration becomes prised away from its enrolment within the familiar assemblage of securitisation and control, surveillance practices, and techniques of disciplining. Instead, it becomes immersed within a new territory that works, among other things, to articulate the brand identity of the airline. The bare bodies in the safety demonstration and television adverts serve representational and mnemonic functions (*Ibid*: 700).

In their study though, Bissell et.al (2012: 703) reiterate a dimension of affect- that of it exceeding capture. They argue that while a lot has been written on:

…the manipulation and engineering of affect in contemporary security society, a faithful rendering of affect will inevitably register its nonequivalence with respect to attempts to modulate it. This is because affect is precisely not a thing that a subject or subjects of power can wield, but a relation (*Ibid*: 703).

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2 The *Bare Essentials* campaign that forms the case for this study has two parts as mentioned. Briefly, the in-flight video as the authors describe it as “…airline staff wearing nothing but G-strings, shoes and body paint. It conveys the relevant safety information in a manner that is silly, flirty, and rather camp by turns (Bissell et.al 2012:696). See Air New Zealand Nothing to Hide (2009) for the full version of the safety video. The television commercial that is part of the same campaign is described as such: “From the girlish bemusement of the women at the check-ins to the coy voyeur caught admiring the baggage handler, through to the pleasantly surprised male passenger and the final shot of a cheekily flirtatious granny, the television advertisement clearly plays a game of sexualised intimacy (Bissell et.al 2012:704). See Air New Zealand TV (2009) for the full video of the television advertisement.
They further state that affective relations are “…not fully susceptible to capture-never completely able to be engineered, managed, or manipulated as emotions may be- as it is in affect’s excess with its respect to its capture that its potential lies” (Ibid: 703). Bissell and others demonstrate through their study that a thing such as an in-flight safety video is but one element within the larger set of elements that make up the airline’s corporate identity. It is not just an element of gimmick in an assemblage of security and control.

Anderson and Adey’s (2011) come from a completely different understanding of the ‘Age of Terror’ debates. They dismantle the idea that an epoch is governed by a particular emotion. Following Foucault, they argue that, “…neither is there any such thing as a general ‘culture of’ or ‘age of’ x or y emotion that defines an epoch. Instead, inquiry should start from the life of specific apparatuses of security, each of which will be (re)organised in relation to a strategic ‘function or ‘objective’” (Ibid: 1097). For their case-study, the authors look at exercises used in the training of emergency services personnel to respond to a situation of crisis. This is thus, a rehearsal of responses to situations such as the ‘swine flu’ epidemic, an earthquake, or other such disasters. Through the observation of such rehearsals or exercises, the authors focus on two issues. One is the relationship between affect and exercise as an anticipatory technique and that of affect and apparatus of security.

From their observation of a training session for emergency service workers, the scholars conclude that such exercises function to make “…affectively present (sic) a space-time that is neither of the present nor the future: an ‘interval’ of emergency where disaster has not yet happened, action has consequences, and life and death are at stake” (Ibid: 1093). This renders future events as more governable. The exercises to this effect serve as an anticipatory technique. They help prime the emergency personnel to respond, almost immediately to any incidence of emergency. Further, the scholars aim to look at how these exercises are one element in a specific apparatus of security, namely, the UK Civil Contingencies Act of 2004. In conclusion, they argue that, “…exercises create affective equivalences between rehearsed and future events and, as such can be understood as one response to a strategic problem: how to secure a valued life in a world of potential and actual emergencies” (Ibid: 1094).

The studies above demonstrate how music, an in-flight safety video, or pre-designed emergency exercises all extend the capacities of entities interacting with them in different ways. These could be an audience at a sub-way station, an airline corporation, or emergency workers in the UK respectively. Similarly, in this study, it is proposed that biodiversity and memory shape each other in many ways, as do media technologies and memories. For example, at DDS, a collection of native regional seeds, traditional recipes and farming methods help promote agricultural biodiversity. At the same time, seeds, recipes and local festivals help the community engage with their collective memory, by invoking what is called sensory memory (for example through cooking and consuming traditional
food), and help preserve local knowledge. I elaborate on this in Chapters 3 and 4. Just as there are connections between biodiversity and memory, there are connections between media technologies and memory. These potentialise the community in many ways. Specifically, the Community Radio and Participatory Video at DDS serve important mnemonic functions for the community at DDS. They have over a decade, become important archives of the communities cultural resources and artefacts. At the same time, the folklore and current issues of the community become sources for the content of the radio and video programmes. Further, these media become systems that can potentially reactivate the memories of affective encounters (following James Ash 2012: 18. Also see Chapter 5). It is argued that all these dynamics help prime the community to resist dominant modes of being, whether in agriculture, caste relations, or gender relations as part of their social justice movement.

As has been stated here, memory and mnemonic practices share important connections with biodiversity and media technologies. For the purpose of this study, it becomes important at this juncture to bring some solidity to the concept of memory and how I choose to treat it. This is necessary as memory is not one single process, but many different cognitive and social processes; a point well-made by Jon Holtzman (2006). He (Ibid: 362) writes that, “what we homonymically label as ‘memory’ often refers to an array of very different processes which not only has a totally different dynamic, but which we aim to understand for very different reasons-everything from monumental public architecture to the nostalgia evoked by a tea-soaked biscuit”. In a similar vein, memory has emerged as an important factor in this study, taking many different forms in different contexts. In the following section, I introduce a few such relevant processes and further elaborate on them across subsequent chapters.

Memory and Mnemonic Processes

I start with the concept of collective memory, as this is the kind of memory that is of interest to this study- that is, the memory of a social group within DDS. The idea of a collective memory was first proposed by Maurice Halbwach (1992), falling firmly within the Durkheimian tradition. For any scholar of memory studies, Halbwach’s writings become an inevitable starting point. He was the first to suggest that we more often than not, perform the act of recollection as part of larger groups, i.e. a social framework. It is in this sense he writes that there, “…exists a collective memory and social frameworks for memory; it is to the degree that our individual thought places itself in these frameworks and participates in this memory that it is capable of the act of recollection” (Halbwach 1992: 38). However, the concept of collective memory in Halbwach’s writing or other sociological texts, as correctly pointed out by Misztal (2003: 4), lacks a concrete definition. One would find extensive descriptions and analysis of its nature but, not necessarily a clearly delimited concept. Some discussions as to its nature are found in Halbwach’s work. He writes that:
...while the collective memory endures and draws strength from its base in a coherent body of people, it is the individuals as group members who remember.... It follows that there are as many collective memories as there are groups and institutions in a society. Social classes, families, associations, corporations, armies and trade unions all have distinctive memories that their members have constructed, often over long periods of time. It is these individuals, being located in a specific group context, draw on that context to remember or recreate the past...Every collective memory...requires the support of a group delimited in space and time (Halbwach quoted in Coser 1992: 22).

Halbwach points out that apart from being collective in nature, the past is not, “...preserved but is reconstructed on the basis of the present” (Halbwach 1992: 40), an approach that is termed as presentist by the scholars of memory studies. Such an approach however makes the past seem much too fluid and inconsistent, a problem that Barry Schwartz (1996) tried resolving in his works on collective memory. Schwartz proposes that collective memory has two faces. It serves as a language, “…for articulating present predicaments” (1996: 910), and a map, ‘…that gets us through these predicaments by relating where we are to where we have been (Ibid: 910). In this sense, the past is not extensively malleable. Instead it is, “...always a compound of persistence and change, continuity and newness” (Schwartz cited in Coser 1992:26). For the purpose of this study I start with this basic description of collective memory and build on it with ideas from other scholars in subsequent chapters (see for example, Chapter 4). The idea pertinent to this study is that of memories as forged, transmitted, and recollected within social frameworks and contexts; that is the memories of collectives or social groups.

The presentist approach to collective memory brings into focus the strong connection the past has with the present. It is often this characteristic of collective memory-its reconstruction on the basis of present needs, that allows many scholars and activists to cast it as a valuable resource in social movements related to collective identities (e.g. Roniger 1997), as well as those of social change (e.g. Barker 1985) and/or social justice (see for example Armstrong and Crage 2006). Olick and Robbins (1998: 128) classify some of these studies as emphasising the “instrumental dimension” of memory. For them Hobbsbawm and Ranger’s work The Invention of Traditions (1983) is a “paradigmatic example” (Olick and Robbins 1998: 128) of such instrumental presentism. Hobbsbawm and Ranger in this seminal work scrutinise, “…the proliferation in the mid to late nineteenth century of state-led efforts to ‘invent’ useful traditions to shore up their fading legitimacy” (Ibid: 117). The idea of collective memories as resources for social movements, as well as that of invented traditions is important to this study. I discuss this particularly in relation to the Mobile Biodiversity Festivals of DDS in Chapter 4. Exactly how such a concept can be applied to a social movement that is not state-led (or is a popular/people’s movement) is also debated in Chapter 4.

Equally important to the study of social justice movements and memory, is the concept of counter memory, unofficial memory, or popular memory. The concept of counter memory, according to Misztal (2003: 61-62) expands the somewhat narrow view of the ‘invention of traditions’ approach to memory which tends to assume that, “…memory is imposed on a public that has no agency”. The idea
of counter memory was promoted intensively by the Popular Memory group in the 1980s. They initially expanded on Foucault’s concept of counter memory, and later went on to be influenced by the works of British cultural studies theories (Ibid: 62). Although scholars of counter memory stress that, “… the dominant vision of the past is linked to the techniques and practices of power, they tend to investigate a much richer spectrum of representations of the past than the invention of tradition approach” (Ibid: 62). Popular or counter memory can be described as a form of collective knowledge possessed by those people who are, “…barred from writing, from producing their books themselves, from drawing up their own historical accounts – these people nevertheless do have a way of recording history, of remembering or of keeping it fresh and using it” (Pearson as quoted by Misztal 2003: 62).

Further, counter memory when, “… seen in opposition to the dominant memory, is a political force of people marginalized by universal discourses, whose knowledges have been disqualified as inadequate to their task, located low down in the hierarchy” (Misztal 2003: 62).

As it will be demonstrated in subsequent chapters, the DDS community focuses all its energies in reviving such memories and knowledge systems that are marginalised. All of their programmes aim to bring back and (re) apply such knowledge within their everyday lives. The counter memory of this community, stands in opposition to the dominant narratives of the government (at the state and central level), and as well as private corporations, especially those within the agricultural and media sectors. This can also be inferred from the three principles that the DDS community follows in designing and implementing their programmes. These principles, as previously stated (see Chapter 1) are: gender justice, environmental soundness, and people’s knowledge.

This study also emphasises the connection we have with seeds, food, recipes, smells, and material artefacts. Further, the importance attached here to our connection with things and how they have the power to affect and be affected, would have strong connection with what is called embodied or sensory memory. Virginia Nazarea (1996, 2005, and 2006) in her work on biodiversity conservation points to how traditional seeds, plants in home gardens, old recipes, traditional food, and festivals, seem to invoke or involve all our senses as well as induce recollections of the past. This demonstrates that memory and its transmission, manifests not only in the form of narratives, but also through material artefacts, performances and bodies (including our own biological bodies). This is how we know how to ride a bike or swim. It is because our muscles are habituated to these set of actions/performances through repetition. Such elements of memory would tempt us to relegate or confine them to the realm of the individual, as opposed to the social. But, Paul Connerton through his book How Societies Remember (1989) proposes that such a thing as social habit memory can exist, and that they are most obvious in our gestures, commemorative ceremonies, and bodily practices.

Connerton’s larger project is an attempt at filling a lacuna within Halbwach’s treatise on collective memory. For Connerton (1989: 37-38), Halbwach fails to answer adequately, the question of how
collective memory is transferred or transmitted from one generation to the next, within a given social

group. Connerton proves through his analysis that such intergenerational transfer occurs through

many means including commemorative ceremonies and bodily practices, which are his study’s focus.

He (Ibid: 4-5) writes that if there is such a thing as social memory, then, “…we are likely to find it in

commemorative ceremonies; but commemorative ceremonies prove to be commemorative only in so

far as they are performative; performativity cannot be thought without a concept of habit; and habit

cannot be thought without a notion of bodily automatisms”.

For this study, Connerton’s larger engagement with questions of memory transfer is not of direct

consequence. However, his study provides some incisive analytical concepts that speak directly with

this study. For instance the connection Connerton makes between commemoration, habits and bodily

automatism in the above quote, resonate with the discussion in previous sections on non-

representational approaches. Secondly, Connerton looks at how commemorative rituals play a

significant role in movements of social change. The establishment of a new social order involves the

shedding of old rituals, habits, and practices and inculcating or imbibing new ones. It is this notion

that deeply resonates with this study in terms of agricultural, cultural, and media practices. As I also

demonstrate in Chapter 4, the Mobile Biodiversity Festivals of DDS sit at an interesting analytical

intersection. It prompts a dialogue between these different theoretical perspectives on collective and

counter memory, including between Hobsbawm and Ranger’s concept of invented traditions,

Connerton’s social habit memory, and the notion of counter memory.

In the next section, I discuss the specific methods and tools used for data collection in this study. Also

described here are experiences from the field which are in turn connected to the discussions in

previous sections. As mentioned at the beginning of the chapter, to understand how things affect us as

much as we affect them, a slightly different approach to data collection is required. Even if traditional

methods are used, their use and treatment may vary from convention. The same goes for analysis of

data as is discussed below.

Notes on Data Collection and Analysis

The study of practices, rituals, habits, and relationship with things are the mainstay of this study’s

data. To be able to immerse myself into the environment so as to become familiar with these, as well

make in-depth observation, methods related to ethnography seemed the most suitable to use. Since

ethnography already encourages detailed recordings of social phenomena, it also seemed to provide

opportunities to push the envelope and help record the “other ways of noticing” that Blackman and

Venn mention (2010: 9) mention. More importantly, it allows for one to build rapports over time and

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3 See Chapter 1 in Connerton’s How Societies Remember (1989: 6-40) for his discussion of how social change
involves the removal of old commemorative ceremonies and constituting new ones.
familiarise oneself with the people, locale, climate, topography, objects etc. Nazarea (2005: x) describes this type of Anthropology and Ethnography as, “…one that admits fluidity and complexity, even quirkiness”. Anthropology of quirkiness, Nazarea (Ibid: 146-147) writes in relation to the study of in vivo biodiversity conservation, is one that is not:

…limited to the erudite problematisation and deconstruction of dominant discourses nor confined to the scholarly interrogation of inscription and text. Instead, it should at the same time tackle practices and emotions in all their quotidian detail, mostly of the embodied, sensory kind. Moving away from a monolithic to a hybrid-or, better yet, creolised- epistemology and methodology we can craft a new scaffolding that would value the contribution of different pathways to the understanding and conservation of biological diversity.

This very much resonates with the discussion presented here on a non-representational approach. The main concern of this study is to understand the many ways in which media technologies and our ecologies extend our capacities and we in turn theirs’, particularly in relation to memory processes. It demands what Cooley (2012: 65) describes as an “ecological mode of engagement”, which would, “pursue an acquaintance with and a responsibility for the various bio-logical lines of life initially proliferated as a result of the body’s being in-relation to technology and whose dynamism- in time and space- is enabled by the articulatory forces of social networking” (Ibid: 65). Following all the above, this study requires a close observation of the community in question and its relationship/interaction with media equipment, processes employed in production of media content, the dynamics of a year’s agricultural cycle and the vast expanse of the community’s folklore. How all of these were mapped in relation to the DDS community and its programmes are described below.

DDS, as mentioned in Chapter 1, has about seventy-five villages affiliated to it, forming a network of sangams. These seventy five villages fall under the Zaheerabad mandal in the state of Telangana. The head office of DDS is located in the village of Pastapur. The office is located approximately nine kilometres away from the busy Pune-Machlipatnam highway that passes through the town of Zaheerabad. I made my very first trip to the DDS office in November 2011. Over the course of the next year, till about November 2012, I made several trips to various DDS offices, villages, and locations. While it would have been ideal to spend an entire year in the area, I was informed that it may not be possible to interact with DDS members throughout the year. Added to this, accommodation was also a difficulty and would have put a strain on the organisation’s resources. Therefore I made periodic trips when it was most convenient for members to interact or spend time with me. These trips then were designed around those periods when people in the community were not engaged in agricultural activities such as sowing, weeding or harvesting, as well as when they were not traveling to other places for DDS related work.

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4 This highway is also known locally as the Mumbai-Hyderabad highway. The route however connects Pune in Maharashtra to Machlipatnam in Andhra Pradesh.
The DDS head office at Pastapur would serve as the first pit stop on my visits. It was an office built of local material, surrounded by a garden and nursery. Inside, it was divided into various rooms, with one editing suit used by the Community Media Trust. There were also offices for the field officers and a large hall for meetings. Outside, next to the office was a well full of water. Just opposite was a small residence where the director lived. It served, during each visit, as a place to check in with the field officer, who would help me draw up an itinerary based on who was willing and able to speak with me. It was often the last place I stopped at, before I departed for the bus terminus at Zaheerabad at the end of each trip. It also served as the spot for an interview and a conversation for the study (Field Notes, November 2012). Apart from this however, most of my time was concentrated in other villages. I was provided accommodation during my stay in the guest house within the Krishi Vigyan Kendra in the village of Didigi. Most of my interviews and conservation were conducted in the Sangam Radio station located in the village of Machanoor. This was an obvious choice of site given that the major question of this study relates to technology. However, this decision was also motivated by the fact that the radio station did programme recordings almost every day. It saw a flow of people from various villages, including sangam members and non-members, providing an opportunity to interact with different groups of people through the course of a day. Further, the Pachasaale and a major Seed Bank were located on the same premises as the radio station. This allowed me to observe three of the major programmes closely. Apart from time spent in Machanoor, I also visited the two villages of Rejinthal and Chinnapuram. I visited Rejinthal in January 2012 to participate in that year’s Mobile Biodiversity Festival. On my visit to Chinnapuram in November 2012, I accompanied a group of international students and was requested (by a DDS field officer) to act as their translator for the day.

On a map or in a description of the Zaheerabad mandal, one might get a sense that this is a compact, close-knit region. The vastness of the territory however, is felt while travelling from one village to another, on a daily basis. Rickshaws and buses form the major form of public transport between villages. Rickshaws can be hired solely by an individual, or larger ones are shared by anything between six to ten passengers. Travelling from the central point for most visitors - the DDS office in Pastapur, to another village can vary between fifteen minutes to an hour and a half. For instance, from the village of Didigi to Machanoor, which formed the commute from the guest house to the radio station, took about twenty minutes by rickshaw. Travelling between Machanoor and Pastapur took about fifteen minutes. On the other hand, the commute to Chinnapuram took about an hour and half to reach.

I would travel by myself in a rickshaw in the mornings to the radio station, or other meeting points. At the end of a day’s work I would be dropped off at my accommodation by transportation owned by DDS. The other women who worked at Sangam Radio were also dropped off to their homes at the end.

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5 Name changed to maintain anonymity.
of each day’s work because it would end at 9:30 pm or after. Getting around is not always the easiest, particularly after dark. Most visitors, especially women, are advised not to venture out after this time, unless escorted by a trusted guide or as a part of a big group for their safety. The same applied to me. This did limit my data collection in some ways. For example, while I was keen on attending one of the sangam meetings, arranging a vehicle late at night did not quite work out in terms of logistics. As a woman navigating these spaces, it helped me empathise with many of the women at DDS and how their movements were regulated by various factors (for example see Chapter 3).

The process of data collection was iterative, with experiences on the field immensely shaping the research problem and objectives. For instance, I started this study wanting to look at the relationship between media technologies and our memories, focusing on how they shape each other. However, my initial interactions with the DDS community forced me to realise the significance of biodiversity to the DDS community. Issues relating to crop, food, and nutrition are at the heart of DDS initiatives. For a girl brought up mostly in urban environments, it took a while for me to understand the actual labour that went into cultivating the food that I so easily bought off a supermarket shelf. Not integrating the strong connections between collective memory, folklore, and biodiversity would have led to an incomplete study. Local contexts and experiences became influential factors in this study.

This process of iteration resonates with Rossiter’s (2012) description of a method perfected by Canadian political economist Harold Innis, called ‘dirt research’. Rossiter (Ibid: 47) writes that dirt research, “…is at once shaped by the model or programme of investigation (design) while feeding back into the organising principle itself as a result of the material and affective properties or qualities of the object of research (data)”. The reason the word ‘dirt’ is used to describe this kind of research is because dirt varies across locations. It is “…uniquely composed, site specific and innately intelligent…” (Born, Furján and Jencks as quoted in Rossiter 2012: 47). Such an approach is also important to understand the relationship between biodiversity conservation and Traditional Environmental Knowledge, because as Nazarea (1999) argues, such indigenous or traditional knowledge is location or site specific and situated (See Chapter 3).

The actual ‘dirt’ or data is constituted of experiences and observations recorded using various ethnographic methods. Like with much ethnography, initial conversations were geared towards getting to know people and building a good rapport. In this scenario, being able to speak the local language was an immense advantage. I am somewhat fluent with a dialect of Telugu language spoken in the state of Andhra Pradesh. However, it took me sometime to understand the distinct Telangana dialect of Telugu spoken around the Zaheerabad region. Thus, some help with meanings of local words and phrases from the DDS members went a long way. Trying to find synonyms within Telugu also helped our conversations. With Zaheerabad geographically straddling the borders of both Karnataka and Maharashtra, I had a chance to meet DDS members hailing from such bordering villages. Being fluent with Kannada and possessing a rudimentary understanding of Marathi helped
catch some nuances in conversations that had Kannada or Marathi seeping into Telugu. There were also some members more comfortable conversing in Kannada and spoken knowledge of this language helped in such cases. All the data that are in Telugu (or other languages) have been translated for analysis. It goes without saying that translation could introduce gaps in data. There have been efforts to bridge these as much as possible.

Conversations, with the various members of DDS whether as formal interviews or more informal ones shared over an evening tea, all provided rich insight. These have occurred with individuals as well as in groups. Some of these individuals I have met only once and others I had the luxury of meeting every day through the course of their work schedule. Many of these conversations were geared towards understanding daily interaction and practices. For instance, many interviews and conversations, especially with the Community Media Trust members were focused on trying to understand their interaction with various media equipment, and the production of media content. The Participatory Video team explained how they learned to operate video cameras and developed a terminology of their own to describe different camera angles (See Chapter 5). Otherwise conversations were geared towards gaining an insight into how various DDS programmes worked its history and practices. Many such interactions gave me an understanding of the folklore of the region, the agricultural and cultural practices. Recorded interviews are fewer in number as I found that people opened up better once the Dictaphone/Recorder was switched off. Conversations that have not been recorded were supplemented by notes, photographs and some video. Many of the ‘informal’ interviews occurred more as casual conversations through the course of visits. I found that people grew more comfortable going about their usual routine and interactions around me towards my later visits. This could be attributed to the increased level of familiarity with me over time.

Observation was another method employed. Some of this was participant, the rest was non-participant observation. For example, at the radio station, one of the radio jockeys would bring her child to work. I would help watch the child while she would finish work. I was also able to assist with one or two recordings. I was invited to join in the celebration of the Mobile Biodiversity Festival, including the lunch at the end of the inaugural ceremony. Such methods allowed me to understand how people and things interacted with each other. It also helped map various practices, habits and rituals, as well as the relationality between things and people. For instance, it helped me understand the relationship people shared with their seeds and crops, and why these seeds and crops were at the centre of certain festivals and religious rituals. It also helped understand, for example how the radio team learnt to use various equipment, and how this in turn helped extend their capacities in different ways.

The Radio team at DDS have been generous enough to share some of their recorded content and archived material with me. These are an invaluable source to this project. These include songs, shows, and stories that have been part of the daily broadcasts. The team also kindly accommodated me into
their everyday work schedules during my visits and I had often spent full days at the radio station, becoming a part of the coming and going within the station. It is in time that I gained some idea about how the team operates radio equipment, records shows, plans content, and maintain a schedule of shows and recordings. I was privy to some of the creative and administrative/managerial aspects of running Sangam Radio. All of these were facilitated through the aforementioned observation, field notes, and interviews/conversations. The DDS office shared with me copies of some documentary films produced by their Participatory Video team. An analysis of these is a part of the data. Over and above this, the DDS websites and the literature published by them have also been included in this study. This literature includes annual reports on events as well as research papers published by the DDS members and collaborators.

I have let the different themes and content emerging from this data become the basis on which to consolidate and analyse it. These have in turn been woven back with the various ideas mentioned at the beginning of this chapter. These include theories drawn from Feminism, particularly Ecofeminism, Ethnoecology, Memory Studies, and Development Studies. Also informing the study are the ideas relating to Cybercultures. In summary, the overall effort with this ethnographic study has been to observe and understand how people interact with other human and non-human actors. An effort has been made to map such interactions, and integrate into the analysis how such interactions have extended the capacities of the community, with a keen focus on collective memory and mnemonic practices/processes. Given that the DDS community is part of a social movement, how the capacities of various actors are amplified or diminished, relates to the idea of ‘empowerment’. In other words, how does a modification in capacities reconfigure existing relations of power, specifically in terms of gender, caste and class relations? An attempt to understand all of the above forms the core of this study.

The next chapter draws out the connections between Biodiversity, Memory, and Micro-finance schemes. The DDS sangam network are organised as micro-finance groups that are involved in addressing issues of agro-biodiversity and gender issue, hence bringing the debates within Feminist theory, Ethnoecology and Memory Studies together to understand the various programmes initiated by the DDS community.