ORGANS AND THEIR TRAVELS:
AN ANALYSIS OF ORGAN DONATION AND TRANSPLANTATION

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Organs and their travels: An analysis of organ donation and transplantation submitted by me for the award of the Degree of Doctor of Philosophy in Arts at Jadavpur University is based upon my work under the Supervision of Dr. Amites Mukhopadhyay, Professor, Department of Sociology, Jadavpur University and that neither this thesis nor any part of it has been submitted before for any degree or diploma anywhere/elsewhere.

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Abstract

Beyond the organic life of bodies, determined by biological teleology, there is a sociality subject to biopolitical control, traceable in the travels of organs, human or otherwise, across multiple material-ideational-ideological situations. Such sociality is manifest in the ways in which organ donation and transplantation, and its practices invest the body as the material-semiotic locus and effect of a dyadic biopolitics of hope and dispensability, which establishes the worthiness of certain bodies *viz-a-viz* the dispensable ones, providing organs for survival of the former, centering on violent operationalization of life, literally and metaphorically. Ethico-political maneuvers of new organ donation initiatives produce entrepreneurial regimes which conceive of organ failure and transplantation as sites of speculative investment, rather than merely remedial. In the face of entrepreneurial regimes of health and biomedicine, labour ideologies of old donation initiatives are rendered ambivalent. However, beyond the bioeconomic moorings and venture capitalist restructuring of life, body, health, disease, subjectivity and the concept of human, through the agencies of contemporary biopolitical dispensations, subjectivities at the throes of biomedical crisis in general and organ failure in particular, neither see organ transplantation as the last resort, nor completely refrain from contemplating illegality. The invocation of the state as provider of organs as free goods or self-provisioning or purchasing one under unavoidable circumstances as modes of negotiation with the specter of intergenerational debt (*riin*) to the known or related donor demonstrates that parallel to the structural-institutional bioeconomic and venture capitalist moorings of organ donation and transplantation, there exists subjective-experiential realms of negotiation, characterized by rational recourse to biomoralities which posits the moral burden of *anga-riin* (donor organ debt) in opposition to the purportedly uncomplicated *angadaan* (altruistic organ donation). Grounded foray into the travels (or travails) of organs, as they tread overlapping situations demonstrates how deeply organs are implicated in machinations of power and contestations of meaning at the institutional, organizational and experiential levels, which in turn foregrounds the complicated sociality of organic life.

Acknowledgments

The gesture of acknowledgement is haunted by the specter of incompleteness. I therefore begin with the caveat that although there is genuine wish to acknowledge each person who has directly or indirectly contributed to the making of this thesis what *it is*. At the same time, I painfully recognize my human inability to acknowledge each and every person individually. For the obliterations therefore, I am culpable.

Throughout this long journey, punctuated by intense despair and fervent moments of researching the field and writing the thesis, I have come across a number of people and institutions. All of them have shaped my perceptions of the field or "imbroglio" I have analyzed. My tryst with organ donation and transplantation began in 2015 and the first so-called entry into the field was through Ganadarpan, a pioneer in the field of organ donation advocacy in India. Although I was an outsider to the movement, I was allowed to participate in its activities and overcome the overbearing feeling of foreignness. I sincerely acknowledge the contribution of late Brojo Roy, then President of Ganadarpan and the office bearers for allowing me to participate in their activities and access their archive. I returned to Ganadarpan in 2019. Mr. Swapan Bandhu, then Treasurer of Ganadarpan, helped me re-familiarize as I was back after a gap of three years. I sincerely thank him for allowing me access without doubting the seriousness of my engagement with the cause. I would like to thank Dr. Pulin B. Chakraborty for sharing the report of a *Sensitization Programme on Scientific Understanding of Posthumous Body, Organ and Tissue Donation*, supported by the National Council for Science and Technology Communication (NCSTC), Department of Science and Technology (DST), Government of India, held in 2017, in which I participated.

I would like to thank Dr. Debanjan Chakrabarty, Critical Care Specialist at the Apollo Hospital, Kolkata, for providing me valuable insight into the biomedico-legal challenges of organ donation and retrieval, and for introducing me to xenotransplantation. The encounter with him in 2016 was vital in that it re-shaped my orientation to the field of human-to-human organ transplantation by bringing within purview the intriguing domain of animal-to-human organ transplantation.

I would also like to thank all interlocutors I met at the S.S.K.M hospital in 2017 and 2019. Their verbatim utterances and expressions constitute the textual weave of the thesis. Yet to prevent breach of privacy, I have anonymized them and cannot acknowledge each one of them by name, although they have significantly shaped my perception of organ failure and its aftermath. I will forever remain indebted to them for speaking to me when my confidence as an ethnographer had hit the rock bottom.

I have probably broken with academic protocol by not beginning the gesture of acknowledgement with my supervisor, Professor Amites Mukhopadhyay. This is because his impact overflows this thesis. Over the last seven and half years of association with him as an employed PhD candidate under his supervision I have always felt how considerate he is of the fact that I am posted in a remote college in rural West Bengal, and balancing research, work and household is challenging. A productive blend of distance and intimacy, objectivity and empathy, has marked his approach towards me as a person and research candidate. What I have learnt from him is not bound to the theoretical and empirical limits of the research problem. His subtle insistence on intellectual autonomy and the urgency of critique critiquing itself through subtle, sometimes complex insinuations, on various occasions–be it in his lectures or responses to presentations, mine or those of others, has shaped my conception of the art of sociological critique. Over the last few years I have learnt immensely from him in terms of rethinking Sociology as practice–pedagogy and profession. A mere thank you therefore would never suffice.

I take this opportunity to thank my teachers at the erstwhile Presidency College for their adulation, my teachers at the Centre for the Study of Social Systems, JNU, New Delhi, for inspiring me to celebrate ideas and my M.phil supervisor, Dr. Anirban Das, Associate Professor in Cultural Studies at the Center for Studies in Social Sciences, Calcutta, whose critical imprints continue to enliven my intellectual discourses. Further, I have learnt enormously from my association with Research Committee 28, Sociology of Everyday Life, Indian Sociological Society, Professor Abhijit Mitra and Professor Sanjoy K. Roy. Their passion for the discipline has inspired me in ways I cannot express in words. In 2013, when I was writing the PhD research proposal, during a conversation on the research problem, Dr. Basabi Chakraborty, introduced me to Ganadarpan, which opened up unforeseen avenues for researching the field. Since 2012, she has been an inspiration as an intellectual interlocutor.

There were moments during this long journey when I thought I would drop out from the program. My family–the closest ones in my life, reignited the wish to achieve what I had been striving for by implicitly recognizing that whatever progress I have made in research has not been at the cost of the immediate needs of the nexus of relations that surround me. Their acknowledgement has made this journey less lonely than people generally suppose.

Preface

For a long time in my career as a student of Sociology I have chosen to engage conventional themes such as education, ethnicity, ecology, development, gender and so on. When offered an opportunity during Masters to study a course on health, biomedicine and body, I bypassed the offer for a reason as silly as, "the course instructor is intimidating".

When I embarked upon the M.phil journey, my research proposal was on surrogacy. The inspiration to study surrogacy derived from my inclination in Gender Studies. Since my focus on surrogacy was primarily through the gender lens, during the M.phil coursework, I chose feminism and biopolitics as electives. But little did I know then that these electives will change the course of my research foregrounding the significance of body and subjectivity as pivotal analytical categories. As I delved deeper into assisted reproduction, I realized that surrogacy is too overworked a domain of research (that too it is only one aspect of assisted reproduction among many others) and began working at the intersections of science and technology studies (also known as STS), sociology of biomedicine and body studies. M.phil was over in 2013. But the advice of a teacher at the Center for Studies in Social Sciences, Calcutta, remained with me, when I was brainstorming about what to work on for my PhD. The teacher had once asked, while I was rambling on body, power, biomedicine, technology, gender and so on, what's the personal motivation behind studying assisted reproduction? I clearly did not have a crisp answer.

Although over time I have realized that there need not be a causal connection between life experiences and the research thematic, the personal, experiential and immediate are nonetheless integral to the modes in which a researcher chooses and poses a problem. Since childhood, I have seen my mother suffer from an autoimmune ailment, rheumatoid arthritis. Medicines for auto-immune conditions weaken the immune system of the body to prevent its hyperactive immune system destroying its own cells, tissues and organs. The weakening of the immune system invites other diseases. To be barely able to move, one ends up contracting chronic liver and lung diseases as side-effects. My father passed away in 2009, when I was just a month into the Masters' program in JNU, after two months of struggle with life-support, tracheotomy, Ryle's tube and intravenous antibiotics. He had undetected gallstone-induced pancreatitis, which affected his lungs. Medical negligence or ill-fate I do not know, multi-organ failure, sepsis and his passing away shook us from the core, emotionally and financially.

Fortunately I got appointed as Assistant Professor in 2014 through the West Bengal Public Service Commission and was posted in Chandernagore College in Hooghly district. This was much needed, although it stalled the project of enrolling for PhD by a year, with me trying to adjust to the new responsibilities, and long hours of travel. Enrolment happened in 2015. I began the preliminary survey and soon defended the title of my proposed PhD thesis. Suddenly, rather abruptly, I was transferred from Chandernagore College in July 2016 to a newly set up government college in a remote area, about fifteen kilometers away from the Mangalkote Block, in the Katwa Sub-division of Purba Barddhaman district. Research came to a halt. I had just begun building rapport with Ganadarpan movement when the transfer happened. I had imagined Ganadarpan as the gateway to the larger ethnographic field but the transfer caused prolonged hours of travel and affected regularity of interaction with the movement. Adjusting to an institution that is not only remote, sometimes openly hostile to city dwellers, put me in psychosomatic disarray. I somehow organized myself and began rethinking my approach to the research problem. The shift from *multi-sited ethnography* to *multi-situational discourse analysis* of organ donation and transplantation emanated as much from the complexities of the field as from the unanticipated situation in which I found myself after transfer. Amid all this, at times I garnered the courage to share my research work in conferences. Sometimes I acted lackadaisically, not meeting University deadline of progress report submission. The bottom line is, I was in despair, but I was coping.

In March 2017, my father's elder brother, my *boro jethu*, passed away after years of chronic kidney ailment. The serendipitous encounter with disease, dialysis and death enriched my understanding of the field, but in the most draining ways. As I was no longer outside the problem (if not fully immersed), I began to embody the turmoil I was trying to document through the research. This turmoil survives in the textual weave of the thesis and sustains the arguments it presents.

In late 2019 and early 2020, when I was collating whatever I had written over the years to give the thesis a final shape, the pandemic happened. My mother was hospitalized for thirty days with Covid pneumonia and post-Covid uroseptecemia during the second wave. She returned home but with oxygen concentrators, nebulizers and an airbed to treat bedsores. I was again amid dis-ease, sleepless nights and total disorientation. This research has seen me survive upheavals as much as I have seen it painfully take shape over a span of seven years. At this point, although I cannot vouch for the authenticity of representation of the field in this thesis, it is definitely a reflexive document of the self in incessant negotiation with life, work, research, and corporeal suffering of significant others, and unfamiliar ones.

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Glossary of Terms

Acute rejection – Non-acceptance of the donor organ by the recipient body within few days or weeks of transplantation.

Allotransplantation – Human-to-human organ transplantation.

Alpha 1-3 gal transferase – Glycoproteins present in all mammals except humans, apes and monkeys.

Appendectomy – Surgical removal of the appendix.

Ateriovenous fistula or AV graft – A surgical connection made between an artery and a vein for the purpose of dialysis.

Autoimmune disease – A condition in which the immune system works against the body and destroys it.

Biliary Atresia – A fatal condition in which the tubes carrying bile from liver to gallbladder are blocked.

Bioavailability (in physiology) – The ability of a drug or substance to be used or absorbed by the body.

Biological war pathogen – Strategic use of disease-causing biological agents to kill or incapacitate humans, animals or plants on large scale.

Bioreactor – An engineered device that supports a biologically active environment in vitro.

Blood type – Classification of blood based on presence or absence of antigens or foreign substances that can trigger immune response.

Brain-stem death – A condition where the brain stem has stopped functioning permanently and there is no chance of regaining consciousness.

Cadaveric kidney – Kidney retrieved for transplantation from a person who has suffered brain-stem death.

Cadaveric organ donation – The practice of retrieval or procurement of organs from cadavers for the purpose of transplantation.

Cardiomyopathy – An acquired or hereditary disease where the heart is unable to supply blood to all parts of the body.

CD64 – A type of integral membrane glycoprotein.

Chimera – An organism with cells from more than one distinct genotype.

Cloning – A laboratory technique of making genetic copies of living organisms.

Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) – An advanced technology to edit parts of the genome by removing, adding or altering DNA sequence.

Congenital diabetes – Also known as neonatal diabetes mellitus, is a rare condition where new born babies are unable to produce enough insulin, leading to increase in blood glucose levels or hyperglycemia.

Congenital liver disease – Liver disorders present at birth, such as Biliary Atresia.

Chronic Kidney Disease (CKD) – A long term disease where the kidneys fail to filter bodily wastes and excess fluids leading to fluid retention within the body.

Cost-benefit analysis – Weighing of estimated costs and outcomes of a business venture to decide whether it is lucrative.

Cost-effectiveness – The extent to which a business venture is effective in relation to the cost incurred.

Cross-species transplantation – Transplantation of cells, tissues or organs from one species to another.

Dalals – Also called scouts in English, is the Bengali and Hindi word for mediating agents in organ trade networks.

Dialysis – Also known as hemodialysis, is a process of purifying the blood of a person with failing kidney function.

DNA Profiling – A process where DNA pattern is obtained from the sample of bodily tissue of a particular individual.

Donation-based crowdfunding – A way of generating a financial corpus by asking for monetary contribution as donation from the public for a particular project or cause.

Donor liver – Liver retrieved from a cadaveric or live donor for transplantation in another person.

Eng-stage-kidney-failure – Also known as total kidney failure, is a condition when Chronic Kidney Disease or gradual, long term loss of kidney function reaches advance stage.

End-stage-organ-failure – A condition when loss of function of a particular organ reaches advance stage.

Equity interest – Ownership interest in a business venture.

Ex vivo – Anything that takes place outside the body of an organism.

Free goods – Goods which are useful and abundant in supply such as air.

Galactosyltransferase – Enzyme which catalyzes the transfer of galactose, which similar to glucose.

Gal knock out – The removal of the gal or pig sugar from the pig gene through gene editing.

Galsafe pigs – Cloned pigs without gal or sugar endogenous to pig gene.

Gene editing – Also known as genome editing, is a cluster of techniques that can alter or change an organism's DNA.

Gene targeting – The technique of altering gene sequence at a particular location in the genome.

Graft rejection – Also known as transplant or organ rejection, is a condition where the transplanted cell or tissue is rejected by the immune system of the recipient body.

Gynecologist – A medical practitioner with specialization in the treatment of diseases of the female body.

Human equivalent – Genetically engineered alternatives for essential components of human body.

Human polyclonal antibodies – A collection of immunoglobulin molecules that work against a specific antigen.

Hyperacute rejection – The fatal non-acceptance of a transplanted tissue or organ within few minutes of transplantation procedure.

Hypertension – A medical condition where the force of blood on artery wall is too high.

Immunoglobulin genes – These are antibody secreting cells or glycoprotein molecules which recognize and combine with particular antigens such as bacteria or virus aiding their destruction.

Immunosuppression – A common practice in organ transplantation involving suppression of the immune system of recipient body to accommodate the transplanted foreign organ.

Immunesuppressants – Drugs or medicines that lower the immune resistance of the recipient body against a transplanted foreign organ.

In vivo – Processes taking place within the organism.

Intellectual property – It is a category of property that includes intangible productions or inventions of human mind or intellect. Best known types include patents, copyrights, trademarks and so on.

Licensing rights – Such rights allows one party to use and earn revenue from the property of the owner.

Lupus – An autoimmune inflammatory disease where the human immune system attacks its own cells and tissues, affecting joints, skin, kidney, heart and lungs.

Nephritis – A disease where the kidneys are inflamed and unable to filter bodily wastes.

Nephrologist – A medical practitioner who specializes in the treatment of kidney diseases.

Nuclear transfer – Also known as somatic cell nuclear transfer, is a laboratory technique for producing an embryo from a body cell and an egg cell.

Microchimerism – The presence of cells from one individual in another genetically distinct individual.

Opt-in system – A system where organ and body donation at death is not compulsory, rather individuals choose or exercise the choice to donate an organ or body at the point of death through prior pledge.

Organ harvesting – Also known as organ procurement, involves the surgical removal and preservation of organs or tissues for transplantation.

Organ swapping – The exchange of organs between two families who cannot donate organs to their diseased family member due to mismatch of blood and tissue type.

Patents – An exclusive right granted to an individual for the invention of a product or process.

Perv free piglets – Genetically engineered piglets which have the pig endogenous viruses removed or deleted through gene editing.

Presumed consent – A system of organ donation where all individuals are treated as organ or body donors at the point of death, unless they have opted-out through prior declaration.

Pharmacology – A branch of medicine concerned with use, action and effects of drugs.

Qualified investments – Investments which are not subject to taxation.

Reward-based crowdfunding – Financial funding with returns for a project by the public towards a project or cause.

Royalty – Payment made to an individual or company for using its assets.

Series B financing – The second round of funding for a particular company that has reached a specific level of achievement, beyond the initial startup stage, involving funding approximately between seven to ten million dollars.

Series C financing – The last round of funding or capital-raising by a startup in the journey towards becoming a full-fledged corporation.

Spin-out – A process of corporate realignment involving segregation of a specific department or division, with its operations, assets and liabilities, to become a separate corporation.

Tax-credit program – A program that reduces the final tax liability of the tax-payer.

Tissue type – Class of tissues immunologically compatible to each other.

Transfusion medicine – Also known as transfusiology, is a branch of medicine concerned with transfusion of blood and its components.

Transplant medicine – A branch of medicine concerned with drugs which can prevent rejection of transplanted organ by the recipient body. Immunesuppressants are an example of such medicine.

Transgenesis – An experimental process of introducing a gene from one organism into the genome of another organism.

Transgenic animal – Animals with foreign gene inserted into their genome.

Transgenic organ – Organ derived from a transgenic animal.

Tubectomy – Sterilization of women through surgical blocking of fallopian tubes.

Victim donor – An organ donor from whom organ is removed without consent and compensation, through coercion, deception, manipulation or persuasion.

Viral scrap – Remnants of dead viruses.

Waiting list (in the context of organ donation and transplantation) – A ranked list of potential organ transplantation recipients, based on determination of priority, to ensure fair allocation of donor organs.

Xenografts – A cell, tissue or organ from a particular organism to be transplanted into another species.

Xenograft engineering initiatives – The genetic engineering of grafts or organs of animal or transgenic origin that are compatible to human bodies for the purpose of transplantation by the bioengineering companies.

Xenotransplantation – Transplantation of animal cells, tissues or organs in humans or vice-versa.

Xenozoonosis – Infections transmitted from animals to humans by the transplantation of animal cells, tissues or organs in human bodies.

Zinc finger nucleases – Engineered or artificial restriction enzymes that can target and modify specific DNA sequences within the genome.

List of Acronyms

AV – Arteriovenous

Cas9 – CRISPR-associated protein 9

CD 64 – Cluster of Differentiation 64

CKD – Chronic Kidney Disease

CPI(M) – Communist Party of India (Marxist)

CRISPR – Clustered Regularly Interspaced Short Palindromic Repeats

CSR – Corporate Social Responsibility

DNA – Deoxyribonucleic Acid

HOD – Head of the Department

IP – Intellectual Property

ISOT – Indian Society of Organ Transplantation

NIST – National Institute of Standards and Technology

NOTTO – National Organ and Tissue Transplant Organization

ODR – Organ Donation Rate

OPD – Out-Patient Department

ORGAN – Organ Receiving and Giving Awareness Network

OTP – One Time Password

PERVs – Pig Endogenous Retroviruses

PG – Presidency General

QTDP – Qualified Therapeutic Development Project

R&D – Research and Development

RNA – Ribonucleic Acid

SSKM – Seth Sukhlal Karnani Memorial Hospital

TALENs – Transcription Activator-like Effector Nucleases

THOA – Transplantation of Human Organs Act

TMC – Trinamool Congress

USFDA – United States Food and Drug Administration

XTL – XenoTrans Limited

ZFNs – Zinc Finger Nucleases

List of Maps

Introduction

Parts, puzzles and polemics: A prolegomenon

In his memoir, the renowned transplant surgeon, Dr. Starzl[1] (1992/2003) writes:

> However, nothing we had done in advance could have prepared us for the enormity of the task. Several hours were required just to make the incision and enter the abdomen. Every piece of tissue that was cut contained small veins under high pressure that had resulted from the obstruction of the portal vein by the diseased liver. Inside the abdomen, Bennie's liver was encased in scar tissue left over from operations performed shortly after his birth. His intestine and stomach were stuck to the liver in this mass of bloody scar. To make things worse, Bennie's blood would not clot …
>
> He bled to death as we worked desperately to stop the hemorrhage. The operation could not be completed. Bennie was only three years old and had not enjoyed a trouble-free day in his life. Now, his wound was closed and he was wrapped in plain white sheet after being washed off by a weeping nurse. They took him away from this place of sanitized hope to the cold and unhygienic morgue, where an autopsy did not add to our understanding of our failure. The surgeons stayed in the operating room for a long time after, sitting on low stools around the periphery, looking at the ground and saying nothing. The orderlies came and began to mop the floor. It was necessary to prepare for the next case.
>
> It was not the last time I would see this scene, both in my dreams and in reality. I never heard anyone who was there describe this as "the Solis case" or the first human liver transplantation. If they mentioned it at all, it was always just about Bennie (pp. 99-100).

The thesis rather begins on a gloomy note with the story of a three year old Spanish-American[2] boy by the name Bennie Solis who succumbed to death during a first-of-its-kind life-saving liver transplantation surgery at University of Colorado in 1963. The surgical team

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[1] Thomas Earl Starzl (1926-2017) is an American transplantation expert, also oft-referred to as "the father of modern transplantation". According to popular media, his achievements include performing the first human liver transplantation in 1963 (the Bennie Solis case presented above, which was unsuccessful and attracted social opprobrium) and the first successful human liver transplantation in 1967. He also contributed to the clinical use of cyclosporine and tacrolimus in 1982 and 1991 respectively as facilitator immunesuppresives in the transplantation context. His autobiography, "The puzzle people: Memoirs of a transplant surgeon" (1992), from which I have quoted above has been identified by the *Wall Street Journal* as the third best autobiography written on the lives of doctors. He not only emphasized on the role of immunesuppression in transplantation contexts, he also pointed out how immunesuppression may cause post-transplant diseases and infections, and proposed microchimerism to augment transplantation tolerance. Issues of immunesuppression and chimerism are important in the present research (see Thomas Starzl).

[2] These are Americans who have originated wholly or partly from Spain. Hispanic and Latino people living the United States also have Spanish background owing to five centuries of Spanish settlement in America. The Hispanic and Latino Americans overlap with the Spanish Americans but the former is a broader category including European groups other than the Spanish, the Amerindian or African (see Spanish Americans).

led by Dr. Starzl, which was carrying out the first-of-its-kind liver transplantation surgery in humans acknowledged failure and chose moratorium[3] in response to the moral furore (both within and beyond the biomedical domain) around the unfortunate demise of Bennie Solis.

Death, natural or induced by an internal disease or external conditions, through harm or violence inflicted by forces from outside the body, is bound to generate discourses. Death as a phenomenon, incident or empirical moment of individual or collective experience is circumscribed by social, cultural and moral meanings. Death, even when not induced by external factors or forces, involving no intentional harm from outside, is ontologically power-laden, which could be made sense only by recourse to discursive regimes, of which the biomedical regimen is the most hegemonic. An exegesis of death, the grief, pain and reaction it generates, especially if a child has bled to death, like Bennie Solis in this case, can only be understood via discourses of life and death–their heterogeneity, the contestation and conflict of positions within and without these discourses.

Starzl's illustrious transplantation career is stained by unfortunate incidents[4], of which the demise of Bennie stands out. Starzl acknowledged on several occasions that he never forgot Bennie, like many other patients he successfully healed later on in his career. But for some transplantation experts, Starzl's approach was aggressive. On the basis of two hundred dog liver transplantation trials, with a team with little knowledge of transplant immunology[5], Starzl embarked on a frivolous venture, which could potentially kill people immediately and

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[3] In scientific research and experimentation, moratorium implies suspension of activities for a specific period of time.

[4] Dr. Thomas Starzl was greatly motivated by advancements in the field of kidney transplantation and thought such ventures as possible in the field of liver transplantation. Success in kidney transplantation with immunesuppression led Starzl to carry out five human liver transplantation between March to October, 1963, excluding Bennie Solis, who collapsed on the operation table, with liver graft survival upto mere twenty-one days. The failure of these liver grafts was attributed to surgical complexities and not to rejection by the recipient bodies. Not only Starzl, surgeons at Boston and Paris also met with failure in such ventures, and the medical community as a whole chose the path of moratorium on liver transplantation (see Hurst 2012). All some attribute the failures to surgical complexities, others like Koka (2018) it was poor prepared and knowledge about transplant immunology that led to such deaths, especially that of Bennie Solis.

[5] An area of research of the immune response that occurs in a body when a foreign organ or tissue is grafted or transplanted in it.

it really did in his maiden venture, as in the case of poor Bennie. Responding to his critics about the failure, Starzl, though melancholic, stated in his defense that although the critical decisions made were wrong, the promise and hope of remedying pain and suffering, and circumventing disease and death through biomedical and biotechnoscientific procedures, incited him to embark upon such venture. He further added that biomedical debacle, and its scientific and public scrutiny is necessary towards developing treatment protocols in biomedicine and particularly organ failure. He admitted that failures are painful and ignominious but they render possible critical introspection into what went wrong, how and where, to be rectified in future biomedical ventures for greater good (see Koka, 2018).

In relation to Bennie's unfortunate demise, in his incisive critique of Starzl's fervent approach, Koka (2018), a Pennsylvania based cardiologist, raises the question of Bennie's dignity at the point of death. Koka exclaims that, for Starzl, the experimental liver transplantation is not the prime reason behind Bennie's end, as children with biliary atresia[6] are destined to die anyway. In his opinion, this is how an otherwise melancholic Starzl ends up rationalizing his failure and it's placing before the critical public for debate as the stepping stone for developing a successful liver transplantation programme at the cost of poor Bennie. To Koka's horror, Starzl's attempt to save Bennie from succumbing to the congenital condition through the experimental life-saving surgery, for many, including his family, is justified, in that such intervention embodied the promise or hope for cure and survival, and escape from untimely death. However, the bottom line for Koka is that, such experimental biomedical ventures are morally reprehensible as they compromise individual dignity at the point of death. He exclaims that the unfortunate end Bennie met–that he bled to death on the operation table during a first-of-its-kind life-saving liver transplantation surgery, although he

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[6] A fatal condition in which tubes carrying bile from liver to gallbladder are blocked.

would have died anyway but gradually, is the price he “paid” for inhabiting a world with unprecedented interventional biomedical advancement.

In this phantasmal discourse between a Starzl (1992/2003) and a Koka (2018), both physicians, the former dead and deified, and the latter contemporary and critical, divided contextually, temporally, and generationally, analytically juxtaposed for laying out the larger backdrop or point of departure for the thesis, few significant concerns require elucidation: Firstly, though Starzl is a controversial figure, there is also a very popular counter-discourse that deifies Starzl as the surgeon who saved innumerable lives through liver transplantation, which he actually did in the later part of his career. The documentary *Burden of Genius* (2017) demonstrates the troubles of an “innovator” attempting to make liver transplantation with immunesuppression[7], a biomedically and socially recognized life-saving procedure. Starzl’s memoir indeed speaks with humane sensibility about the challenges of biomedical practice in general and attempts to remedy kidney and liver failure. The humane articulation is worth noting when Starzl writes in a melancholic tone, “it was always just about Bennie” and not “the Solis case” (pp. 99-100). Investigation of biomedical and biotechnoscientific discourses and the problematics of life, death and corporeality in such controversial contexts are therefore to be delinked from the biography or empirical persons of specific experts like Starzl[8], although their involvement in such controversy may well be the starting point or point of departure for examining the nature of biomedical discourses and practice. Secondly, the conceptual and empirical cue for take-off from such controversy or empirical referent to a larger discursive plane is offered by Koka in his vehement moral proposition relating to Bennie’s dignity at death. In some ways, Koka posits the significance of life, death and

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[7] A common practice in organ transplantation, involving suppression of the immune system of recipient body to accommodate the transplanted foreign organ.

[8] The point is, there is no attempt here to hold Starzl responsible for Bennie death or absolve him of all moral responsibility since he saved many lives later on, but to look at the incident of Bennie’s death during Starzl’s experimental surgery as part of larger regimes of power and control in biomedical discourses, foregrounding the intimate relationship between biomedical power and its purveyors, and the control of life and death in general and of empirical persons, like Bennie.

corporeality as philosophical and anthropological concerns. Contemporary biomedical technologies and biotechnoscientific interventions seek to foster life and avert death. Insofar as the life-fostering imperative of contemporary biomedical and biotechnoscientific interventions is concerned, Starzl probably lived up to his expected role and performance as a surgeon by embarking upon the experimental liver transplantation to save Bennie's life and circumvent untimely death. But that Bennie bled to death during this purportedly life-saving surgery without any successful case-precedent, such death, to echo Koka, raises serious moral concerns about the nature and extent of power biomedicine exercises on life and body in general. From Koka's point of view, it is morally objectionable to precipitate death, which would have happened anyways but gradually. What such phantasmal polemic around the unfortunate demise of Bennie during a first-of-its-kind surgery decisively does is that it unveils life, death and corporeality of the garb of naturalness and relocates them within biomedical power, decision, control and intervention. The double-bind of the promise (or power) of a biomedical technology like organ donation and transplantation and it's unfortunate and sad reversal–Bennie's death, the curtailment of his life against the backdrop of hope and promise render these technologies and practices that aim to retrieve and harvest[9] donor organs and transplant them in bodies with failing organs to remedy organ failure into a discursive field calling for critical attention and ethical engagement.

Probably such a gloomy introduction to a thesis revolving around the promising life-fostering technology and practice of organ donation and transplantation could have been avoided. The empirical referent (Bennie's unfortunate death) indeed does not represent the complex discursive field exhaustively but approximates it in a rudimentary yet subtle, microcosmic way. The most vital function this empirical referent or point of departure discursively performs is that it sets the tone of the thesis by pointing out as an abstract

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[9] Also known as organ procurement, involves the surgical removal and preservation of organs or tissues for transplantation.

premise that life and its opposite, the phenomenon of death, and body are subject to incessant control, intervention and re-conceptualization over time and space in and through a variety of discursive regimes, of which, in contemporary times, discourses on life-fostering biomedical technologies have gained unprecedented momentum. Organ donation and transplantation is one such discourse. Therefore, the broad thematic of the thesis is to (dis)engage the philosophical and anthropological problematics of life, death and corporeality (yet in decisively non-anthropocentric ways) in their complex entanglement with power of the biomedical technology of organ donation and transplantation and how such power invests the very matter-of-fact of existence in the most ubiquitous ways. In this (dis)engagement, bodies and organs function as critical discursive sites, for it is in and through the discursive situation of bodies and organs that the problematics of life, death and corporeality, disease, pain and suffering, and the concomitant life-fostering discourses of organ donation and transplantation unfold, gain shape and significance.

Fox and Swazey (1974, 1992) in their work on kidney failure, hemodialysis[10], and transplantation, trace the social context and background of the practice and technology of organ transplantation. They deploy mechanics metaphor of parts to explain the dissociability of human bodies and organs that transplantation has brought in its wake. None other than Starzl, not an anthropologist or medical sociologist, but a transplant surgeon, in his memoir has exclaimed how organ donation and transplantation engenders puzzled entities–not indicating any sort of confused mental or emotional state but a bizarre corporeal condition or state where foreign parts belonging to different persons come to inhabit recipient bodies, leading to a disjunction, corporeally speaking, between what one originally was by virtue of birth, and what one became due to tragic turn of biological events. Human organs as parts and human bodies and subjectivities as puzzles made of foreign parts are bound to generate

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[10] A process of purifying the blood of a person with failing kidney function. Popularly known as dialysis.

polemics around what constitutes the ontology of life, death and body. The practice and biomedical technology of organ donation and transplantation has evidentially reconfigured the ontology of life, death and corporeality, popularly understood and biomedically reconfirmed as natural-organic monoliths, in the most heterogeneous and hierarchical manner. The practice of harvesting donor organs of human or animal origin and their transplantation in failing recipient bodies with the aim to foster life and avert death, therefore needs to engage the polemics around high rate of incidence of organ failure, organ shortage, and contemporary prominence of organ transplantation as a remedial technology.[11] It is interesting to note that much before Starzl (1992/2003) had begun talking about puzzled entities forged through transplantation technology, medical sociologists Fox and Swazey (1974) had flagged off discussion about the moral problematic of "right to die" in the context of life-saving technologies like hemodialysis which prolong life in the face of kidney failure, yet in the most draining ways. Academic interest in the phenomenon of death, and its context and derivatives as sociological concerns was thus gaining prominence, especially in the American context (see Fox and Willis, 1983).

Glaser and Strauss (1965) have argued that death is a tabooed topic in America, with little academic interest in death as an abstract concern. In their view, the prevailing "moral attitude" to death is: "life is preferable to whatever may follow it, and one should not look forward to death unless he is in great pain". Glaser and Strauss' sociological approach to death centers on the argument that "Death is one of the characteristic features of human existence" is a recurrent predicament and "one way to deal with it is to talk and read about it" (p. 3). Such "attitude" according to Glaser and Strauss was however to end by the middle of the next decade when life and death in the context of disease–as an inseparable dyad–began to inhabit sociological and anthropological discourses with great philosophical sensitivity

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[11] See Global Observatory on Donation and Transplantation for world wide data on organ donation and transplantation activity. https://www.transplant-observatory.org/

about their political and ethical moorings (see Das & Han, 2006). However, while in the American context, interest in life, death and biomedicine in general generated curiosity about the technology and practice of organ donation and transplantation, which is the case with Fox and Swazey (1974, 1992), in case of this thesis, the intriguing anthropological and philosophical problematics related to the biomedical technology and practice of organ donation and transplantation generated interest in life, body, disease, suffering and the fear of imminent death, culminating in intense polemics on corporeal puzzles and disembodied parts.

What prevailing discourses speaketh?

Parsons et al. (1972) argue that bestowing of life and curtailing of death through biomedicine is the promise of modernity. From the God who granted or gifted life, with modernity, there is a transition to conferring of life as a prerogative residing with the doctor, a representative of the rational system of biomedicine and is expected to protect life and ward off death, especially the untimely ones. They argue that the involvement of doctors in the existential predicaments of life, disease, suffering and death offers modern rational biomedicine a religious aura or dimension. Fox (1981) traces the "sting" of death as public issue in American society to series of technological advancements which transformed biomedical profession over time, which in turn increasingly rendered health, illness and death into issues of moral consideration.

Extending the preoccupation with death, Lock's (2000, 2002) cross-cultural anthropology focuses on fatal accidents[12] and declaration of brain-death[13], and the moral

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[12] Such as Road Traffic Accidents or RTAs have an important place in brain-death related donation discourse. In many such accidents, where the brain has stopped functioning irrevocably but vital organs have not been damaged or their functioning minimally compromised, body and organ donation is possible.

[13] A condition where the brain stem has stopped functioning permanently and there is no chance of regaining consciousness. The other form of death is cardiac or circulatory death where the heart has stopped pumping and the supply of oxygenated blood to the cells and tissues has stopped irrevocably. Brain-death offers the biomedical ground or backdrop for organ transplantation because even after the brain has ceased to function the

conundrum surrounding the latter through comparative ethnography of North American and Japanese contexts. Through a demonstration of how persons continue to survive in other bodies and organs supersede discrete, empirical persons beyond death through donation and transplantation, Lock demonstrates the social embeddedness of human organs. Lock (1995) foregrounds the contradictions built into the practice of transplantation as a promise of overcoming human mortality. Lock (1996, 1998) unpacks controversies surrounding death and hybridization of self-identity through cross-cultural comparison of North American and Japanese data. Lock (2004) shows how the Japanese way of conceiving and negotiating brain-death is fundamentally different from the North American model, where brain-death is seen as termination of life and critical point of clinical commencement of organ harvesting. But for the Japanese, the body that is warm, in which heart pumps and blood circulates, even when the brain has stopped functioning irrevocably, is a living body which experiences pain when organs are retrieved for donation.

In a similar vein, Sharp (2006) conceives of brain-death or irreversible coma as a form of “special death”, which marks the clinical basis of organ procurement and reshapes personhood in complex ways. Sharp argues transplantation not only engenders denaturalized bodies which embody difference but also transforms the self. Earlier, Sharp (1995), in light of American ethnographic data, elaborated the struggles of people trying to retain or reclaim selfhood in the face of organ failure, donation and transplantation. Further, Sharp (2000, 2001) problematizes the fragmentation and commodification of donor bodies in the wake of new biomedical technologies.

Crowley-Matoka’s (2016) ethnographic work on Mexico shows the interface of living and cadaveric body and organ donation in relation to domestic sphere, focusing on gendered ethicalization of donation against the larger backdrop of nationalist motivations around

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vital organs are alive in the sense that oxygenated blood continues to sustain the cells and tissues through the continuing circulatory function of the heart.

promotion of organ donation awareness. Lock and Crowley-Matoka (2008), on the basis of cross-cultural and ethnographic comparisons of United States, Japan and Mexico, argue that the dynamics of moral obligation and individual choice in organ transplantation can be understood only by recourse to familial, cultural and political contexts. Crowley-Matoka and Lock (2006) disengage the tensions in definition of death and self-identity, and conceptions of body commodification with reference to wide-ranging ethnographic contexts like United States, Japan, Mexico, Europe and India.

Fox and Swazey's (1992) sociological study looks at biomedical and pharmaceutical developments like the emergence of cyclosporine[14] and its contribution to the expansion of organ transplantation. Their in-depth study emphasizes on organ donation as a social and biomedical strategy in response to shortage of human organs and demonstrates how donation was initially perceived as an uncomplicated gift, but later on came to be inserted within the exchange system with advocates of free market economy calling for compensation or reward to combat shortage of donor organs, justifying their argument through the idea of biomedical or biological commons. On the other end of the spectrum, where others demanding regulatory controls on the exponential cost of organ transplantation (p. xvii). Such discourses in their view circulated around the notion of body as constituted of "spare parts" to be potentially replaced or transplanted. Fox and Swazey (1973) have written about the story of a cadaveric organ transplantation[15] to demonstrate how the biomedical system and biomedical language of organ transplantation obscures affectual codes that pervade lived contexts of disease, death and organ procurement. Fox and Swazey (1974) have also offered a sociological account of kidney failure, haemodialysis and transplantation using qualitative insights to analyze the complexities built into the so-called "gift of life" through donation and the uncertain nature of medical practice itself (see also Fox, 1980).

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[14] Cyclosporine is an immunosuppressive agent or drug used in combination with other medicines to prevent rejection of a transplanted organ.

[15] The practice of retrieval or procurement of organs from cadavers for the purpose of transplantation.

Joralemon (1995) in his incisive critique of organ transplantation has talked about how the technology has resulted in reconceptualization of self and body as constituted of "replaceable parts" rehearsing Fox and Swazey's (1992) notion of body as constituted of "spare parts". Joralemon deploys immunesuppressants[16] as metaphor to explain how biomedical practitioners invest in strategies to undermine widely socially held, traditional notions of selfhood through "cultural immunesuppressants" which invoke the greatness of altruistic motivation to donate and primacy of rights of the individual to survive meaningfully through organ donation and transplantation. Problematizing the then ongoing debate on compensation for donors and donor families, Joralemon (2001) argues that medical professionals doubt the idea of incentives or rewards for donor organs, because they believe that human organs and monetary systems belong to diametrically opposite biomoral worlds, a compromise of which will result in dilution of the ethical grounds of medical profession.[17]

Joralemon and Cox (2003) further argue that proposal for financial compensation or rewards for donor organs concretizes the schism between self and body that transplantation technology has brought in its wake and normalizes the dissociability of the two. They argue that although those supporting incentives and commodification of bodies have the "reasoned ideal" argument in their favour which asks an opponent what he or she would have done had his or her own child been at the brink of death due to organ failure and scarce supply of donor organ (p. 30). They oppose the idea of "rescue obligation" to save a near or close one through whatever means available, which provides the moral basis of the "reasoned ideal" argument (p. 31). Such approach renders the self disembodied, making it a property or commodity, which Joralemon and Cox (2003) critiques, for disregarding the embodied nature of self and personhood. Wilkinson and Garrard (1996) argue that organ sale and altruistic organ donation

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[16] Drugs which lower the immune resistance of the recipient body against a transplanted foreign organ. Cyclosporine is an example of immunesuppressants.

[17] It is not out of place to point out that the community of medical professionals is no monolith. While some welcome new technology in the biomedical field wholeheartedly, there are many others who engage in an ethical audit before sanctioning the use of a particular technology in biomedicine.

are dual aspects of the same moral continuum and are seen as objectionable, although varyingly, because of the value society puts on bodily integrity, which is seen as threatened by these forces. Papagaroufali (1999) provides insights from the Greek context where organ donors resist the objectifying forces of market by foregrounding “body as flesh”–a notion of flesh that is culturally and phenomenologically constructed.

Hogle (1996) contends, based on data from Germany that body as whole and body parts have cultural meanings, which biomedical technologies manipulate. Hogle (1995) demonstrates the tension between homogenizing bodily interventions of organ transplantation technology and mundane everyday practices of organ transplantation experts and how these tensions generate newer ideas about embodiment and selfhood. Beyond the discourse on philosophical issues of life and death (see Youngner et al., 1999), and the reconfiguration of self and bodily identity through transplantation technology in particular and biomedical technologies in general, there is an established and emerging body of work which studying the nexus of power, political economy, formal and institutionalized and black market in the context of organ donation.

Scheper-Hughes (2000, 2001, 2005a, 2006) focuses on the illegal dealings in human kidneys nurtured by the highly commercialized organ transplantation market with unequally positioned organ providers and recipients (p. 4). She discusses the murky side of organ transplantation which derives from global capitalism, where, for the donor, the commodified kidney is an “opportunity”, for the recipient, “the last resort” for survival (p. 5). Elsewhere Scheper-Hughes (2004) emphasizes the need for an “undercover ethnography” of transnational organ trade to locate the Goffmanian “back-stage” or “secret world” of black market of human organs (p. 30; see also 1995, 2006, 2009). Trying to respond to the ethical and political questions about whose organs are sold and purchased–an engagement she considers significant for a critical medical anthropology, Scheper-Hughes argues that the poor and vulnerable living in the developing world, transported to the state-of-art transplant units in transit, cater to the existential crisis of the well-off in the developed world (p. 32). She posits the similarity of mercantile capitalism premised on "slave trade" with the asymmetries of transnational organ market where cities such as Bucharest, Chennai, Johannesburg, Moscow and so on, are the provider of organs and "global" or metropolitan centers such as Berlin, London, New York and so on, are the recipients (p. 36). It is in the latter cities that medical or transplant tourism develops, serving as nodal points of transfer of "fresh" human organs from global south to north, from people of colour to the whites, from poor to the affluent, from women to men and so on (p. 37; see also Scheper-Hughes & Wacquant, 2002).

Scheper-Hughes (2005b) depicts how the neoliberal arrangement of contemporary globalized society has reshaped the relation between forces of capital and labour, the state and citizen bodies, resulting in a black market of human cells, tissues, organs and bodies, through notorious transnational transplant tourism (pp. 145-151). She vehemently argues that the neoliberal ideology legitimizes a market in human organs (p. 153). Since such market has met with resistance, it has gone underground working at the behest of the medical mafia, targeting the most vulnerable as providers of "fresh" human organs (p. 158). In her view, bioethics justifies the demands for a free market in human organs (p. 156). She contends that bioethical arguments in favour of organ sale premised on free will are problematic (p. 161), and overlooks the structural mechanisms which determine who places the demand for a donor organ and who supplies one (p. 163; see also Scheper-Hughes & Wacquant, 2002).

Through ethnography of kidney sale in Chennai, Bangalore, Delhi and Mumbai, Cohen (1999) concludes: firstly, there is dearth of information about the impact of kidney sale on the sellers and their families (p. 149). Secondly, the impetus to sell a kidney derives from severe indebtedness to local moneylenders than generally recognized (p. 151). Thirdly, long-term dialysis and organ transplantation in India lacks affordability (p. 153). Fourthly, those buying an organ are often unaware of the huge cost of immunesuppression in post-transplantation phase and the risk of organ rejection[18] despite huge financial, physical and emotional investment (p. 155). Fifthly, the intensification of transplantation initiatives in major cities in India since 1990s have emanated from poor response to the technology from the probable recipients than from scarce supply of donor organs (p. 156). Sixthly, significant spread of transplant medicine[19] since 1990s is connected to larger attempts to institutionalize medicine in India. Private investments and private-public partnerships have rendered transplant medicine a site of intervention (p. 157).

In a theoretically-informed ethnographic study of kidney sale in South India, Cohen (2005) goes beyond Foucauldian formulation of sovereign and biopower, adhering to Giorgio Agamben's reading of biopower, to propose a notion of "exceptional life" premised on "bioavailability"[20] and "operability" (p. 79; see also Agamben, 1998). Cohen argues that "bioavailability" is a twentieth century construction and has a pharmacological[21] origin, whose gaining of significance is related to the grafting techniques of renal transplantation (p. 83), emergence of "transfusion medicine"[22] which can detect blood match (p. 84), and production of immunosuppressants which ensure unhindered grafting and acceptance, which has resulted in biopolitical earmarking of a population for retrieving organs, starting from the brain-dead to the most vulnerable or easily available or accessible, for instance, women in Cohen's study who are subject to "gendered moral demands of prestation" (p. 85). For Cohen, "operability" elaborates the logic of "bioavailability". He establishes through

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[18] A condition where the transplanted cell or tissue or whole organ is rejected by the immune system of the recipient body.

[19] A branch of medicine concerned with the study of medicines that prevent the rejection of the transplanted organ by the recipient body.

[20] In physiology, the concept of bioavailability has a completely different meaning. Here it is related to the ability of a drug or substance to be absorbed and used by the body.

[21] Related to a branch of medicine concerned with use, action and effects of drugs.

[22] A branch of medicine concerned with transfusion of blood and its components.

ethnographic evidence that most women organ sellers he interviewed had already undergone tubectomy[23], which demonstrates their previous exposure to an operation (p. 86). This "prior operation" established their proven eligibility and availability to forces that demand organ sale. Elaborating the biopolitical grounds for defining what constitutes "exceptional life" which can be targeted for organ donation or sale, Cohen concurs with Scheper-Hughes (2000, 2001, 2005b, 2006) when he argues that the "bioavailable" is a large "marked donor population" constituted not merely of lives and bodies laid bare but ones with "exceptional life", expected to enact "operability" thrown in difficult life circumstances or sacrifice out of love and pity (pp. 82-3). Cohen (2001) also shows through a study of Hindi films how kidney transplantation narratives in India invoke resorting to tradition, kinship and care as ways of dealing with the crisis.

Das (2000) in her ethnographic and textual study of networks and locations of organ transplantation argues that trajectories of organ sale are to be located in relation to the dominant narrative of organ shortage and informal economy in India, where bodily violence in organ sale converts into an "opportunity" for those languishing in the informal economy. This resonates with Cohen's (2005) point relating to women's "operability", working as articulation of agency in which they are implicated in the enactment of violence against their own bodies. Such "opportunity" or agency, Das argues, shrouds the violence involved in occupying a precarious position in the economy and selling of an organ out of precarity on pretext of celebrated values of altruism and sacrifice. Lindberg (2013) takes up the case of Finnish law which made organ donation an "obligatory gift". To explain the law, Lindberg resorts to Agamben (1998), and shows how law treats citizen bodies as natural or "bare life"– as the locus of biopolitical machinations or biopolitics of death. Such discourse on black market in human organs is paralleled by a discourse on demands for a regulated market in

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[23] Sterilization of women through surgical blocking of fallopian tubes.

human organs–a possibility which Joralemon (2001, 2003) outrightly rejects. For instance, Jeffries (1998) calls for a regulated market in human organs through “organ warehouses” and agencies of middle-men.

Further, Copeman’s (2006) ethnographic study of a religious organization in India giving up cremation to meet the demands of “medical rationality”, and Ibrahim’s (2014) ethnography of organ donation practices in Gujarat under the popular deployment of *dan* which is close to Hindu and Jain traditions but excludes Muslims, are important contributions to the study of organ donation and transplantation in India.

The study of organ donation and transplantation as a sociological and anthropological problematic has come a long way from American medical sociological preoccupation with life and death, cross-cultural ethnographic and comparative anthropological analysis of brain-death and transplantation practices, and their material and semiotic effect on perceptions of self, personhood and body, to the biopolitical and global political economic explanations of corporeal violence, exploitation and injustice involved in the transnational organ trade. This thesis draws substantial inspiration from this large existing body of work but also goes on to argue that these studies are limited insofar as they fail to address the complexities of organ donation and transplantation as a contemporary biomedical technology and practice or at least offer a snippet of it.

Organ donation and transplantation, to invoke Latour (1993), is an “imbroglio”–a muddled pile of discourses and practices with subtle power and ideological equations, which call for engagement at multiple levels from multiple standpoints. Simplistic problematization risks reducing the “imbroglio” to a fixed set of known or a few emerging unknown concerns. This thesis therefore proceeds by positing the broader thematic–(dis)engaging life, death and corporeality in their complex entanglement with the power of the biomedical technology of organ donation and transplantation and how such power invests and inscribes the very matter-of-fact of existence in the most ubiquitous ways–in a manner that approximates the "imbroglio" via snippets of structural-institutionally, organizationally and subjective-experientially interconnected, overlapping dimensions of the technology, its deployment and practice in recent times.

Methodological departures

This thesis entitled "organs and their travels" is an attempt to trace the movement of organs across diverse discursive spaces: human and non-human life-forms, geopolitical landscapes, structural, institutional and organizational terrains, moral milieu and domains of human consciousness, subjectivity, experience and interpretation. The biographical approach to the study of such travels derives from the realization that the multilayered complexities of organ donation and transplantation technology and practices render impossible a careful mapping of the varied discursive routes treaded by organs unless such travel is investigated using the biographical approach, generally deployed to study life-trajectory of empirical individuals.[24] Such approach derives from Kopytoff (1986) who observes that biographies have the unique capacity to tease out or excavate characteristic features which would otherwise escape human attention (p. 66). However, unlike conventional biographical approach in anthropological studies which presuppose linearity–a sequential unfolding of life events along a pre-defined course–which renders the biographical approach a teleological project, Kopytoff thinks of the biographical as a wide spectrum of potentiality–one that does not succumb to standardized or collectively endorsed notions of "ideal", and the diversions therefrom, but examines the social and cultural processes or movements which defines what the object is at a particular

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[24] Appadurai's *Social life of things* (1986) as an edited volume on commodities within the cultural context presents many insightful works of which Kopytoff's (1986) "cultural biography of things" is one important contribution. Appadurai (1986) presents Kopytoff's "cultural biography" approach to things as one way of tracking their social life. In the scheme of things of the present thesis, the biographical and social life approaches are concomitant. Rather one can say that the biographical approach renders possible tracking of the social life of organs. This is because, Kopytoff's biographical approach as the preliminary move renders possible a methodological immersion into life as spectrum of possibilities rather than a linear course.

point in time and space through dyadic processes of singularization and commodification (pp. 66-68).

In Kopytoff's (1986) view, singularization and commodification as social and cultural processes have the capacity to denaturalize taken-for-granted naturalizations which contribute to the production of things and objects. Biographical approach of Kopytoff's variety in the scheme of conceptualizations of the present thesis is significant in that it seeks to bring to the forefront unthought-of trajectories and interstitial translations across diverse domains of culture and society, in short, the travels that render objects natural through acts that either distinguish them as unique or standardize them as akin to other market equivalents. Insofar as organs are concerned, laws circumscribing, regulating and promoting organ donation and transplantation, and biomedicine-biotechnoscience-market conviviality producing animal alternatives to human organs are social and cultural processes. But what complicates the travels of organs is that, while biomedical law as social and cultural process singularizes and sacralizes the organ, biomedicine-biotechnoscience-market conviviality puts organs at the threshold of monetary exchange systems by engineering marketable animal equivalents of human organs.

This anticipates what a social life or trajectory of organs in their travels across diverse discursive domains would be like. To facilitate this biographical foray into the social life or trajectory of organs–a radical response against their naïve naturalization, this thesis proposes methodologically reframing the biographical approach in terms of social situations. Neither an objectivist-institutional approach to biography with overt emphasis on what is structurally or collectively desirable, nor a pure subjectivist-experiential approach with focus on authentic agential possibilities help explain the sociality of organs or their social trajectory. When macro, meso and micro processes and interactions are conceived of as situations–material, ideational and ideological, and conceptual-empirical sites, the interplay between the structural and desirable, and the idiosyncratic and agential within the social life or trajectory analytic begins to enact a marked discursive appearance.

The complex of situations, akin to what is called “imbroglio”, this thesis investigates, is delineated mainly through two mapping techniques: the situational and the positional, that elucidate as well as complicate not only the multiple situational units that inhabit the complex under scrutiny but also the relations that obtain between them (Clarke, 2005).[25] Such mapping is pursued through Clarke’s (2005) cartographic approach to situations which works through the deployment of multiple sources, methods or tools, which underpin the logic of triangulation (Denzin, 1978),[26] towards scrutiny of the relations that obtain among actors, objects or “quasi-objects” (see Latour, 1993), spaces, processes, technologies, institutions within the larger complex of situations under study and the discursive positions that emerge *viz-a-viz* them.

The situational map (Figure 1.1) locates who and what inhabit the larger situation–organ donation and transplantation–under scrutiny. Figure 1.1 demonstrates inhabitation and involvement of a series of actors, processes, incidents or events, technologies and institutions with large-scale structural-institutional and organizational processes at one end of the spectrum (along with criminal articulations) such as the *Transplantation of Human Organs Act* (henceforth THOA), 1994, with reference to India, transnational organ trafficking, the biomedical establishment including organ transplantation experts, bioengineering companies specializing in xenograft engineering[27], pharmaceutical industry and market, and so on, with meso-level organizational processes such as new and old organ donation initiatives at the middle, and inter-subjective lived domains such as characteristic and unique experiences of

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[25] Clarke (2005) also talks about social worlds or arenas map in addition to situational and positional maps. This thesis has mainly used situational and positional maps. Social world or arenas maps have been used in addition in the first two research chapters, where the complexity of the situations under scrutiny rendered the use of such maps relevant and of analytical significance.

[26] Here I am particularly referring to two variants of triangulation mentioned by Denzin (1978): Data and methods triangulation, the use of multiple data sources and methods in a particular study.

[27] The genetic engineering of grafts or organs of animal or transgenic origin that is compatible to human bodies.

people exposed to organ failure, trying to find a donor organ for transplantation and the personal life-experiences of the researcher in relation to organ failure at the other end of the spectrum.

The positional map (Figure 1.2) helps locate the pivotal positions taken by dominant and non-dominant or oppositional social worlds within and in relation to the complex of situations at hand. Figure 1.2 depicts the juridico-institutional discourses through the THOA, 1994, and the subsequent amendments that promote organ donation in response to organ failure and boost organ donation rates to combat organ scarcity, and prohibit illegal dealings in human organs as a reaction to organ sale. It also depicts the biomedico-biotechnoscientific discourses–xenotransplantation[28] or xenograft initiatives of bioengineering companies aiming to engineer animal (porcine to be more specific) alternatives in the face of scarce supply of donor organs, and the donation initiatives which advocate cadaveric donation programme as a corrective for organ failure and organ scarcity. All of these discursive positions, in summation, promote organ donation in response to high global incidence of organ failure and critical donor organ scarcity or shortage, although with caution, which is the case with THOA which prohibits commercialization of human organs. The oppositional discursive worlds are represented by media and journalism which not only points to the loopholes of the law–leading to organized organ trafficking and trade, animal rights' activism which focuses on violence against animals in xenograft initiatives, and the inter-subjective experiential realm of people exposed to organ failure and its aftermath. In relation to these prominent discursive positions, there are two more positions: the first relates to the public anthropology discourses involving in human rights' activism which critique the black marketing of human organs and political economic commodification of marginalized bodies as source of donor organs (see Cohen 1999, 2005; Scheper-Hughes; 2000, 2001, 2005a, 2006), and the second relates to

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[28] Transplantation of animal cells, tissues or organs in humans or vice-versa as a replacement of a failing organ.

public administration and medical governance discourses which propose cost-benefit analysis to calculate rewards for those who donate organs as a way of boosting organ donation rates (see Axelrod et al., 2018; Garcia G. et al., 2012; Held et al., 2016; Senanayake et al., 2020). There is another vital position: personal experiences and subjectivity of the researcher both during and beyond the phase of researching organ donation and transplantation practices.

The complex of situations (in Figure 1.1) along with intrinsic discursive positions and those that emerge in extrinsic relation (shown in Figure 1.2) combined together helps depict and pictorially approximate the “imbroglio” at hand. The epistemological significance of mapping techniques in pictorial representation of the complex of situations constituting the “imbroglio” does not derive from any claim to holistic representation or total knowledge but from attempts to represent the conceptual-empirical referents of the research and establish the interconnections that are incomprehensible and escape human cognition. Various studies relating to organ donation and transplantation have focused on specific aspects of the use and practice of the technology, generating in-depth monographs and ethnographies of institutions, practices, experiences and subjectivities (see Cohen, 1999, 2001, 2005; Crowley-Matoka, 2016; Das, 2000; Fox & Swazey, 1974, 1992; Hogle, 1995, 1996; Joralemon, 1995, 2001; Lock, 1995, 1996, 1998, 2000, 2002, 2004; Scheper-Hughes, 2000, 2001, 2004, 2005a, 2005b, 2006; Sharp, 1995, 2000, 2001, 2006). However such studies fail to explain the situational nuances of the interconnections that obtain between the universal and the particular, the global and the national or local, the institutional and the experiential, the structural and the agential, in the production of objective and subjective trajectories of sociality–the travels (or travails) of organs, both literally and metaphorically, as tread natural-cultural, biological-social realms.

Analytical vehicles

Analytical vehicles or tropes which act as the organizing principle for the complex of situations in this thesis are the Foucauldian notion of biopolitics (1978) and Rose's Foucault-inspired "the politics of life itself" (2007) within the general framework of Appadurai's (1986) "social life of things". These vehicles have been deployed as theoretical-empirical indicators for coming to terms with the contemporary practice of the biomedical technology of organ donation and transplantation. Rather than trying to demonstrate how authentically these vehicles or tropes represent the reality of the conceptual-empirical world under scrutiny, this thesis remains sensitive about fact that while popular scholarly tropes embody the promise of representing the conceptual-empirical world in its authenticity, they disable linear or easy conclusions. The conceptual-empirical world too resists fitting into the straightjacket of scholarly tropes.

Foucault (1978) is of the view that for a long time the power of the sovereign over the subjects manifested in the "right to kill, or refraining from killing". In short, sovereign power manifested in "the right to *take* life or *let* live" (emphasis original). This power of "juridical form" worked by way of "right of seizure: of things, time, bodies, and ultimately life itself". With the passing of the ancient epoch, "mechanisms of power" transformed from "deduction" as the main form of exercise of power to an array of interventions that aimed at "generating forces, making them grow, and ordering them, rather than one dedicated to impeding them, making them submit, or destroying them". This transformation amounted to a change in the relationship of power to life and death. The right of death exercised by the sovereign power transformed into a "life-administering power"–one that "exerts a positive influence on life, that endeavors to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations" (pp. 136-137). From the seventeenth century onwards, this "life-administering power" functioned along two axes: "*anatomo-politics of the human body*" involving disciplining of empirical bodies and "*bio-politics of the population*" (emphasis original) involving regulation of population at large. These two axes of power functioned in and through the "processes of life" aiming "no longer to kill, but to invest life through and through" (p. 139). Understanding this "life-administering power" that began to emerge in the seventeenth century is a significant step towards grappling with modern biomedicine in general and biomedical technologies in particular for they "invest life through and through" in order to enable, "optimize" and "multiply" it (Foucault, 1978, pp. 137-9). Coming to terms with how this power in and through biomedicine and biomedical technologies and practices invests and enables life through "controls" and "regulations" requires engaging the processes of subjectivation or production of subjects, which explains how such power functions or operates.

For Foucault (1982), power is inevitably tied to "the question of the subject". Power "categorizes" individuals, endows them with "identity" premised on "a law of truth" which the individual and others should recognize. In short, it is power that renders empirical individuals into subjects. The expression "subject" here as has two meanings: "subject" to "control" of and "dependence" upon other and "subject" to one's own "identity" by way of "conscience or self-knowledge" (p.781). The external relation of "control" and "dependence" *viz-a-viz* another, and being "tied" internally to one's own "identity" constitutes dual modes of functioning of modern power through "totalizing" and "individualizing" technologies and forces. This form of power, according to Foucault, resembles "pastoral power" that derives from a "technique" associated with Christianity, but is integrated within modern state in a "new political shape" (p. 782). The motto of the Christian pastorate was to ensure salvation of individuals and towards that end it not only gave orders but was inclined to "sacrifice" itself for the well-being of the group. In sharp contrast to "royal" sovereign power which required the "sacrifice" of the subjects for its survival and regeneration, "pastoral power" of the modern state looked after each empirical individual, trying to dissect their "conscience" and "innermost secrets" in order to be able to "direct" them. For Foucault, this "pastoral power" is an "individualizing power" because it is "coextensive and continuous with life; it is linked with a production of truth–the truth of the individual himself" (p. 783).

Any attempt to theorize modern power, according to Foucault (1982, 1988), has to take into account how this "modern matrix of individualization or a new … pastoral power" partakes in the production of subjects (p. 783), or puts in place a repertoire of "technologies of self" in and through which individuals "effect by their own means or with the help of others a certain number of operations on their own bodies and souls … so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality" (p. 18). "Technologies of power" are inevitably tied to "technologies of self" in the Foucauldian formulation, which serves the purpose of this thesis which looks at the dynamics of biopolitics and subjectivation in relation to organ donation and transplantation. Rose's (2007) ruminations on biopolitics in the twenty-first century provide an in-depth account of biopower in its contemporary biomedical and biotechnological *avatar*.

Extrapolating Foucauldian biopolitics to explain how biomedical power "invests" life in the most intricate ways in contemporary times, Rose (2007) argues that in twenty-first century life and biology are no longer "fixed endowment(s)" but subject to incessant engineering. Biomedical judgment no longer resides in delineating normal from pathological to the extent that difference between treatments of disease and "enhancement of capacities" has collapsed. The immense scope of engineering has opened up life to "experimentation" and exercise of "choice, prudence, and responsibility" (p. 40). According to Rose, in this "new" biopolitics, life is invested with hope for "technological reformation" towards betterment through molecular interventions on body (p. 11), technologies which "optimize" life (p. 15), production of subjectivities which are ethically oriented towards biology–present and future (p. 22), under guidance of those with expert knowledge about “vital” life processes (p. 27), within an overarching venture capitalist dispensation that takes life and biological processes as object of speculative investment (p. 31).

Rose (2007) suggests that the extension of “choice” to life and biological existence has made life controversial in that there are contestations over “vital” decisions relating to life. The “politics of life” that these contestations perform do not derive from an overarching expert authority-regime making decisions about life but from judgments of the agents of “pastoral power”–the medics, genetics experts, pharmaceutical companies and so on, who delineate the ethical path towards a life that is responsible to biological present and future of individuals and collectivities, thereby making life itself a field of contestation over right “choice”, “responsibility”, “decision” and ethics and so on (p. 40). The unfurling of life to “choice” and “decision” on the one hand, and “judgment” and evaluation on the other, presupposes the reign of an ethical and responsible subject shaped by the hope for a probable better life (p. 50). But these choices, decisions, judgments and evaluations open life to a new biopolitics which renders molecular interventions on life a field of “opportunity” while submerging into “biological determinism” or new “eugenics” (pp. 50-51).

In Rose’s (2007) view, a reading of Foucault shows that biopolitics since its inception had a “vitalist character” in that it focused on “vital” biological processes of the subjects (p. 54). But what the new biopolitics consists is the extension of this “vitalist” imperative to the molecular minutiae of life through biotechnology and genetic engineering, resulting in what Rose terms “molecular vital politics” (p. 4) or “molecular biopolitics” (p. 11). The conceptual movement from Foucauldian biopolitics to Rose’s “molecular biopolitics” is significant as it sensitizes about the nuanced workings of biomedical power over life in contemporary times, and offers possibility for engaging the conceptual and empirical variety and complexity contemporary biomedical technologies such as organ donation and transplantation embodies.

Appadurai’s (1986) resort to the commodity as a general framework to explain “the social life of things” is thought-provoking in that commodities despite being “objects of economic value” are imbued with value that does not necessarily derive from their objective location on the market but from meanings they have for people, and judgments and evaluations they incite. To explain his project, Appadurai invokes Simmel (1900/2004) to argue that some commodities become more valuable not only because they have a higher price on the market but because they “resist” people’s “desire” to “possess” them (Appadurai, 1986, p. 3). While Appadurai concurs with Simmel on the complexity of possession and “sacrifice” involved in owning one commodity over another as the basis of valuation of commodities and things, he argues that the issue of “*regimes of value*” (emphasis original), integral to Simmel’s theory of money, offers an “alternative” way of looking at commodities or things via co-constitution of “desire” and “demand”, “sacrifice” and “power” in the production of economic value in particular social and cultural situations (p. 4). Appadurai adds that mere recognition that commodities and things have no meaning outside human acts of signification is not enough; an anthropological analysis of commodities and things has to locate how meanings are imprinted on their “forms”, “uses” and “trajectories”. In short, Appadurai suggests it is only through the “trajectories” of commodities and things that their sociality or social liveliness can be tracked. As important as humans attributing meanings to commodities and things is the issue of their “circulation” within social situations, which throws much needed light on their sociality (p. 5).

This research however does not resort to any available conceptual or theoretical framework for the purpose of analysis, rather devises one appropriating conceptual tropes from coeval intellectual traditions. How this research negotiates the complexities engendered by the conceptual juxtaposition of Foucauldian biopolitics (1978) and Rose’s (2007) nuanced historical and contextual reformulation of the concept within an overall framework of Appadurai's (1986) "social life of things" is left to be traced in the pages of the thesis.

Routes of exposition

Reading prevailing discourses on and around the "imbroglio" through texts and documents, encountering the field constructed for the study, and engaging people exposed to the characteristic experiences of organ failure, the research has come to rework the background assumptions it began with and such reworking happened out of unanticipated situations. This facilitated redefinition of research as a way of posing newer questions all along the length and course of the research without reaching definite answers, beyond the taken-for-granted canon that research is a way of seeking answers to solid questions.

Important realizations were fundamental to this process. The first is the futility of positing the opposition between the conception of body of the biopolitical state and the organ transplantation market. Not only the conception of body that is the locus of investment of power of the biopolitical state is derived from modern biomedicine, the ways in which the organ transplantation market conceives of the body as embodying utility, to be monetized through the enterprise of organ transplantation, derives from modern biomedicine. This is not to say that modalities of investment of power on the body of the biopolitical state and organ transplantation market are one and same. While both have unique power-effects on the body, being different in essence, the fact that both are informed by modern biomedicine, have implications for the truth-regimes relating to what constitute life and death, and body and corporeality. This necessitates reworking assumptions of exclusivity and exhaustiveness of the two realms–the biopolitical state and the market, and pushes analysis towards complex intersecting and overlapping discourses about how body is co-generated by the biopolitical state, its biomedico-legal apparatus–modern biomedicine and biotechnoscience, and the market. The second relates to the redundancy of thinking donor campaigns as an authentic space beyond the biopolitical state and organ transplantation market; the latter sustained mainly by private players. While the old campaigns have traditionally reproduced the notion of body of the biopolitical state–promoting cadaveric donation and curbing organ sale, new donor advocacy campaigns reaffirm the need for reconfiguring the field after a venture capitalist standpoint. Donor campaigns, old or new, are implicated in biopolitical processes, and venture capitalist moorings of the biopolitical state and the market in contemporary times. The third relates to the limitations of thinking of organs as having a social life outside the body and beyond death only in the discrete, empirical transit-ional phase of donation, retrieval or harvesting and transplantation. This propels an ontological reformulation of what organs, human or otherwise, symbolize materially, ideationally and linguistically, where the sociality of organs is reconceptualized in essentially ex vivo terms. This is where the thesis reworks Appadurai's (1986) social life approach with reference to organs to think of them as having the social component intrinsically and immanently as part of their naturalness, rather than merely coming to have the social dimension or aspect in the process of circulation or movement or travels across biological and social spheres.

Since these realizations occurred at various phases of the research, the questions this thesis seeks to respond to, have also emerged at various points of encounter and negotiations with discourses–the texts and fields related to the biomedical technology of organ donation and transplantation. While the earlier strategy was to locate the notion of human body as articulated at the intersection of the biopolitical state, organ transplantation market and donor campaigns in contemporary India, realizations emerging from unanticipated conditions led the investigation toward ruptures and tensions that occur at multiple points of interface of biomedico-legal apparatus promoting legal practice of organ donation and transplantation in India (THOA, 1994) and the illegal–immoral, macabre cases of organ theft in the Indian context with transnational spread, the hopeful anthropocentric-humanistic ventures of global xenograft engineering companies hoping to engineer animal or porcine alternatives to human organs, and the violence perpetrated and inflicted upon animals in transgenic experiments and xenograft initiatives, the enabling of life of a privileged few through organ donation and transplantation, and the bodily deduction of the dispensable subjects and animals, cloned or otherwise, as source of donor organs. The ruptures and tensions these oppositions generate propelled the research to work its way through the complex discursive regimes of organ donation and transplantation, foregrounding the schisms that posit the human in opposition to the "less-than-human" (Butler, 2004), the human in opposition to the animal, those worthy of protection and those liable to be dispensed with (Agamben, 1998), those which are hopeful objects of cure, healing, and futuristic visions and which are mere means to such visions, enables a tentative arrival at what constitutes life, death and body as inherently stratified and graded experiences in the particular context of organ donation and transplantation discourses and practices.

Moving a few steps beyond the discourses of biomedical law and biotechnoscience–the pervasive ways in which they invest life and body with power, the thesis looks at organ donation initiatives or donor campaigns in an attempt to locate how biopolitical control of life exceeds the boundaries of biopolitical state and incumbent institutions, namely, biomedicine, bio-technoscience and law, to impact the ways in which such campaigns envision biomedical and ethical subjectivities towards greater public good through body and organ donation. Ruptures are significant here too. Intrinsic to modes of subjectivation through modern biomedical power are ruptures that occur at the interface of the demands for state-enforced rationalized system of organ donation towards public good and positing of the rational decision making of the thinking and acting person–the liberal subject as vehicle for transforming individual body into a collective property, in case of Ganadarpan, and the biopolitical elaboration of the liberal subject, sound in biomedical knowledge, and biologically and ethically responsible towards self and others, into an entrepreneurial subject who partakes in effectively rendering subjectivity into a domain of venture capitalist maneuvers. These shifts and the tensions they embody facilitate understanding of body, power and subjectivation in a new light, and implications they have for the concept of body and organs in the context of donation and transplantation. The final ruptures the thesis posits are those generated at the interface of the researcher and the problem, personal experiences and crisis of the knower, and the suffering and pain of the others, which contributes to the act of grappling with the sociality of organs–the significant ways in which they figure in familial and relational landscape, in disputes relating to inheritance and control of property, and responsibility of taking care of the weak and ailing, and the complex negotiations donor organs bring forth and the spectral effect they have on the self-perceptions of the recipients and their immediate care-givers.

These taken together contribute to an analysis of the sociality or travels of organs in relation to the biomedical technology of organ donation and transplantation in recent times. The section devoted to conceptual tropes and framework of analyses has already alluded to how this thesis aims to pursue and trace the social trajectory or travels of organs. The biopolitical route embraced in this thesis helps unravel the investment of modern biomedical power in general and the power of the biomedical technology of organ donation and transplantation in particular on the one hand, and the field of power generated by organ donation initiatives, old or new, on the other hand, in the co-production of life, death, human body and organs as discursive sites and objects via truth-regimes of modern biomedicine and biotechnoscience, and venture capitalism. The biopolitical route also helps trace the embeddedness of organs in the social and moral fabric of human and non-human existence in general and the network of interpersonal social relations in particular, namely, familial and kinship relations. The relevance of the biopolitical angle in the gesture of sociologizing bodies and organs against naïve naturalism and biologism resides in tracing how organs travel or tread multiple intersecting, overlapping situations of institutionally organized (or illegalized) power and how such power invests and inscribes situated accounts of embodied subjectivities in their negotiation with organ donation and transplantation in the face of organ failure and donor organ scarcity or shortage. The possibility of unthought-of subjective-experiential articulations as expression of potential critique of or probable resistance to manifest and organized yet subtle microcosmic forms of biomedical and biotechnoscientific power, control and intervention renders organ donation and transplantation a practice (or problem) worth ethical engagement.

Analysis of power (in its general and particular ramifications) in its complex entanglement with life and death, and body and corporeality presupposes the inevitability of engagement with existential concerns. It is not ethics that directs analysis of power towards existential concerns. Rather analysis of power in itself is an ethical move in that it necessitates engagement with structures that determine forms and conditions of existence, human or otherwise.[29] It is precisely in this inevitability that this thesis locates or positions itself via the critical ruminations of Foucault (1978, 1982, 1991, 1969/2002, 1973/2012), Rose (2007), Appadurai (1986), Butler (1993, 2004) and Agamben (1998).

Itinerary

This thesis analyses organ donation and transplantation in recent times from the point of view of the sociality or travels (or travails) of organs through six chapters. The first chapter looks

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[29] This thesis posits the centrality of ethics as an aspect of critique of power. A critique of power through social scientific endeavour or investigative foray into social reality is in itself posited as an ethical act. Therefore, rather than broaching the problem from a specific point of view or orientation of the ethical, for instance, bio-ethics, which is very apt for investigation of the problem at hand, this thesis proceeds by pointing out the situated and situational nuances of the workings of power in relation to the technology and practice of organ donation. And such pointing out of the workings of power is understood here as an ethical act.

at biomedical law circumscribing the practice of organ donation and transplantation as a dynamic biopolitical gesture–aiming to safeguard the human body against death induced by end-stage-organ-failure[30] and the violence involved in organ sale and organ theft or illegal organ removal from victim donors. This chapter foregrounds that despite the life-fostering agenda of the biopolitical state and the biomedico-legal machinery via the technology and practice of organ donation and transplantation, the deductive dimension of biopolitical dispensations rears its macabre visage in organ theft reports. This chapter makes tentative attempts to theorize the body by examining the nature of power that produces the body through violations, albeit differentially, in the context of organ donation and transplantation. This is the foundational conceptual move of the thesis in that it does not think of an *a priori* body subject to power. Rather it seeks to trace how power and violence are intrinsic to production of the body in its natural givenness, albeit differentially. The positing of power concomitant with violence in the production of the materiality of the body in biopolitical dispensations foregrounds the conceptual and empirical problems involved in juxtaposing law against biopower.

In conceptual congruence with the first chapter, the second chapter looks at life-fostering, hopeful promises of two xenograft engineering initiatives, Revivicor and eGenesis, which envision animal alternatives to human organs to address organ scarcity through genetically engineered or cloned pigs with human-compatible organs to be potentially transplanted in human bodies. This chapter demonstrates beyond the high hopeful promises of xenograft initiatives and xenotransplantation, lies the murky world of hapless animals, cloned or otherwise, used as mere means in transgenic experiments and xenograft initiatives, subjected to pain, violence and death, a narrative of dispensability which anthropocentric

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[30] A condition where loss of function of a particular organ reaches advance stage or is irrevocably damaged.

biopolitics of hope for cure and healing categorically disavows. These two chapters demonstrate the corporeal manifestation of institutional power and how it partakes in defining concepts of life, death, human, body and organs, and most importantly, what delineates life and body to be protected *viz-a-viz* life and body that is dispensable and worthy of death.

The third and fourth research chapters look at new and old organ donation initiatives as purveyors of biopolitical processes involved in the hopeful biomedical and biotechnoscientific promises of organ donation and transplantation, and how effectively these initiatives partake in production of biomedical and ethical subjectivities that are a prerequisite for successful working and public acceptance of the technology. New donation initiatives exceed and mutate older prerequisites to shape new entrepreneurial subjectivities in relation to organ failure, donation and transplantation, who adopt a venture capitalist orientation to the tragedy and trauma organ failure and fear of imminent death brings in its wake.

The fifth and sixth research chapters demonstrate via experiences of the researcher and others–the collaborators in the discursive field–that organs are not only implicated in biomedical power, truth-regimes and processes of subjectivation; they are also embedded in the inter-subjective, relational and moral worlds of people. The fifth chapter claims that the relational dimension manifests in disputes and contestations over bodies and organs in lived and experiential contexts of organ failure and the pursuit of remedy. The sixth chapter posits the impossibility of thinking the donor organ without the specter of moral obligation the donor organ brings in its wake, which problematizes the unconditional, gift-like status of the latter, thereby pointing to the futility of conceiving organs as uncomplicated biological entities devoid of social and moral antecedents.

In a similar vein, life, death, body and corporeality are no uncomplicated natural-organic monoliths with no societal antecedents or consequents or nexus with power. Beyond the organic life of bodies and organs more specifically, determined by natural causality and biological teleology, there is a social life, involving travels (or travails), which represent a wide spectrum of possibilities, subject to biopolitical machinations, control and intervention, characterized by complicated travels or movements across diverse material-ideational-ideological, biological-cultural situations. This thesis is a preliminary foray to map these travels and offer an engaged critique of the spectrum of possibilities such travel offers.

Methodology

Outlining the philosophy behind the method

Sociological research is ridden with the constant dialectic of structural constraint and desire for intellectual freedom. Any attempt to define research should first of all take into account this dialectic. Textbook orientation to research presents it as a methodical, scientific process which requires systematic caution and care. What, why and how to research are the originary questions in any course on research methodology trying to acquaint scholars about the modalities of reaching answers to posed questions. Such questions when answered in a predetermined manner constrain the freedom and imagination of the researcher and the inherent open-endedness of the field through the imposition of various controls like institutional rules and regulations, and intellectual protocols of conduct. When textbooks instruct in fixed ways how to select a topic of research, problematize it, collect and analyze data and reach a definite conclusion, research is constrained by diktats of institutional power asymmetries and societal-ideological hierarchies. This is reflected not only in the chosen problem of research but also in the treatment of the problematic. Research gets shaped by what power in general and power regimes in particular demands of researchers as purveyors of legitimate knowledge. Research becomes linear, lacking any ability to look beyond the limits imposed by power, hegemony and ideology. But not all research reiterates the linearity of scientific method and its inherent biases. They espouse critical perspectives and foreground marginality as the basis of more objective accounts of the world around.

Feminist and queer studies, studies of black and dalit experiences have been sufficient proof of this. Some feminists have argued that what masquerades as the “view from above” or the “bird’s eye view” of Western objective science is the knowledge produced from the privileged location of the white, Anglo-Saxon, male scientist or researcher (Haraway, 1988; Harding, 1992). In a similar vein, dalit scholars have talked about hegemonic upper-caste social sciences and their institutional frameworks overshadowing dalit experiences (Guru, 2002). Let us however not fall into the trap of thinking that invocation of stand-point epistemologies (Haraway, 1988; Harding, 1992) is an exercise in glorifying relativism. Haraway (1988) and Harding (1992) are critical of the “view from above” as much as they are uneasy with “view from everywhere”. They rather call for “view from somewhere” (Haraway, 1988)–one that is sensitive to location at and from which counter-knowledges are produced, and establish the connections that obtain between the politics of the marginalized location and knowledge production (Harding, 1992). In order to de-essentialize the marginal location or the “somewhere” from which or where counter-knowledges are produced, they argue that the marginal location is achievable. The assumption is that the knower may not by social ascription or location have access to the experiences of marginality but the marginal location is achievable as an ethical and political stance (Haraway, 1988). While such epistemologies attribute mobility to the location of the sovereign knower–by foregrounding the ethico-political requirements of a mobile positioning to move downwards in the social hierarchy of rewards and privileges to explore and know the world from marginal location and offer more just accounts of the world, thereby subverting the assumption of immobility that is so integral to the objective stance in construction of the authentic sovereign knower in the natural or physical sciences, they however give in to the idea of the sovereign knower as capable of negotiating social differences and navigating across hierarchies to achieve the marginal location.

The philosophy that underpins the method of research and presentation of data in this thesis is the recognition of the human finitude of the knower (Ricoeur, 1965/1986)–to the extent that the sovereign function of the knower in the process of knowledge production becomes a space for constant reconsideration and scrutiny, beyond the taken-for-granted assumptions of Enlightenment rationality and feminist standpoint reflexivity. Fallibility of the knower and the perception of dis-ease loom large at every stage of knowledge production. This thesis negotiates this dis-ease not by resolving but by stating them as experientially and legibly as possible–which also is a mode of engagement with the much-aspired yet deferred realization of human intellectual freedom.

Having outlined the philosophical premise that informs the notion of sovereign knower as fallible (Ricoeur, 1965/1986), in order is an engagement with how this thesis conceives of the field–the object of critical investigation and what relations obtain between the knower and the field thus constructed for investigation, especially when the knower is engaging a complex "imbroglio" (Latour, 1993) or "assemblage" (Ong & Collier, 2004), such as the biomedical technology of organ donation and transplantation, and an entire of gamut of intersecting institutions, practices, experiences and subjectivities associated with it.

Seeking the field

Researching life, death, disease and the struggle for survival in the face of death is immensely challenging. Methodology textbooks would have us believe that if the researcher adopts a systematic approach to the field, takes methodology lessons and demands of specific research methods seriously, the data the researcher seeks to gather will automatically begin to present itself to the researcher. As researchers trained in the modes of analyses unique to social sciences, we often come to believe in certain truths about the field. However the moment one begins to engage the field, these truths no longer retain their non-negotiability. Re-negotiations continually unfold; the researcher only has to recognize and acknowledge them.

During training as sociologists we are taught that there is no consensus within the discipline with regard to epistemological and ontological issues in sociological research. While some believe, following French positivism and objectivism, the approach to the study of social reality should be scientific, driven by objectivity so much so that society comes to be viewed things out there (see Durkheim, 1895/1982). Others argue, following German historicist and idealist tradition, that society cannot be conceived in ways in which matter or objects are conceived of in natural sciences (see Weber, 1949). They believe in the meaningfulness of the social world, which is derived from actions and attributions of individuals, and therefore subject to variation, multiplicity and unpredictability, and cannot be subsumed within general laws of the kind of natural sciences. But when one enters the field, having read enough about the philosophical debates on what and how methodology of social sciences ought to be like, and what are the varied methods and instruments used in social science research, one does not necessarily feel equipped to deal with the challenges the field throws up. There is a popular construct that sociological research is essentially field-based, be it sample survey or participant observation, and is far less uncomplicated compared to research in history or economics, where researchers handle hard facts–archival records in the former and statistical data in the latter.

This is a limiting concept of the field orientation of sociology as a discipline. The complexity of the discipline emanates not so much from contending theories of society and individual, structure and agency, and the constantly emerging analytical tropes, but from the fact and expectation that unless the social researcher has chosen a field, a physical locale or site for fieldwork, and has not observed the field keenly or talked to people with (see Watson, 1999) enough attention for a considerable period of time, the researcher is believed to have not done enough to prove through the depth of the data presented in the monograph–that he or she is a good fieldworker. There is nothing wrong with this assumption but requires engaging the concept of field one is working with. This implicit assumption often becomes explicit in classroom lectures on research methods or techniques of research where teachers argue that sociology’s laboratory is the society and therefore to study society one has to go out of the closet of the classroom to engage the world out there.

A substantial mystification and romanticism is embedded in the modes in which methodology textbooks and classroom lectures at undergraduate and post-graduate levels, represent the society and the field as object of analyses. Critiques of objectivist-positivist approach foreground issues of reification involved in this ontological-epistemological stance (see Lukacs, 1923/1972). While there are problems in rendering the society and the field devoid of life–as if these are *always already* products of hidden impersonal structures, there are also problems involved in thinking of the field as brimming with life–as an outcome of subjective meaning-making of individuals. The objectivist-positivist approach mystifies the field as a discrete unit of larger society, embodying hidden workings of structural principles in its minutiae, which the sociologist ought to unravel. Champions of interpretation, on the other hand, romanticize the field as a domain of subjective interpretation of structural prerequisites (see Weber, 1949) or subjective re-interpretation of prevailing interpretations in the social milieu under study (see Geertz, 1973, 1983). The sociologist is required to work through varied layers of meanings and interpretations prevalent in and relevant to the field, only to incite and poke them, so that the field purportedly begins to speak for itself. Both mystification of the field as non-person and therefore as supra-human or supra-individual, or romanticization through acts of personification, attributing the field the capacity to speak for itself, operates within an epistemic configuration where the field is seen as *a priori*. Positivist mystification and interpretative romanticization amounts to thinking of the field as an object independent of the knower, which the latter ought to know: explain or interpret. While objectivism-positivism demands detachment and distancing, subjectivist-interpretative approach calls for immersion as a way to incitement, yet chooses to overlook the active contribution of the knower in constitution of the field as an object of knowledge.

In such thinking, downplaying of the sovereign knower of positivism and attribution of agency to the field deprives the knower legitimate place within knowledge production.

This is not a call for reinstating the sovereign knower in position of power but a plea to bring the knower back into the scene of knowledge production, along with its baggage of power asymmetries, ideological foreclosures and systemic hierarchies. It is plea against moves that obliterates the sovereign knower from knowledge production, because suspending the sovereign knower does no good, towards acknowledging the mark of sovereign knower and attempting to respond to critical issues involved therein. Dissolving the sovereign knower in the hermeneutic weave of the field does not dissolve the power of the sovereign knower. Rather, power goes unacknowledged through naive glorification of meanings and motives of individuals. This amounts to a politics of knowledge which sees the sovereign knower as unmediated and immediate, and its hermeneutic dissolution as final. Beyond such naïve stance, one possibly needs to ask while seeking the field: *what is left of the field if it is not constructed in certain ways based on certain assumptions and observations by the sovereign knower*?

Field as constructed object

The relation of the field to the researcher–the sovereign knower is *always already* a relation of subjection and the field therefore, logically speaking, is *always already* subordinate to the knower. This is because; the knower constructs the field *as such* as an object for analyses. Such idea derives in part from Bourdieu and Wacquant (1992). The researcher is sovereign in relation to the field insofar as what counts as field is a construction of the researcher. This relation of sovereignty and subjection between the knower and the field is integral to the process of knowledge production or any specific study or research for that matter. When a researcher studies a particular aspect of society, because of the very fact that he or she cannot have, given the finitude of human knowledge or corporeal limits of human body, complete grasp over the population, their experiences, objects, spaces, technologies and subjectivities related to that particular aspect, cannot lay claim to any exhaustiveness and completeness of knowledge of the field. The researcher therefore works through the challenges thrown up by the finitude of human knowledge and corporeal limits to construct the field, through available materials, like Levi-Straussian (1962/1966) "bricoleur". Plain critique of the sovereignty-subjection relation is no reversal of the essential subject-object opposition and hierarchy in knowledge production. How the knower minimizes the sovereign relation to the field, the subjection of field to the knower, the former being a construction of the latter, depends on how the researcher as knower negotiates epistemic agency and the demands of an ethical and political response to the immanent asymmetries and hierarchies of various orders intrinsic to the field and social life in general.

However let us not assume that since the researcher studies the field constructed as an object for research, the act of knowing becomes linear and uncomplicated. While there are reservations with personifying the field, attributing it with life, there is no denying that the field is contingent. It is for this reason that the researcher faces immense challenge trying to engage the field constructed as an object for research. Construction however is a much used and abused term in social sciences, especially in sociology (Hacking, 1999). There is no inherent fallacy in arguing that a particular institution or practice is socially constructed. Much of sociology is all about pointing out the ways in which institutions and practices *come to be what they are*, given the de-naturalizing gesture of sociology. But when constructivism becomes the be-all and end-all of a social science, there are obvious problems. To show how, like Foucault (1969/2002), a set of institutional practices or subjectivities are constructed over time through discourses is to engage in sociology proper. To say, however, that institutional practices or subjectivities are constructed, without throwing light on *how* they become what they are, under what conditions, is to engage in a project of framing question to an answer, and that too with great certainty.

A reflective engagement with constructivism would require greater space and perhaps a more legitimate occasion. Methodologically speaking, dissecting constructivism as an approach to the understanding of social reality would require thinking of reality having many orders. What we see around as lay men is the first order of reality, which appears as self-evident through processes of naturalization. A critical perspective poses questions about how and under what conditions the first order of reality comes to achieve self-evidentiality. The second order of reality is a construction of experts–sociologists or other disciplinary experts. How disciplinary practitioners look at society is different from and opposed to how lay men conceive of society. This is because, specialized modes of seeing or conceiving reality becomes deeply ingrained in expert consciousness through institutional and disciplinary training. A trained sociologist travels from first order to the second, trying to point to the modes in which certain institutions, practices and experiences or subjectivities become so naturalized that their constructedness is not called into question. Through concepts and theories, sociologist offers a vision or image of what society would be like had certain naturalizations not veiled it to construct an apparent reality (Berger, 1963). The assumption here is that the first order of reality is inherently veiled, and the task of the sociologist is to unveil or excavate the real.

There is no substantial reason to assume that the second order is more real than the first. The second order, in its positivist and phenomenological ramifications, is mere approximation of what society should have been had certain naturalizations not taken place or occurred, and cannot therefore claim any absolute authenticity in the representation of social reality. Beyond acts of representation, reality itself has no inherent authenticity to it. Such position has been held by those who foreground the limits of the real and real as a function of representation (Clifford & Marcus, 1986/1992). Methodologically speaking, to be a sociologist therefore, is to dwell at the level of representation, not reality. This is because; it is through construction of the field as an object and its representation (in this thesis through cartographic techniques and discourse analysis) that sociologists attempt to make sense of the field. But then, there is no consensus among sociologists about how such representations are to be constructed. Even most critical and acutely sensitive sociologists present their representations as real. Not that they do it consciously–the underlying assumptions of the epistemic configurations within which they operate predispose them to such conclusions. Some work with a fixed conception of the field, conceive of it as constituted of specific finite elements. In which case, the construction of the field is such that contingency is ruled out.

Those sensitive to the potentials of contingency ought to work with a conception of field as an object-in-construction, rather than a constructed object. To say that sociologists or sociological researchers ought to work with a conception of field as object-in-construction is not a compensatory move, trying to reinstate the field to a position of autonomy and agency in a matrix where the field is dependent and in derivative relation to the sovereign knower. Rather it is an attempt to rule out attribution of any finality to the construction of the field as an object of analyses. The epistemic agency of the sovereign knower does not merely reside in the construction of the field as an object of analysis, but in the arduous task of constantly reconstructing and redefining it in response to changing situations while recognizing his or her own contribution and claim to such construction, obviously in collaboration with other interlocutors, and the fallibility that punctuates the process.

The accommodation of newer elements leading newer conceptions however cannot unfold endlessly. Research is a time-bound activity. The researcher has to arrive at some point to a closure, by way of making a critical decision, where to suspend the openness to continual redefinition. Continuous deferral to completion in final construction can amount to complexities that have the potential to hit the researcher hard. Research in general is bound by institutional requirements of completion within time, either of submission of the thesis for award of a degree or writing of a field report for a project funded by the government or a non-government agency. This is also true of book projects funded by capitalist publishing houses. Whatever maybe the reason behind conducing the research, the knower's sovereign control over the object of knowledge is inevitably constrained by structural and institutional requirements. Therefore let us also not fall into the trap of conceiving the sovereign knower as autonomous–*nothing remains of the researcher unless there are entrenched structural and institutional frameworks that invest the researcher with power and agency*.

Field as situated discourse

This is not an ethnographic study in the conventional sense of the term. For a research monograph to be counted as ethnographic the researcher has to answer questions about the length of time spent in the field, the language, customs, practices and everyday life of people therein and so on. The researcher is expected to respond to these canonical questions through qualitative references from the field. Not only such questions are raised in job interviews, a good ethnographer sees answering these questions as disciplinary obligation. The way a number cruncher is required to answer questions about sample size or units of analyses. In a similar manner, an ethnographer is also bound by the protocol of honesty to the method (Srinivas, 2002) and dictums of scientific proof. Apparently what distinguishes a number cruncher from an ethnographer is former's preoccupation with quantified data and the latter's interest lies in emotions and experiences, and socio-cultural aspects unique to a particular locale or milieu, but both are bound by the scientistic requirements of institutionally funded or guided research. To think that the recourse to ethnography results in exploring human freedom is a naive underestimation of institutional scientism's cutting short of human excesses or reprimanding of human limits in the process of knowledge production. Excesses and limitations are integral to knowledge production and an ethico-political orientation to knowledge production ought to account for these excesses and limitations rather than obliterate them. Philosophical anthropology has gone ahead in engaging the excesses and limits of human experience and existence (Das et. al, 2014).

In early 2016 as a doctoral research candidate, I was gradually trying to get familiar with the practice of organ donation and transplantation. I was reading up the available materials and paying occasional visits to the Ganadarpan office–an organ donation initiative located in south Kolkata, to attend their programmes with the motive of gradually becoming a familiar face. The strategy was not to force my research onto them but develop familiarity, if not the glorified ethnographic ideal of friendship. One of the initial objectives of the then proposed research work was to speak to people who have donated organs or undergone transplantation and know about their experiences. Based on previous experience of research in assisted reproduction and the biomedical field, I knew it would be challenging to get the contacts of organ donors and transplant recipients from the hospitals, be it public or private. Ethical committees usually take a lot of time to arrive at conclusive decisions regarding whether researchers are to be allowed within the hospital space, and permitted to speak to patients and collect information.

Transplant recipients are vulnerable to serious health hazards in the post-transplant phase, for which they are quarantined and follow up takes place. It did not appear ethically permissible to even think of speaking to the recipients–which would expose them to the risk of infection. Asking for information about live donations appeared equally problematic, given the fact that I was not only an outsider to the characteristic experience relating to organ failure, I was also outside the expert, biomedico-therapeutic domain of organ transplantation. The practitioners would not speak about live donors to outsiders given issues of anonymity and illegalities related to live donation. The hospital premise therefore from the onset of the fieldwork did not figure at all as a physical site from where I could gather information, although this perception altered later on. Information barriers were multiple and I could not think of the hospital premise as my field for fieldwork. Therefore I had to think of alternative spaces to gather information–where actors would show interest in sharing information. Organ donation initiatives appeared as most accessible and safe in this regard. Since donor initiatives want to gain popularity, their concept of insider-outsider is more fluid compared to hospital premises, especially the transplant centers, where it is extremely challenging to speak to the doctors involved in organ retrieval and transplantation. Not only they are busy and not ready to speak to anyone randomly. There are professional protocols which renders enquiry by outsiders not involved in the process of transplantation, either as donor or recipient or facilitator, as unnecessary and to be avoided. No response or deferral of response to queries of the ethnographer is opposed to the demands of time-bound research, which necessitates contemplating alternative strategies of doing fieldwork.

Within the institutional space of the hospital, outsiders are seen with suspicion, which is not the case with organ donation initiatives. I had therefore started participating in the programmes of Ganadarpan from the beginning of my research in 2015. I went to their office to participate in their annual lectures and general body meetings. There was great hesitation in the initial days, which lingered for a long time, because the group was small, with participants having familiarity with each other–being long time comrades in the movement. In the beginning, I was not very keen about immediately divulging my identity as a research scholar and wanted to present myself as an advocate of the movement–which is no deception.[31] From my early encounters with the organization and its members I had realized that they were open to participation by outsiders. But I was aware the moment I present myself not only as a lay sympathizer of the initiative or an ardent advocate of rationalism but as sociologist researching organ donation and transplantation–I would immediately become

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[31] This is indeed no deception, rather a coping strategy with the expectations that may generate with divulging of my identity as a researcher of organ donation and transplantation practices.

subject to specific role-expectations, which I did not want at that point of time. This however could not continue for a long time. I realized unless I present myself as a researcher to the activists, my presence would not count. I attended several open-door meetings, took notes, and collected information about the history of organ donation in general and the specific trajectory of organ donation initiatives of Ganadarpan in West Bengal and India. But soon found that the content was repetitive and had reached a saturation point insofar as gaining new insight from every new meeting is concerned.

Detached observation had to come to an end and active participation had to begin but hesitation was immense. The activists, many of whom were medical practitioners working in well-known government and private hospitals, spoke unequivocally against the superstitions and misconceptions related to organ donation and how essential the movement is for saving lives of people suffering from end-stage-organ-failure. Non-experts but staunch believers in the spirit of rationality, science and technology spoke confidently about organ donation, transplantation and the movement, its predicament and the way ahead. I felt challenged to introduce myself as a researcher of the domain, thinking there would be expectation about me knowing substantially about the ground reality of the movement, which I did not dare say I had. Apart from this personal discomfort, I had also realized by then that locating within Ganadarpan initiative will provide only a partial perspective of the complex problem at hand. As a starting point it is good enough but there is a necessity to go beyond–*to the domain of discourses, and not remain necessarily confined to specific ethnographic locales*. A research concerned with organ donation and transplantation cannot just locate itself *viz-a-viz* donation initiatives, there are other domains and discourses associated with and implicated in it–from the juridico-institutional apparatus of transplant regulation, biomedico-bio-technoscientific realm of organ transplant professionals and bioengineering companies engineering animal alternatives to human organs, to the realms of human experiences of pain and suffering due to organ failure at the two ends, with an array of multiple other discursive complexities in-between.

But there were worrisome philosophical and methodological questions throughout the research. How can a study originally aiming to ethnographically orient itself to the humane problems of life and death, and the struggle against imminent death reorient itself to study of discourses? How can discourse analysis as a method retain profound sensitivity about the world of human existence? Is there any fundamental opposition between ethnographic study and analysis of discourses insofar as studying human predicament is concerned?

This takes us to theorization of field as situated discourses, that derives from a conceptual matrix that chooses to work with and not deny the concept of field so integral to sociological and social anthropological studies as discrete physical locale or social aggregate with cultural markers as boundary but reconceptualize it. Such reconceptualization links ethnography to discourses, while remaining sensitive about the groundedness offered by the conjunction of situations and situatedness as variables in establishing the link between the field and discourses associated with it.

Situations as middle-ground between social structure and individual agency has special epistemological significance in such reconceptualization in that situations while surpassing the duality of collectivism-individualism retains traces of conversation between the two, materially and ideationally. Situations as panacea for the limitations of the concept of field as physical space or locale has the potential to embody the dynamics between structure and agency, collective and individual, societal determination and free will via material and ideational effects. Situations are fluid and open-ended in that they are not necessarily bounded by definite physico-political boundaries, and are conceptually contiguous to discourses in that they enact free play of sociological possibilities (Derrida, 1967/2002), albeit there are institutional and ideological forces which suspend or foreclose them. With reference to this research, the field defies physical spatiality and the way the problem related to the field is posed for research rules out possibility of only looking at specific physical locales for sociological and anthropological data. A celebrated method these days for the study of complex, disparate, yet interconnected, overlapping contexts is multi-sited ethnography (Marcus, 1995). This involves the ethnographer navigating multiple physical locales and social milieu to collect necessary information. For studies where the nature of interactions (see Figures 1.1 & 1.2) between diverse structural-institutions (biomedicine, biotechnoscience, law), organizations (organ donation advocacy initiatives), groups (journalists and activists), networks (transnational organized organ trafficking rackets) and individuals (transplantation experts, organ scouts, patients with organ failure, their immediate relatives and care-givers and so on) overflow discrete physical locales and their boundaries to discourses which cannot be crudely reduced to their physical sites of emergence, necessitates working with a concept of field as situated discourses which enables the research remain open to multiple possibilities–involving parallel, intersecting and overlapping sources of knowledge and information related to interacting institutions, organizational initiatives and subjectivities.

The fact that the research retains sensitivity to all the three important sociological dimensions: institutional, organizational and subjective-experiential–demonstrates that the concept of field as situated discourse does not function to the detriment of subjectivities involved in the constitution of situations, rather it helps locate subjectivities in constant dialogue with and amongst themselves in particular situations and with wider institutional-discursive realms like biomedicine, biotechnoscience and law on the one hand, and the organizational-discursive realm like organ donation initiatives, new or old, on the other.

Strategies of mapping the field

Initial attempts to explore organ donation and transplantation worked with the assumption that the best way to get a sense of such an “imbroglio” would be to resort to the ethnographic method and generate a monograph out of the interaction that unfolds on the field. But things did not work that way. It was a disconcerting encounter with the philosophical and ethnographic naiveté in me. Eventually I chanced upon two books which were to change the way I thought my study should move in a particular direction: *Disciplining Reproduction* (1998) and *Situational Analysis* (2005), both by Adele Clarke. The latter informed by approach in unexpected ways in that it promised a way out of the deadlock between collectivism and individualism by positing the situation as the entry-point and discursive premise for understanding the sociality of organ and their travels.

Clarke’s (2005) postmodern situational analysis is mainly an extrapolation of Glaser and Strauss’s (1965, 1967/2006) cartographic-grounded approach to the analysis of complex situations. The advantage of cartographic approaches or strategies of mapping, according to Clarke, is that they help the sociologist construct the situation or object of investigation under study empirically; indicating that through mapping techniques the sociologist can approximate mediated representations of the complex situation under inquiry and point out the constituent elements of the situation and relations that obtain among them. Orienting oneself in terms of situations, conceptually and empirically, in Clarke’s view, enables the researcher move beyond the duality of structure and agency, and the presupposed fixed relations between research methods and tools, and data sources to the opportunity to involve in intra-method and inter-method triangulation in the study of complex situations. Clarke suggests three mapping techniques: a. situational maps representing who and what are there in the situation and what kind of relations obtain between them? b. social world or arena maps representing the perspectives, objectives, technologies, techniques or objects, if any, and inherent opportunities and constraints[32], and c. positional maps representing major positions taken in relation to the problem at hand–the discursive contestations and discursive silences, if any. Major elements of the situational, social world or arena and positional maps taken together help us generate project maps which provide the larger picture constituted of specific situational social processes. The critical edge mapping strategies have over other research methods is that they enable pictorial representation of the incomprehensible complexity of social situations, and sociological analyses of stable patterns, subtle or open contestations, instabilities and subversions built into them, and the marginal perspectives overshadowed by dominant patterns by recourse to an array of data collection methods and data sources–survey, ethnographic, archival, visual, discursive and so on (see Clarke, 2005).

An elaboration of how Clarke's (2005) postmodern situational analysis is deployed in this thesis with reference to the "imbroglio" at hand is essential at this point. However a caveat before I proceed any further with the elaboration of the maps: situational, social world or arena and positional, that have been deployed in this thesis: I have not included social worlds or arenas map as they overlap with social situations in many cases, and have incorporated only those aspects which definitionally intrinsic to each mapping technique. I have represented only those aspects which represent the complexity of the "imbroglio" in its rudimentary form. The maps and strategies of mapping deployed in the research chapters primarily attempt to demonstrate this complexity with regard to specific objectives of the research. This section of the chapter is mainly devoted to demonstrating the complexity of the situation under study rather than resorting to relational analyses of the situations or constituent elements therein. Strategic mapping of complex situations and relational analyses is pursued in the research chapters and concluding chapter of the thesis.

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[32] Social worlds or arenas map has been used only in the first two chapters which deal with complex situations of biomedical law and biotechnoscience in relation to the field of organ donation and transplantation.

Figure 1.1 is a situational map which represents the situations under study. The situational map demonstrates the organ donation and transplantation laws with reference to India, transnational organized illegal organ trafficking, organ transplantation experts, bioengineering companies involved in transgenesis[33] and xenograft engineering initiatives, genetic engineers, pharmaceutical market of immunesuppresives, organ donation initiatives, old and new, the experiences of people exposed to organ failure, donation and transplantation and the self of the researcher as key constituent situational elements. Figure 1.2 is a positional map representing the main discursive positions in relation to the “imbroglio” or problem at hand. The main positions include the biomedico-juridico-institutional apparatus which promotes organ donation and transplantation, and curbs organ sale, the biomedical-bio-technoscientific realm which deploys various technoscientific means to save life against organ failure and generate new means of engineering animal alternatives to human organs in response to organ scarcity and poor organ donation rates in some parts of the world, the organ donation initiatives, of which the new advocates any form of donation, while the old focuses on cadaveric donation, the media personnel and journalists who posit organ trafficking as an organized crime involving medical professionals in contravention of law, the animal rights’ activists who point to animal violence in xenograft engineering initiatives and human rights’ activists who point out corporeal violation of the marginalized in transnational organ sale. The latter three positions represent oppositional positions, ones which result in discursive contestations. The experiences of the people exposed to organ failure and difficult search for donor organs and experiences of the researcher jointly engender perspectives which reiterate

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[33] An experimental process of introducing a gene from one organism into the genome of another to produce a transgenic organism or animal. These are animals with a foreign gene inserted into their genome.

and subvert cardinal and oppositional positions, thereby generating greater dissonance in grappling with the “imbroglio” of organ donation and transplantation.

Having offered cartographic insights into the complex concerns associated with the wide-ranging situations related to the “imbroglio”–from local to the global, the individual-experiential to the collective-structural/institutional and so on, the next section proceeds to provide details of the various data sources and, methods and tools of data collection that have been deployed and triangulated in the study.

Data sources and their triangulation

The first two research chapters look at the institutional realms of biomedical law and bio-technoscience integral to the biomedical technology of organ donation and transplantation. The first research chapter engages THOA 1994 with reference to India, its subsequent amendment in 2011 and revised rules published in 2014. This chapter engages in an exegesis of the original law and its subsequent amendments as biopolitical texts. This chapter engages national and international online or digital newspaper reports of cases of illegal organ removal or organ theft in India in contravention of THOA 1994. It also looks at professional journals of the practitioners of organ transplantation in India. Articles published in the *Indian Journal of Transplantation*–the official publication of ISOT[34] have been used in this chapter to track the ways in which medical professionals respond to the law with reference to its successes and failures in boosting organ donation in India. This is because, the latter’s involvement in organ theft and sale is widely reported by media attributing transnational organ trade features of white collar crime.

The second research chapter looks at biotechnoscience more specifically–which is an inherently dynamic discourse. The domain of biotechnoscience in relation to organ donation

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[34] Indian Society of Organ Transplantation.

and transplantation is multi-layered, characterized by constant intellectual accretion through research and experimentation. Rather than looking at the technology of transplantation *per se*, this chapter focuses on a parallel domain of biotechnoscientific research connected to the realm of organ donation and transplantation, through case studies of two U.S.-based bioengineering companies, namely, Revivicor and eGenesis, involved in gene editing[35] and genetic engineering to produce cloned or transgenic organs[36] for xenotransplantation. Apart from a general textual analysis of website contents of Revivicor and eGenesis, this chapter engages in a critical reading of their press releases as discursive texts to analyzing their achievement claims. It resorts to biotechnoscience journals like *Science* to track the ways in which genetic engineers showcase their achievements in addressing organ failure through fine gene editing tools and transgenic organs. This chapter also looks at a parallel domain–the emerging pharmaceutical market of immunosuppressive drugs through market projections of three big market research firms.

The third and fourth research chapters look at organ donation initiatives, old and new, as the organizational or meso-level of analysis, in between larger biomedico-juridico-institutional realms of law and its contravention, and biotechnoscience on the one hand and the immediate interpersonal and human experiences relating to organ failure, donation and transplantation on the other. The third research chapter focuses on new organ donation initiatives, and reads the website contents and online awareness generation materials of three chosen cases as texts, namely, Mohan Foundation, and its Anudaan program, conducted in collaboration with Milaap, a popular crowdfunding organization, ORGAN[37] India and Shatayu. Ethnographic instances are deployed to substantiate the claims. The fourth research chapter centers on a symptomatic analysis of the awareness generation material of an old organ donation initiative–Ganadarpan–a left-leaning rationalist, social reform movement that

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[35] Cluster of technologies and techniques that can alter or change an organism’s DNA.

[36] Organs derived from a transgenic animal.

[37] Organ Receiving and Giving Awareness Network.

came to existence in West Bengal in late 1970s and pioneered organ donation initiatives in India. This chapter looks at various publications of Ganadarpan such as their monthly journals, occasional booklets and pamphlets, both in English and Bengali, collected from Ganadarpan office or archive at D. L. Khan Road in Kolkata[38]. Insights from situated personal experiences and ethnographic narratives and encounters gained during participant observation in the activities of Ganadarpan have been deployed in this chapter to substantiate the claims or generate dissonance between organizational claims and purported ground reality.

The fifth and sixth research chapters reflect on subjectivity and self of the researcher and the others having immediate exposure to experiences that uniquely characterize situations of organ failure, need for a donor organ and subsequent transplantation, if at all possible. The engagement with the question of subjectivity completes the triadic schema of analysis having traversed larger institutional domains of biomedical law and biotechnoscience and meso-aggregate or organizational level of new and old organ donation initiatives in the preceding chapters. The fifth research chapter traces the social life of organs. Towards this end, this chapter emphasizes the human place of the researcher within the ethnographic text and contextualizes the problem by recourse to unfortunate personal experiences and serendipitous encounters within the field which informed the perception and knowledge of the field. Exposure to situations not only generates self-knowledge but knowledge about others–those suffering from CKD[39] and requiring dialysis and support from family, kinsmen and friends. Exegesis of the self of the researcher in encounter with organ failure unfolds parallel with the exegesis of the life-experiences or narratives of the others in this chapter and culminates in the following chapter. The fifth research chapter has the researcher engaging the field of

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[38] I visited the Ganadarpan office at this address in south Kolkata several times in 2015-2016 and late 2019.

[39] Chronic Kidney Disease–A long term condition where the kidneys fail to filter bodily wastes and excess fluids leading to fluid retention within the body.

situated discourses primarily as a participant–the observations were culled out from memory later on with the realization that these constitute essential ingredients (dis-ease, anxieties, silences, discomforts, serendipitous knowledge) of the narrative in the thesis.

The sixth and final research chapter looks at experiences of people directly exposed to organ failure and ways in which they negotiate imminent death and the psychological and interpersonal struggle involved in finding a donor organ for a relative or a loved one. This chapter is mainly based on ethnographic insights culled out from narrative encounters with people in front of the then newly established Renal Transplantation Unit at the S.S.K.M[40] hospital in Kolkata. The information is not culled out from ethnographic interviews *per se* but constituted of open-ended conversations with people in and around the physical site of Nephrology building of S.S.K.M. hospital, about their experiences of organ failure of their near relatives and how they coped with it. This chapter has the researcher engaging in observation, coupled with documentation and critical use of spontaneous responses and situated narratives of people, unfortunately thrown in a challenging situation to questions, during conversations and queries.[41]

Situationalism as approach to the study of "imbroglio"

This chapter dedicated to the discussion of the method of this study with deeper rumination on social and sociological research as a practice embodying dialectic between structural constraint and individual freedom. While constraints loom large, the desire for intellectual freedom is as abysmal as constraints on freedom. The question that remains therefore: *how does individual or intellectual freedom manifest under such circumstances?* It obviously does

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[40] Seth Sukhlal Karnani Memorial Hospital. Now renamed as Institute of Post Graduate Medical Education and Research, Kolkata. Still popularly called S.S.K.M.

[41] Although I began the fieldwork with an unstructured interview schedule, attempting to get a sense of experiences of people at the throes of organ failure but gradually realized how difficult and ethically problematic it is even seek an interview appointment with such people, to carry out even an unstructured interview. Causal interaction leading to deeper conversations with key categories in mind appeared to be urgent mode of negotiation with the field reality.

not involve superseding constraints on freedom to a state of authentic or originary autonomy or agency. The sovereign knower is as constrained by the social circumstances of knowledge production very much like the field that he or she constructs for research. The manifestation of freedom and the desire that propels it therefore has to be located in the series of careful recognitions and disclaimers that the sovereign knower ought to provide for the choices made and decisions taken thrown in circumstances beyond control, with regard to methods, tools and techniques of research. At the most rudimentary level, freedom manifests itself in the caveats and exceptions that the researcher states and claims. Playing around with intellectual freedom, in this study specifically, begins with the recognition that representations are mere approximations or analytical depictions of the imagined real. The field is a constructed object or an object-in-construction, which is not to be traced solely to its bounded physicality or locality. Inspired by methodological situationalism of thinkers like Clarke (2005) and Knorr-Cetina and Cicourel (2015), the field is reconceptualized as an effect of situated discourses. It is empirically constructed for sociological analysis through techniques of mapping, where there is no claim relating to any authenticity in depiction. Rather there is an acknowledgment that the field is a cartographic representation of the imagined real. For studies of complex "assemblages" (Ong & Collier, 2004) like organ donation and transplantation coupling of cartographic representation of multiple interconnected, overlapping situations characterizing the "imbroglio" at hand with multiple data sources and techniques of data collection is clearly unavoidable. Therefore the thesis chooses not to fall back upon mono-methods to deploy Bourdieu and Wacquant (1992). It is however no celebration of choice or volition. Rather the very nature of the "imbroglio" calls for a treatment that contently relies on multiple data sources, and data collection methods and tools to develop a sense of what the complex of situations and associated discourses are all about. If mono-methods are forcefully thrust upon studies which require approaching from multiple points, research falls flat and treatment fails to capture the complexity of the problem at hand.

The study of organ donation and transplantation as an “imbroglio” necessitates deployment of techniques of representation or strategies of mapping, after Clarke (2005), of social situations constituting the field. Techniques of mapping of situations do not work with the assumption that pictorial-analytical depiction is representative of the real. Rather it recognizes the impossibility of representation of the real–its incompleteness and partiality (Clifford & Marcus, 1986/1992)–without giving in to any pessimism about the future of sociological and social-anthropological research. Techniques of mapping depict the field and its construction as an effect of intersecting, overlapping situated discourses. Constructedness of the field in such a gesture is not taken-for-granted. Field is neither mystified like positivists-objectivists do, nor is it romanticized like the interpretivists-subjectivists. The objective is to tentatively approximate the “imbroglio” the discursive and ethnographic field stands for, by pointing out what animates situated discourses characteristic to the field and what relations obtain between them. In such a gesture, there is an explicit recognition that mapping techniques and analytical tropes deployed therein are neither exterior nor posterior to the field. It is in and through mapping techniques and analytical tropes that the field begins to materially and ideationally (and probably ideologically too) embody and effect certain situated discourses. The groundedness of analysis in such gesture, to draw from Clarke (2005), does not emanate from the field as a physical space or locale but from the recognition that discourses overflow physical or spatial boundaries, engagement with which require a total rethinking of the concept of field as situated discourses. The critical edge of such conception of field is that it bestows upon analysis a far more grounded character which a traditional ground theory approach to social reality probably fails to offer, while refraining from turning the field into an alleged free-floating postmodern fiction.

Chapter One

Organ Theft, Dispensable Bodies and the Biopolitical: The Macabre at the Limits of Law

At the interstices of state, medicine and morality

Foucault (1973/2012) has historicized the institutions and practices of health and medicine. Central to this historicization have been attempts to demonstrate that health and medicine–institutions and practices concerned with reinstating diseased body to state of normalcy, consistent with the imperatives of life, is linked to conjoint maneuvers of police state and public morality (see also Canguilhem, 1966/1978). Mutual inter-implication of health and medicine on the one hand and state and morality on the other is not redundant to a project that seeks to engage the life-fostering imperatives of a biomedical technology–organ donation and transplantation (Foucault, 1973/2012, 1978). Such discussion helps lay out the larger context for engaging how the biomedical technology and the body of law circumscribing it, aiming to foster life engenders, encounters or negotiates its other–the macabre–newspaper reports of organ theft or illegal organ removal in this chapter. To trace the itineraries of this interface, it is imperative to locate the investigation at the interstices of discourses of state, medicine and morality as the primary analytical move to address critical questions at hand.

Foucault (1973/2012) observed that in post-revolutionary France, the state came to "exercise a policing function over all aspects of health" (p. 35). There were proposals to establish a health court to try individuals who perform "direct or indirect application of the art of health" without expertise (p. 34). It was proposed that the court would concern itself with "professional abuses, inadequacies, and imperfections ... of the medical state" (p. 34-35). An executive body was proposed that will "prescribe" what to read, write, and research, and document treatment protocols for diseases, and suggest what medical practitioners ought to "publish" on, and describe studies being carried out in other countries (p. 35).

For Foucault (1973/2012), "linking medicine with the destinies of states" was a crucial move in that in seeking to impact life "positively", the medical state did not merely promise to benefit individual citizens, it attempted to determine the future of the state (p. 39). The medical system emerged not only as a "body of techniques" and knowledge about curing diseases, it essentially fashioned itself as the "knowledge of *healthy man* ... a study of *non-sick man* and a definition of the *model man*" (emphasis original, p. 40; see also Canguilhem, 1966/1978). In the normative act of defining what constitutes the "healthy" and "model man", the medical system, in Foucault's words, became the authority which "advised" basic biological parameters and "dictated" the ideal "moral relations of the individual" and society at large (p. 39-40). Keeping this as the premise, the following section disengages the THOA, 1994, in India and its subsequent amendments, after the Foucauldian formulation relating to concomitance of the ideologies of state and the techniques of medicine and medical practitioners functioning as "guardian of public morals" (Foucault, 1973, p. 45-49). In relation to THOA, the Indian state is the custodian of citizen bodies and the biomedico-legal apparatus is morally responsible to promote ethical deployment of organ donation and transplantation technology towards larger public good. Newspaper reports suggest that such deployment is punctured by immorality. Whether this fall from accepted moral standards relating to the citizen body is intrinsic to law is the main question.

Critical engagement with biomedical law is a crucial step towards disengaging the immoral–the macabre domain–one that represents the reversal of life-fostering gestures of the biopolitical state and life-enabling biomedical technologies and practices of organ donation and transplantation and laws surrounding them (see Figures 2.1 Situational Map & 2.2 Social World Map).

Reading THOA as biopolitical text

In India, the THOA 1994 (https://main.mohfw.gov.in/sites/default/files/Act%201994.pdf) or organ transplantation law regulates organ transplantation and prevents buying and selling of human organs. The act delineates the limits of legality of the practice and marks the outside– which according to the act is: "commercial dealings in human organs". The law defines organ "transplantation" as "grafting of any human organ from any living person or deceased person to some other living person for therapeutic purposes". Any "payment" made for compensating the donor for removal or providing an organ is a violation of provisions of the law (THOA, 1994).

Asking a few questions may help disengage the Act: the first is: what is to be donated and transplanted? The answer is: the human organ, which is medically defined in the Act as: " ... any part of a human body consisting of a structured arrangement of tissues which, if wholly removed, cannot be replicated by the body" (THOA, 1994).

The second is: which institution or body controls the practice? According to the law, the "Appropriate Authority" constituted of Central and State government officers control the practice and hospitals meant for conducting transplantation. The "Authorization Committee" formed by Central and State governments oversee validity of applications for donation and transplantation. The "registered medical practitioner" with requisite qualification, enlisted in "state medical register" represents higher bodies to stakeholders in the transplantation scene. The "registered medical practitioner" has not only to carry out the transplantation with the help of other experts but also ensure adherence to legal provisions. In short, "Appropriate Authority" regulates the transplant centers, "Authorization Committee" oversees applications and adherence to law, and "registered medical practitioner" is responsible for carrying out transplantations. It is incumbent upon the "registered medical practitioner" to explain the "donor" and the "recipient" about outcomes of the procedure (THOA, 1994).

The third is: what are the major decisions involved? The “Authorization Committee” before taking final call on an application, complying with rules laid down by the Act, satisfies itself whether the following have been taken care of: the clinical determination of a. “brain-stem death” of a “deceased person” in case of cadaveric donation, and b. biological compatibility of a “near relative” as “donor” to a “recipient” in case of live donation (THOA, 1994).

More issues are involved: first, the decision regarding who is a “deceased person” depends on determining whether there has occurred “permanent disappearance of all evidence of life ... by reason of brain-stem death or in a cardiac sense....” This is a clinical decision based on empirical evidence of extinction of life and entry of death into the scene. The second: “permanent disappearance of life ...” according to the law, does not automatically make the “deceased person” eligible for donation–the person should have attained eighteen years and given “voluntary consent” for donating organs for “therapeutic purpose” (THOA, 1994).

This relates to the question of personhood–the individual’s making of a choice or giving of consent to a proposal or possibility of donation before he or she succumbs to death, which marks the end of personhood and entry into the other of life–acquiring the status of the dead. The law states that donation and transplantation for “therapeutic purposes” implies deployment of the donated body or organ in the “systematic treatment of any disease or measures to improve health” (THOA, 1994). The assumption is when a donor pledges to donate an organ or whole body for medical purpose, through reflection and rational judgment; the donor commits to a larger rational-humanitarian project.

Beyond death, if the “near relatives” in lawful “possession of the dead body of the donor” have no reason to believe that the “deceased person” would have at any point revoked consent in favour of donation, the “registered medical practitioner” would begin the process of organ removal. In cases where no pledge was made prior to death, if no “near relative” in lawful “possession of the dead body” has any reason to believe that the “deceased person” would have decided against donation, the “registered medical practitioner” would seek permission from immediate relatives and proceed to the “board of medical experts” for final decision. However, unless the “registered medical practitioner” is satisfied through “personal examination of the body” about “brain-stem death” of the donor–the extinction of all life in the body, should that dead body be at all considered for organ donation. Final decision about organ removal is arrived at only when in-charge of the hospital, an independent practitioner and a neurologist or neurosurgeon nominated by “Appropriate Authority” and the “registered medical practitioner” in charge of the dead body have reached consensus on clinical parameters of death and legality of the donation. If the “deceased person” is a minor–one who has died before attaining adulthood or rationality to decide, parental permission is sought (THOA, 1994).

The Act meticulously mentions the conditions of death under which cadaveric donation is possible. In case of bodies where an “inquest” or police enquiry is to take place, organ donation cannot take place. In case of unclaimed dead bodies in hospitals and prisons, if the body is not claimed by a “near relative” within forty eight hours, in-charge of the institution can proceed for organ removal following appropriate rules. However, the Act states, any person who is not a “near relative” but is responsible for cremating or burying the dead body, has no authority to decide on donation, which means in case of unclaimed bodies, in-charge of the institution has to seek permission from higher bodies before removal of organ. In case the hospital or prison has reason to believe that some “near relative” may show up to claim the dead body, even after the expiration of forty eight hours, the institution shall not proceed for organ removal at all. In case of bodies which have undergone autopsy due to “accident” or death induced by “unnatural” or “pathological” factor, only “competent” authority under the Act can give permission for organ removal, after proper evaluation whether such removal would be of any medical utility. Under normal circumstances, if the "deceased person" has pledged organs before death, and if they are usable, then organ can be removed. If the "deceased person" has made no such prior pledge, organ donation can take place only if the "competent" authority has reasons to believe that the person would not have done otherwise. In all cases, the "registered medical practitioner" shall take the necessary "steps for the preservation of the human organ so removed" (THOA, 1994).

With regard to live donation, THOA 1994 unequivocally states that organs cannot be removed from a living person "unless the donor is a near relative of the recipient". Only if "Authorization Committee" permits can a living person who is not a "near relative" of a recipient can donate an organ out of "affection or attachment towards the recipient or for any other special reasons". If a joint application is made by a donor and a recipient, "Authorization Committee" may conduct an inquiry and decide on validity of the application (THOA, 1994). This is a fuzzy domain and results in manifold illegalities in the Indian context. One such incident was been reported by *The Indian Express,* where a kidney sale racket was busted by the police involving a woman who posed as the wife of a man, who was about to undergo transplantation with her kidney at the Hiranandani Hospital in Mumbai, based on "forged" documents which established the donor as the recipient's wife (see Barnagarwala, 2016).

Proof of kinship in case of live donation is filled with possibilities of violation of the law. This is the third crucial issue. Not all can donate an organ, even if the person is adult and is capable of deciding. According to the law, only a "spouse, son, daughter, father, mother, brother or sister" can donate an organ to a "recipient" (THOA, 1994). There are social limits to the practice of donation and transplantation, which are legally significant. Which also means, even if a “donor” is biologically compatible to the “recipient”, cannot legally donate an organ, if not one among the list of eligible kin earmarked in the law.

The fourth is: where does it take place? The hospital, well-equipped technologically and personnel-wise, is the physical site for donation and transplantation. This is where crucial medical determinations are to be made, and issue of legality taken care of. The Act states that this site could be “a nursing home, clinic, medical centre, medical or teaching institution”. Organ transplantation can be conducted only by a “registered practitioner” at registered hospital. The “Appropriate Authority” formed by Central and State governments “grant”, “suspend or cancel”, or renew registration of such hospitals. It is authorized to “enforce” law, “inspect” hospitals periodically and “investigate any complaint of breach of any of the provisions of this Act”. It may cancel registration of any hospital without prior notice (THOA, 1994). The hospital is the custodian of the dead body to invoke Foucault (1973/2012) not only in the sense of protecting the larger populace from infections of the dead but also by way of putting in place mechanisms which prevent misuse of dead body. The handling of dead body for organ donation and transplantation, according to THOA, 1994, to put in Foucault’s (1973/2012) words, ought to take place “beneath the eye of the hospital doctor” (p. 49).

The fifth is: what are the “penalties” for “offences”? Because transplantation practice is legally circumscribed within hospital space, any person who participates in removal of organ “without authority” is liable to be imprisoned for five years and incur a fine up to ten thousand rupees. If the offence is committed by a medical practitioner, then medical registration of the practitioner is liable to be cancelled temporarily for two years for the first offence and permanently for the second. In case of breach of rules of registration for organ removal, imprisonment can extend up to three years or a fine up to five thousand may be imposed. Attempting to find a person who offers an organ in return of money or making "arrangements" or "advertising" for organ sale, are punishable acts under the law (THOA, 1994). Ultimate authority rests with the Central government, which has enacted the law, and respective State governments, when they adopt the law.

Amendment of THOA in 2011 (https://main.mohfw.gov.in/sites/default/files/THOA-amendment-2011%20%281%29.pdf) brought tissues and their "removal, storage and transplantation" within its purview. Hospitals with specialized transplantation units were rechristened "Human Organ Retrieval Centre". The amendment provided for a "transplant coordinator", "appointed by the hospital for coordinating all matters relating to the transplantation of human organs or tissues … in accordance with the provisions" of the law. The "registered practitioner" is required to work with the "transplant coordinator" to "ascertain" whether any patient housed in the ICU of the hospital has already consented to donate organs at the point of death, from "near relatives", in which case "documentation" for transplantation begins. If such consent is not available, "near relatives" are given option to decide on organ removal. If they show interest, formal application is made to the "Human Organ Retrieval Centre" for removal and transplantation of organ. "Registered practitioners" in the ICU of hospitals not registered as transplantation centers under the Act are also liable to inform "near relatives" of dying patients about donation. The definition of "near relative" is expanded in the amendment of 2011 to include grandparents and grandchildren. This expands the pool of legally eligible potential donor kin (THOA Amendment, 2011).

Like the original Act (THOA, 1994), the amendment disentangles complex issues related to eligibility of the "donor". Foreign nationals are prohibited to be donors, unless "near relatives". "Mentally challenged persons" are ineligible to donate. Apart from the prohibitions, the amendment prescribes that "near relatives" of two separate "recipients" can swap organs in case there is biological compatibility between the first "recipient" and "near relative" of second "recipient" and vice-versa.[42] In such case, an agreement is arrived at for swapping of organs with approval of "Authorization Committee". At the organizational level, the amendment provides for formation of an "Advisory Committee" for tenure of two years to support "Appropriate Authority" to discharge its duties properly. It is to be composed of two administrators, two medical experts, a transplant specialist, and two social workers. In order to address the urgent need of large-scale, rationalized management of "authorized" organ donation and transplantation, the amendment proposes the formation of "National Human Organ and Tissues Removal and Storage Network at one or more places". It also proposes a "national registry of the donors and the recipients" for scientific management and scrutiny of transplantation practice in India (THOA Amendment, 2011).

As regards offences, the amendment states that "Appropriate Authority" can summon any person who is witness to the violation of the law and can ask to produce documents for investigation. It can issue warrants to search clandestine sites or places for "unauthorized removal" of organs. Punishment for involvement in "unauthorized removal" is increased to ten years of imprisonment and a fine of twenty lakhs. The punishment of an authorized medical personnel involved in "unauthorized removal" is increased to suspension of registration for three years for first offence and permanently for second (THOA Amendment, 2011). These new provisions can be seen as a response to the spurt in cases of illegal organ removal. These are meant to address challenges posed by "unauthorized" organ removal with hospital personnel as aide and accomplices in organized crime.

Although there is no attempt to locate a definite shift from the original law of 1994 and amendment of 2011 along a linear-temporal axis, few observations can however be made about the amendment and new directions *viz-a-viz* the original Act:

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[42] This is called organ swapping, the exchange of organs between two families who cannot donate organs to their diseased family member due to mismatch of blood and tissue type.

a. The inclusion of tissues, defined as “a group of cells, except blood, performing a particular function in the human body” in the amended Act, and provision for establishing “tissue banks” point to an increasingly biomedical management of body–consisting of multiple, real or potential, fine biomedical-technological interventions on minute units of the body, creation of “tissue banks” for “storage” of tissues for grafting points towards increasing molecular management of organs and bodies (see Rose, 2007). The proposal to establish national level agencies to network to remove, store and share organs and tissues demonstrate efforts at bureaucratic and centralized management of biological materials through networking agencies established at various regional and local levels. Through national registry of donors and recipients, biological materials in particular and life in general become the object of recording, documentation and enumeration.

b. With advancements in the field of transplantation and emerging technologization of the practice, there has occurred a reconfiguration of the practice via a functional specialization of space–the site of donation and transplantation. In the original Act (1994), the hospital was the designated legitimate place where removal of organs can take place, with the amendment (2011); “Human Organ Retrieval Centre” emerged as the specialized biomedico-technological, interventional site. The lived, micro-spatial site of the ICU became the microcosm for negotiations with biomedical determination and legal adherence. This is how biomedical power realizes the “capillary” *avatar* to invoke Foucault (1975/1995) via legislation. This is not a simple narrative of instrumental objectification of dying or dead bodies; rather this is a move towards dissipation of power and knowledge across bodies and spaces within the wider discursive domain. This dissipation is noticeable in the formation of multiple sites of power–agencies having as their objective better management of life through provisions for and regulation of organ donation and transplantation.

c. The top-down hierarchy of authority clearly laid out in the original Act (1994) is not dissolved in the amendment (2011) even though power becomes more dissipated in its effect and democratized with inclusion of roles such as the “transplant coordinator”, who works with the registered medic to “promote” legal donation of organs. The amendment states that no specialized degree in medicine is required to become a “transplant coordinator”, psychologists or sociologists or social workers can as well take up the role. In its effort to be more public and humane in reach, the amendment paves way for openness in its biomedico-legal hierarchy, by including non-experts, at least, in limited capacity. This is also evident in the constitution of an “Advisory Committee” to the “Appropriate Authority”: including two social workers among transplantation specialists and administrators in the panel. The inclusion of non-experts, professionals from so-called soft sciences or applied social sciences also point to a move towards recognition of extra-clinical nature and social embeddedness of transplantation practice.
d. Increasing rationalization and ethicalization of organ donation and transplantation practice in perceptible in the discursive moves of the Act, original or amended. This involves demarcating in the most rational terms who can donate an organ or body at the point of death. People outside the domain of rationality–the addict or mentally deranged cannot donate because they are unable to rationally decide. Not only clinical rationality determines whether a brain dead patient can donate organs provided there is familial consent and no reason to believe that the deceased person would have decided otherwise, which is also a way of rationally prioritizing rational decision of the live person, rationality as a mental condition in general determines who is eligible

to donate and who is not even in case of live donation. This is the rationalization aspect, whereas ethicalization unfolds in the form of widening the category of live kin or people who can legitimately donate, by including grandparents into the category of "near relatives" and providing for organ swapping. The widening of categories of live kin who can donate indicates how donation becomes an ethical imperative, whereby provisions are offered to ease the process of organ donation and transplantation.

Culmination of rational management of human organs and tissues as notified in 2011 amendment occurs in the Rules of 2014 (https://main.mohfw.gov.in/sites/default/files/THOA-Rules-2014%20%281%29.pdf) with meticulous additions. The sovereign function of the "registered medical practitioner" is decentered in 2011 amendment with entry of the non-expert "transplant coordinator" in the scene. Not that the former disappears from the Rules, but the way minute functions of the latter is laid out shows the significance of the "transplant coordinator" in the emerging scenario. Hiring a "transplant coordinator" with training in any disciplines, namely, medicine, nursing, psychology, sociology, social work or public health, becomes compulsory on the part of the registered hospital (THOA Rules, 2014, pp. 45-7). Coordinators have to counsel prospective donors and recipients about the procedure.

Once certification of "brain-stem death" is obtained, the "registered practitioner" of the ICU along with "transplant coordinator" has to ascertain if organ donation is possible, either through prior pledge or consent from those in "lawful possession of the body". In case the "near relative" decides in favour of organ donation, the "registered medical practitioner" through the "transplant coordinator" writes to the "authorized retrieval centre" for necessary documentation for organ removal. Bringing in of the non-expert "transplant coordinator" into the scene can be seen as a move towards humanizing the practice, without diluting the biomedico-legal strictures of adherence to the law. According to the Rules notified in 2014, the "registered medical practitioner" has to ensure that i. in case of live donation, the live donor has been made aware of the effects of the procedure, ii. the donor is not mentally retarded or physically ill, and iii. proper application and approval has been received, if the donor is a "near relative" or "spouse", or someone other than the two. According to the Rules (2014), like the amended Act of 2011, foreign nationals and minors cannot be donors unless there is approval of higher bodies. In biomedico-legal cases, consent has to be obtained by "registered practitioner" from police authorities, ensuring that organ retrieval does not interfere with the investigation of the "cause of death". In case donation takes place, details of retrieval should be recorded by the "registered medical practitioner doing post-mortem" (pp. 40-1).

Special care is taken in the THOA Rules 2014 to prohibit organ sale involving unrelated donors. The "Authorization Committee" has to ascertain that no "commercial transaction" is involved, actual or promised, between the "donor" and "recipient". The "Authorization Committee" has to satisfy itself about the connection between the donor and the recipient, and the conditions that led to such an "offer being made". Swapping of organ is possible only between "near relatives" of two patients (p. 42). Verification of residential status of unrelated donors is compulsory under the Rules (p. 43). Offers for transplantation from a donor to a recipient, both foreigners, can be made to "Authorization Committee" but donation from an Indian national to a foreigner is not permitted "unless they are near relatives" (p. 42). Documentary evidence is mandatory in case of related donors and recipients. In absence documentary evidence, there is provision for conducting DNA profiling[43] from certified laboratories for establishing genetic link (pp. 43-4). The "Authorization Committee" has to be special care if the donor is a woman.

Few observations are in order regarding the Rules of 2014:

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[43] A process where DNA pattern is obtained from the sample of bodily tissues of a particular individual.

a. The “transplant coordinator” and “registered medical practitioner” have to work in sync with each other, given the fact that critical decisions are to be arrived at while facilitating organ removal. Crucial judgements are involved in determining eligibility for live donation. The introduction of “transplant coordinator” is based on the recognition that donation and transplantation cannot be solely based on declaration of brain death; there are familial, social and cultural barriers to donation. Death is an experientially challenging moment, where rational decision-making confronts a whole gamut of paralysing emotions. Since final decision to proceed for donation is never purely clinical–the counselling and the facilitating role of the non-expert “transplant coordinator” can be seen as humanizing the process of donation towards a larger social, ethical goal and decentralization of power structures of the modern biomedical system.

b. Since the domain is rife with illegality, the decision regarding eligibility of donation, both cadaveric and live, ought to take place under the discriminating and hierarchical gaze of the “registered medical practitioner” functioning under the shadow of the “Authorization Committee”, which in turn has to be careful that the socio-economically vulnerable is not exploited in live donation. Attempts are made to reverse transnational trafficking of human organs from developing to developed world (see for instance, Scheper-Hughes, 2000, 2001), by erecting barriers against donation to foreigners, unless the latter is a relative. DNA profiling is mentioned to determine relatedness. The Rules is extremely meticulous about evaluating motivation behind decision to donate in case of unrelated donors.

Organ transplantation laws in India and their evolving legal discourses can be read as a biopolitical text and entry-point for critique of larger institutional biopolitical discourses (see Figures 2.1 Situational Map & 2.2 Social World Map). This hardly requires emphasis in that THOA unequivocally speaks about the need to protect, enable and foster life in case of organ failure by recourse to organ donation and transplantation. But it is also sensitive about the fact that such technologies tend to generate a field of illegality. Therefore provisions of the law, not only seeks to promote organ transplantation to render life more productive, it simultaneously engages in meticulously earmarking spaces of illegality–involving buying and selling of human organs–which in essence and practice is antithetical to the life-fostering gestures of biopolitical state, the biomedical system and associated legal statutes. As human life and body gets increasingly ensnared in highly rationalized, bureaucratic biomedical strategies of control and management to the extent that biopolitical control is manifested in the most "capillary" ways to invoke Foucault (1975/1995)–the juridico-legal control of life and body in response to biomedical and bio-technoscientific advancements becomes more and more premised on finer distinction, classification and categorization of what constitutes life and death, how to differentiate the living and dead body, and determine brain-death, what constitutes rational decision and consent in the context of organ donation and so on, and most importantly what is legal and not legal under the purview of the THOA. This indicates the futility of citing an opposition between normative and juridico-institutional processes insofar as modern biopolitical dispensations are concerned (Golder & Fitzpatrick, 2009), for morality is the guiding principle in such categorizing and classifying moves. Moral investment and work is intrinsic to such juridico-institutional processes working via state, biomedicine and law (Fassin, 2015). Parallel to an all-pervasive biomedical rationalization are processes of ethicalization and humanization which are significant biomoral forces to reckon with in face of: 1. growing incidence of end-stage-organ-failure which threatens life and 2. illegal organ removals in the absence of legally available pool of donor organs. While promotion of organ transplantation technology and organ donation addresses the former, stringent curbs are fundamental to combat organ thefts and illegal organ removals, widely reported in national and international media, in which medical professionals are also allegedly involved.

In response to the vilification, practitioners of organ transplantation in India have called for stringent measures to curb organ trafficking and a state-led cadaveric donation programme through prompt harvesting of organs after clinical declaration of brain death, as live donation puts transplantation experts in a risky ground, susceptible to allegations of involvement in illegal organ trade rackets (see for instance Shroff, 2019). Whether such widely reported incidents are real or concocted is not something a research of this kind can evaluate, although public anthropologies using human rights' perspective have foregrounded their reality (see Scheper-Hughes, 1995). Rather this chapter proceeds by juxtaposing macabre case reports of organ theft or illegal organ removal against the ever-evolving body of organ transplantation law in India, not to arrive at some conclusive argument about the misuse of organ transplantation technology by those meant to deploy it towards moral and public ends but to examine the nature of power intrinsic to biopolitical dispensations and biomedical technologies in general and practices of organ donation and transplantation in particular, and the internal paradoxes they enact and negotiate. Next in order is an immersion in the domain beyond the legal, having charted out the ways in which the Indian organ transplantation laws reconfigure with time to rationally and legally control and manage the human body and protect it from forces of universal marketization which seeks to render the body and constituent organs and tissues, a commodity to be transacted on the international black market.

Macabre reports of organ theft or illegal organ removal

Exegesis of the dynamic body of organ transplantation laws in India as quintessential biopolitical text demonstrates that it fashions itself as the legal and moral custodian of life and bodies of citizens, not by enforcing organ donation through presumed consent or compulsory donation at death but by promoting biomedically-guided legal practices by clearly earmarking when and under what circumstances organ removal, harvesting and transplantation is legally permissible. Such exegesis proceeds further by (dis)engaging the Foucauldian juxtaposition of law (characteristic of sovereign power of the ancient times) as antithetical to the biopolitical, i.e., modern power (Foucault, 1978). In this engagement, the macabre is a critical category and parallel entry point through which one can theorize how legal enactments as biopolitical texts constantly negotiate the illegal, and in the process constantly (re)moralize citizen and clinical body in case of organ donation and transplantation practice. The domain beyond legal not only incites moralization of citizen and clinical body owing to its macabre visage (as reported in online newspaper reports and articles)–the gross corporeal harm inflicted upon body but also confronts us with: 1. law-making as a dynamic biopolitical gesture–aiming to safeguard the body against death and forces of violence, and 2. the deductive face of biopolitical dispensations in general, of which law is a constituent element–one that seeks to foster life of a privileged populace at the cost of others (see Figures 2.1 Situational Map & 2.2 Social World Map).

To illuminate the cognitive and political space animated by bodies which a productive and positive biopolitical power and biomedical system categorically fails or lays bare to negative forces of corporeal deduction, to invoke Agamben (1998), this section engages in a close reading of three case of organ theft or illegal organ removal, deploying the trope of macabre to come to terms with the selective reversal of life-fostering gesture of organ donation and transplantation technologies in relation to particular social collectivities or bodily subjectivities, in that they engage in inflicting harm on bodies that do *not* matter to use Butler (1993) inversely. Next in order is description of the three cases via online newspaper reports.

The infamous Gurgaon racket

According to an *ABCNews* report, Mohammad Salim Khan was writhing in pain after gaining consciousness and found himself in an unknown place. A man wearing the attire of a surgeon was standing in front of him. When he asked the man what exactly has happened to him, he was told that his kidney has been removed and would be killed if he told about this to anybody. When Khan narrated the story to a journalist, he was housed in the isolation unit of Gurgaon Civil Hospital in the fringe of Delhi. Shakeel Ahmed and Naseem Mohammad were also in the isolation unit and were victims of the scam like Khan. Mohammad Salim Khan, Shakeel Ahamed and Mohammed Naseem were young contractual construction workers and had to wait at a meeting point with similar other men where contractors offered them work in return of meager wage. It was at one such meeting point that they were lured by kidney theft racketeers and transported to another building. They were offered food and accommodation free of cost. Consequently they could not predict any foul play. Gradually all of them were sent to an operation theater in the same building, where tests were conducted and eventually each one of them woke up with pain and scar mark on their bodies and learnt to their horror that their kidneys have been removed (Russo, 2009).

Soon there was a police raid and the three men, along with few other men waiting in line for kidney removal without knowledge were rescued from the three-storey building with advanced clinical and technological equipment. There were care-takers in the building that disappeared when the police arrived. The police found a nearby accommodation where two American citizens where housed. When the rescued men were examined by the personnel at the Gurgaon Civil Hospital, it was confirmed that their kidneys have been removed but with great precision, which indicated the involvement of expert surgeons. The American couple, Joy and Susan Mathew of New York, who had been housed close to the building would have received the kidneys, had the racket not been busted by the police. All the three victim donors told the police that they did not know about the scam and had not agreed to sell their kidneys. Police investigation found that this racket was spearheaded by a doctor by the name Amit Kumar *alias* Santosh Raut, since 1993. He was arrested on several occasions but managed to go scot-free and allegedly conducted around six hundred illegal transplantations. In the scam involving three victim donors[44], Amit Kumar *alias* Santosh Raut functioned with his brother. Another doctor was involved. When the police raided the building, they not only found the victim donors and the prospective recipients, but a long waiting list of forty foreigners from five different countries. Four other aides were found, among them one was a nurse (Russo, 2009).

A *Newsweek* report provided further information about the ghastly scam. According to the report, it was in Meerut–a town in Uttar Pradesh that Mohammad Salim Khan was offered work for three months in Delhi by a bearded man, which appeared a lucrative offer for the informal construction worker. Instead of Delhi proper, he was transported to Gurgaon where he was sedated and his kidney was removed by a team led by Amit Kumar, who has performed several such surgeries with a team over the last ten years, involving a "criminal network" comprising of:

> … four doctors, five nurses, 20 paramedics, three private hospitals, 10 pathology clinics, and five diagnostic centers, police believe, and drew patients from as far afield as the Canada, Greece and the United States. (Overdorf, 2008)

According to the report, Amit Kumar controlled the Gurgaon-centered kidney theft racket, and was dubbed "Dr. Horror" or "Dr. Dracula" by the Indian media. He was arrested for the same charge in 1994 but acquired bail and changed his name to Santosh Raut and continued his illegal operations in and around Gurgaon and Delhi. In 2000, the case being described, came to light when a former victim donor, who was working as an agent or recruit

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[44] An organ donor from whom organ is removed without consent and compensation, through coercion, deception, manipulation or persuasion.

for the racket divulged information to the police. Amit Kumar *alias* Santosh Raut fled the scene when he came to know about it (Overdorf, 2008).

More details about the incident can be found in a *New York Times* report, which states that Amit Kumar somehow escaped and only one of his aides was arrested. The police suspected that more members of the medical fraternity in Delhi could be associated with the racket considering its huge scale of operation. The racketeers were supported by a team of kidney scouts who targeted labour markets in Delhi and Uttar Pradesh, which constituted the pool of vulnerable kidney donors. A vehicle with testing equipment was kept handy so that potential candidates could be tested for match. This is how Shakeel Ahmed was trapped and he told the *New York Times*:

> I had no idea about kidney transplants, but when they made me lied down on the stretcher, I was terrified. I knew that these people meant to do evil to me. When I woke up, a doctor said my kidney has been removed. He said I would be shot if I ever told anyone about what happened. (Gentleman, 2008)

Seeing his son’s predicament, Shakeel Ahmed’s father, Abdullah Ahmed told the *New York Times*:

> I don’t know what we will do. The men who did this should be hanged. (Gentleman, 2008)

India Today reported that the Nepal Police too was behind Amit Kumar who ran a “multi-crore” international racket with off-shoots in Nepal and was able to track him down in southern Nepal. In Nepal, the kidney kingpin and his brother were considered “subject of national interest … for illegally transplanting of kidneys, cheating and criminal conspiracy”. India hoped that the suspected criminals will be handed over to them for further investigation and trial (Press Trust of India, 2008).

In this first case of organ theft or illegal organ removal the victim donors are informal working class and minority men. Moreover what draws attention is the highly professional nature of the enterprise involving skilled surgeons and international scale of activity indicating connection with organized transnational organ trade networks.

Bindol, "the kidney village" of India

According to a *TOI* (2012) report, every second home in Bindol, an Indo-Bangladesh border village of North Dinajpur district in West Bengal, has a person who has sold a kidney to survive in the face of extreme poverty and hunger. Men in the village compel womenfolk to sell their kidneys after they have sold their own. Collapsing agrarian economy, dispossession, poverty and hunger, and intoxication with spurious liquor are the main problems facing people in the village and adjoining areas. The report mentions Razzak, a kidney racketeer, who targets men of tribal origin and convince them to sell their kidneys. Razzak promises them three to four lakhs in return of a kidney but what they actually receive is far lesser. The report says that they know they are "signing their death warrant" when they are enter into an agreement with Razzak who has duped some villagers. Describing the ground situation the *TOI* report narrates:

> Lakshmiram Hansda sold his kidney–and his life–for Rs 80,000. On Wednesday the TOI saw him lying under a tree near his hut, gaunt, emaciated and hapless. He says he is 35 but looks 60. With no land of his own and a wife and daughter to feed, Lakshmiram had gone to Mumbai to work as labourer in 2000, like hundreds of youths. But it brought him little money. When someone offered Rs 80,000 for a kidney, it seemed a good deal. Soon after the surgery, Lakshmiram lost his strength to work. His starving wife and daughter deserted him. He now lives on an NGO's mercy, and is counting his days. (Maitra, 2012)

According to the *TOI* (2012) report, same is the condition of other tribal men such as Munshi Tudu, Jogen Hansda, Chhoto Murmu and Lapong Soren, who have sold their kidneys in return of a meager one lakh rupees. They were into intoxication and did not think about their future. The kidney racket had spread to adjoining villages of Jalipara and Balia. Dulal Jali, a resident of Jalipara, told *TOI* that unable to meet ends as a poor fisherman, he sold his kidney through Kuddus, another racketeer, in return of one lakh rupees and was rendered incapable of working. Another resident of Jalipara, Jatin Jali, had sold his kidney through Razzak in 1998 in return of only thirty thousand rupees.

Victimized men targeted their wives. Astomi Malakar told *TOI* that her husband Dilip Burman took her to Kolkata four years back and she returned with a big scar on her back, clueless why she was admitted to the hospital and had to undergo the surgery. The *TOI* report notes, that some villagers see Razzak and Kuddus as "messiah" as they offer them an escape route from poverty. Anita Jali told *TOI* that she finds nothing wrong in selling kidneys and bargained with agents for a compensation of eight lakh rupees for three kidneys to be sold by her, her husband and father-in-law (Maitra, 2012).

The Citizen reported, like the *TOI,* that Bindol has emerged as the "kidney auction capital" of India. Due to rampant drought, many villagers live at starvation point and are forced to sell their kidneys, which helped them sustain for few months and were rendered ineffective as daily wage labourer the surgery. According to the article, police investigations have revealed that *prima facie* such incidents involved violation of organ donation laws of the country but legal documents of donation were available with the donors. *The Citizen* noted, due to "rural poverty" and "administrative apathy", Jalipara, the fishermen's village, has emerged as the target of transnational kidney racketeers like Razzak and Kuddus, who were arrested after the kidney racket was busted. Razzak and Kuddus were the "kingpins" but there were other agents operating in Baje Bindol and Koyladangi localities. The racket operated in Balia, Dodra, Hemtabad of North Dinajpur and had its spread in South Dinajpur, Malda and in the neighbouring state of Bihar (Bhaduri, 2016). According to *The Citizen* article:

> Abdul Razzaq, the main Kidney trafficker in this area, a resident of Antara village in Bindal, North Dinajpur. Razzaq has been misleading Bindal villagers since 1996 and taken their kidneys against money with the help of doctors and hospitals in Kolkata, New Delhi and Mumbai. Razzaq himself sold his one kidney and also sold his wife's kidney. He was arrested twice. Now he is quite ill and not as active as earlier. But according to unconfirmed rumours, Razzaq is still active in this business in Bangladesh and Nepal. (Bhaduri, 2016)

With reference to Kuddus, the article stated:

> Mohammad Kuddus is another Kidney trafficking agent (*dalal*)[45] in Bindal village. Kuddus is running the racket in Kolkata for the last four years. He has connections with top level doctors and hospitals in Kolkata. Most of the kidney donors from Jalipara and Balia in more recent years sold their sold their Kidney through Kuddus. (Bhaduri, 2016)

These men arranged for kidney sale and duped the donors of the promised amount. Sambhu, fisherman of Jalipara, sold his kidney at a Kolkata nursing home in 2010 through Razzak, for which he was promised one lakh fifty thousand rupees but received only seventy thousand rupees (Bhaduri, 2016).

Unlike the first case, which is about organ theft, this case is one of organ sale. The line of demarcation between the two is very thin; while the former involves coercion or deception as the backdrop of illegal organ removal, the latter relates to the act of sale based on conscious decision of donor. A notion of consent is presumed in it. However coercion or theft cannot be ruled out in contexts of sale where the donors involved are from poor fishing communities at the brink of starvation and poverty. That the donors had legal documents with them is not a necessary indication of their consent. Documentation demonstrates professional mechanisms behind recruiters or scouts who were themselves victim donors at one point in time and hail from marginal groups or communities, working at the behest of larger criminal networks to target other vulnerable men or women in their own community who could be easily persuaded for organ sale in return of meager money or may be cheated of a part of the promised amount like Sambhu of Jalipara or may be cheated of a kidney like Astomi Malakar.

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[45] Bengali word for the middle-men who organize and coordinate illegal organ removal.

Husband sells wife's kidney on the "pretext" of appendectomy[46]

In 2018 *Hindustan Times* reported the story of a twenty-eight year old woman, Rita Sarkar, who alleged that her husband, Biswajit Sarkar, has removed her kidney two years ago, after getting her hospitalized in a nursing home in Kolkata, on the "pretext" of an appendectomy. Rita Sarkar lodged a complaint with the police that her husband and his brother-in-law duped her into selling a kidney because her family failed to provide a dowry amount of two lakh rupees which her husband and his family demanded. She was physically and mentally harassed by her husband and in-laws for not meeting their demand. She informed the police and the *Hindustan Times* that two years back she started having severe stomach ache–for which her husband took her to a private hospital in Kolkata where she was told that she has an infected appendix which required urgent removal. The appendectomy took place, however without any relief for Rita Sarkar. Her husband told her not to divulge the appendectomy to her family. She requested him to consult the doctor again, but he paid no heed. When she resorted to North Bengal Medical College with her paternal relatives, she came to know to her horror that one of her kidneys was missing. The same was confirmed when she visited a private nursing home in Malda. She filed a police complaint against her husband, who was a cloth merchant in Lalgola in Murshidabad in West Bengal, and his mother and brother-in-law. Rita Sarkar's husband confessed under pressure that the surgery was carried out in Kolkata and the kidney was sold to Chattisgarh-based businessman (Pal, 2018).

The *Washington Post* quoted Rita Sarkar saying:

> Now I understand why he forbade me not to reveal anything. He and his family tortured me during the past 12 years of marriage for dowry and when my family failed to meet their demands, they sold my kidney. (see Doshi and Schmidt, 2018)

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[46] Surgical removal of the appendix.

Rita Sarkar’s father said that Biswajit and Rita got married in 2005. Biswajit’s family was given gifts and an amount of one lakh eighty thousand rupees in cash as dowry but he “kept asking for more” (Doshi and Schmidt, 2018).

A brief report published in *Latestly* reported that although Biswajit Sarkar had confessed that his wife’s kidney was sold off with his wife’s consent, who had signed legal documents for donation, which Rita Sarkar summarily denied. The Murshidabad police said that Biswajit Sarkar’s connection with larger kidney racket cannot be ruled out and investigations are under way (*Latestly*, 2018).

Like the previous case, the presence of documentary evidence is cited by Biswajit Sarkar as an indicator of Rita Sarkar’s consent in the removal of her kidney. Documentary evidence of consent does not guarantee that the victim donor was not cheated or compelled or under constrained circumstances ended up having an organ removed. Victim donors are mostly vulnerable people–located in compromised positions in the social order and are targets of cumulative structural wrongs and therefore more vulnerable to machinations of criminals, including intimate partners, who engage in deception and manipulation to get an organ sold without the donor’s knowledge. This is evident in the case of the Bindol villagers who sold their wives’ kidneys when they were left with one, for instance, Astomi Malakar returned from Kolkata with a scar not knowing that her kidney has been sold and also in Rita Sarkar’s case, where there was a constant pressure for unmet dowry from her husband’s family which ultimately led to the illegal removal of her kidney on the “pretext” of an appendectomy for sale to Chhattisgarh-based businessman through the cruel machinations of her husband and his brother-in-law. What comes across prominently in the three criminal case reports is the involvement of biomedical and health institutions, and formal procedures and professional expertise, maybe tangential, in the illegal removal of organs from vulnerable people.

The macabre perpetually haunts the unity and selfsameness of the legal in general and case-specific statutes and enactments in particular. The macabre shows law its discomforting limits–moments of its difference from itself–and it brings to the fore how law negotiates the ghastly reversal of its own morality, as is demonstrated in the three case of organ theft or illegal organ removal. On the one hand, modern biopolitical and biomedical dispensations involve medical professionals and purveyors of law who valourize the life-saving potential of biomedical technologies in general and technologies and practices of organ donation and transplantation in particular. On the other hand, the same biopolitical dispensations are implicated in deductive acts of (trans)national organ trade networks in which bodies conceived as dispensable are subjected to corporeal harm–acts which are not legitimized and cannot be so in principle, but unfold subtly and purportedly in connivance with those responsible safeguarding the integrity of medical practice and sanctity of law. Macabre cases consequently are a source of discomfort for a life-fostering dispensation and its biomedical apparatus more specifically, particularly because its own personnel exceed moral limits of its practice to engage in acts of inflicting corporeal harm on dispensable few to reap benefits out of a practice that fosters life in principle. The macabre shows law its limit or how deductive power is intrinsic to biopolitical dispensations. It also compels theorization of material-semiotic systems that construct the body as a hierarchically marked material effect, which provides the locus for defining dispensability and locating which bodies are dispensable and which are not. The macabre helps posit the relation between body as a hierarchically marked material effect and the biopolitical rationality or material-semiotic systems which decides which empirical bodies are to be protected and which are to be dispensed with.

In order now is an engagement with conceptions of bodily materiality offered by three feminists–Grosz (1994), Butler (1993) and Kirby (1997) particularly because their conception help locate the body as a field of hierarchical effects–one that is pivotal for the biopolitical to function in productive and deductive ways by placing citizen bodies across a hierarchical plane and determining which bodies are dispensable in the larger life-fostering project. In Foucault's understanding, the "let die" (1978) function of modern biopolitical dispensations premises itself on the biological rupture or break that derives from a certain theory of racism that privileges one form of life over another. But the contention is, following Agamben (1998) but within a decisively feminist framework, that the "let die" function is essential or intrinsic to modern biopolitical dispensations, coming to terms with which requires a general theory of body materiality, rather than a theory of racism, one that would account for racial and ethnic oppression and violence as much as it would explain gender and sexual oppression, while recognizing the conceptual and empirical distinctiveness or specificity of each.

Conceiving bodily materiality via feminist renderings

Grosz (1994) begins her ruminations on bodily materiality with thinkers like Freud, Lacan, Merleau-Ponty, Nietzsche, Foucault, and so on who believe that body is a socio-historical construction. They argue, like nature, body is "permeable", with an inherent "pliability", whose definite empirical form is not mere biological outcome. Body is a discrete product of psychological and physical interactions, and social "inscriptions" (p. 187). Going beyond biologism which attributes fixity to body and dynamism to society, culture and history, these thinkers reconfigure body as open to extra-biological possibilities. There is a caveat however, in their argument, to which Grosz (1994) draws critical attention.

According to Grosz (1994), they argue, the fact that body is "pliable" does not imply that there are no limits to the "pliability". These limits are set by biological codes. At the same time, they argue that there are limits to the pliability do not mean that such limits cannot be exceeded (p. 187). For these theorists, Grosz contends, body's exceeding of biological limits does not enact a disavowal of nature but involves working in tandem with it–a collapse of "stretchability" of body and nature. Grosz conceives of these theories of body as pliable yet not beyond biological foreclosures as "neutral" in that they fail to recuperate the body from biologism (pp. 187-8).

This propels Grosz (1994) to think of new way of conceiving the body. Grosz asks, what constitutes the body? Which is essentially an ontological question as it relates it to what constitutes the "matter" of the body? She is interested in the relation that obtains between biological givenness and cultural construction in constitution of bodily materiality (p. 189). Grosz reconfirms; along with thinkers who adopt a "neutral" approach to nature and body, that bodily materiality has an inherent pliability. Bodies are neither "fixed" nor biologically pre-programmed (p. 190). However, Grosz observes that body or biology is neither pure historical construction, nor is it the pre-cultural or extra-cultural base on which social and historical "inscription" unfolds. The metaphor of "inscription" or "writing on a blank page" is a naïve way, Grosz thinks, to conceive of the body, how it is constructed or it is to be construed (p. 191).

For Grosz (1994), construction of body resembles the "model of etching, a model which need to take into account the specificities of the materials being thus inscribed and their concrete effects in the kind of text produced". Body, in her view, is "a container for a mixture of culturally or individually specific ingredients". It is an "open materiality'–a field of "infinite" possibilities yet not premised on individual "will" or "choice". Rather such materiality is characterized by "bodily styles", "habits" and "practices" which valourize certain modalities of bodily articulation, while excluding others (p. 191). Bodily materiality is thus imagined in terms of difference, otherness or "alterity within and outside the subject" (p. 208).

Difference, for Grosz (1994), is a question of “distance, division, an interval: it involves each relating to the other without being engulfed or overwhelmed” (p. 208). The problem with masculinist perspective in Grosz’s view is that it is negligent of difference, glorifies sameness or identity and dubs the other as an “inferior” version of the same. This disavowal amounts to violence, not only in the form of abjection but as “effacement”. Thinking bodily materiality in such framework requires sensitivity to the fact that bodies are irreducibly characterized by difference yet are rendered self-same through congealing processes of masculinism, which disavows the otherness inherent to matter and materiality. But bodies as matter always bear the mark of otherness within themselves.

In Grosz’s (1994) emphatic words, “Bodies themselves, in their materialities, are never self-present, given things, immediate, certain self-evidences because embodiment, corporeality, insist on alterity….” Alterity, for Grosz, is a pre-condition for “pliability or plasticity of bodies”, at the same time, alterity is also the outcome of “plasticity of bodies”–a characteristic that renders bodies “other than themselves, other than their “nature,” their functions and identities” (p. 209). The recognition of difference, Grosz suggests, would help come to terms with the interface between what she calls “animate materiality” and “materiality of language” which constitutes body beyond the physicalism proliferated by biology and medicine (p. 22), and reiterated by other disciplines and perspectives.

Like Grosz (1994), Judith Butler (1993) is interested in the question of materialization of the body. The process of materialization, in Butler, is a “kind of citationality”–a process in which the subject is produced through “originary complicity with power” and the act of “citing of power”. For Butler, the process of subjectivation has a characteristic “paradox” that the subject is “enabled” by the norms that it “resists”. The possibility of agency is not ruled out by this “constitutive constraint”, yet agency becomes a practice of reiteration, and has no necessary relation of opposition to power. Gender performativity in Butler’s conception is materialization of regulatory heterosexual norms, which is not to be conceived via any theory of individualism or voluntarism (p. 15). Bodies which fail in “materializing the norm” offer the discursive outside to bodies which matter–meaning, which are socially valued. Those which constitute the outside are the “abject” bodies–which not only do not count as “bodies” but reside outside the periphery of what counts as human (p. 15-16). This is the key thematic of Butler’s ideas is bodily materiality and has significant continuities with Grosz (1994) who conceives of body as a field of material possibilities, and explains bodies as differentially marked resulting in abjection of deviant articulations.

Butler (1994) problematizes the devaluing of matter as relevant category in post-structuralism (p. 27). Butler asks: If the body transforms into fiction with postructuralism, what happens to the violence it encounters every day? How does poststructuralism account for the materiality of body in the face of textualization? Attempting to respond to these critical questions, Butler adds as caveat that much of feminist thinking has unproblematically proceeded from the assumption that materiality of the body constitutes the “irreducible point of departure”, not only for cultural construction but also for feminist epistemology, politics and ethics to orient and concretize itself. The materiality of the body within feminist thinking has become the quintessential “sign of irreducibility”–the pre-condition for social and historical inscription, yet outside these forces. Butler interrogates “constructedness and materiality as necessarily oppositional notions” (p. 28). This is similar in gesture, to Grosz (1993) who thinks that the body is neither purely historical, social and cultural construct, nor a pre-social, pre-cultural and pre-discursive entity.

The feminist debate on materiality, for Butler (1993), is not a matter of choice between embracing materiality as basis of bodily experience and socio-historical inscription and rejecting materiality altogether. She thinks that it is deeply problematic for the feminist cause to conceive of bodily materiality as foundational principle for feminist thinking. She problematizes the presumption that “deconstructing matter” ends up reducing materiality into linguistic function. Poststructuralist deconstruction of matter, in her view, does not succumb to linguistic determinism. The point is neither to foreground materiality as foundational nor to reject it as unworthy of consideration, rather rethink materiality and question the “interests” that are bound to the “epistemological certainty” bodily materiality lends to social constructionism and certain brands of feminist thinking. Butler calls for “deconstructing matter” or materiality, not as an act of “political nihilism” but as a way of thinking of newer ways to conceive of how bodies materialize (p. 30). Butler is of the view that “matter itself is founded through a set of violations”, and to “deconstruct nature” or materiality, would involve (dis)engaging the “violations” that constitute body (p. 29). Grosz too voices similar concerns when she ruminates on masculinist violence inherent to the disavowing of difference and how demanding recognition for difference should thus be a feminist move. Unlike feminists who conceive of bodily materiality as the prediscursive condition for raising feminist claims, Butler (1993) does not give in to the gesture that posits body as prediscursive and hence, prepolitical, and is vehement about locating feminist politics in deconstructing acts, reiterations and foreclosures which foreground prediscursive or prelinguistic nature of materiality.

Butler (1993) is clear in her head that body is posited as prior to signification in and through signifying practices. It is signification, with its hierarchies and presumptions, Butler argues, which “delimits and contours the body that it then claims to find prior to any and all signification”. Butler however cautions that such a reading is not to be conceived of as a reduction of bodily materiality to a linguistic effect, as that would amount to obscuring the materiality of linguistic signs which constitute body. She further adds that act of positing bodily materiality in a relation of exteriority to signification is however haunted by the trace of signification (p. 30). The materialization of body has acts of signification as the precondition to materialization. Power and language together aid the positing of body as outside power and language and therefore, pre or extradiscursive. In a similar vein, Grosz (1994) harps on otherness and alterity whose mark body bears. This has striking resemblance to Butler's (1993) claim that even though body is posited pre or extradiscursive, it bears the mark of discourse, the power-effect it produces and the "violations" it bears and engenders indelibly.

Further engagement with bodily materiality and the issue of difference, alterity, violence and abjection can be traced in Kirby (1997) where she contributes to the debate on difference and argues that such debate has been confined to the idea of sign as distinguishable from the "extralinguisitic reality of matter" (p. 52). In saying this Kirby (1997) rehearses Butler's (1993) contention regarding pre or extradiscursive positing of bodily materiality. Both Kirby and Butler foreground their arguments by recourse to the study of signs via Saussure.

Classical conception of signification, Kirby (1997) argues, displaces the transcendental signifier at the centre of discourse. This for Kirby is the basis of anti-essentialism of the classical conception, whose proponents include Saussure, Benveniste, Levi-Strauss, Barthes and so on. Kirby's however points out that the anti-essentialist conception of signification disavows its own investment in the "essentialization of matter". What for Butler (1993) is the problematic pre or extra-discursive positing of materiality, for Kirby, a step ahead, is the "essentialization of matter" itself. Tracing this essentialization, Kirby notes that, while Saussure's invocation of play has radical implications for thinking agency, Derrida complicates this radicalism trying to look beyond the closures Saussure imposes on such play. Saussurean emphasis on "stable ground", "the real physical substance", the "matter itself" as that which "resist all attempts to penetrate and to know it", for Kirbi, reaffirms the idea of a domain beyond signification (p. 54).

This impenetrable nature of matter in Saussure's understanding, Kirby (1997) argues, can be attributed to his conception of the linguistic signifier as "*incorporeal*" (emphasis original, p. 55). Kirby's deconstructive engagement with structural linguistics works toward locating how Saussurean theory of signs founds itself via a relation of exteriority with the "referent" which is purportedly material. While for Butler (1993) the pre or extradiscursive positing of materiality happens through a power-laden language, for Kirby, the conceptual location of matter or referent outside the theory of signs occurs as such because of the very structure of thought which eliminates matter or "material substance" or body from the theoretical itinerary of signification. This for Kirby is Saussure's "repression of the body" of the linguistic signifier–a gesture that rehearses the "somatophobia" or fear of the body of Western philosophical thought. The immaterializing of material in Saussure, Kirby shows, is locatable in the definition of the signifier–the "sound-image" as the material aspect of the sign. Saussure allegedly posits the "material" only by way of opposition to the abstract concept. The material world is reduced in Saussurean thinking to a "substance", in Kirby's (1997) words, "already *present* to itself, both independent of, and anterior to, those signs that would designate it" (emphasis original, p. 55). Kirby contends that if the play of sign is deployed to make sense of matter, then we are confronted the "generative substance of matter" (p. 60)–the disavowed ways in which difference constitutes and implicate matter. The similarity between the ideas of Kirby (1997) and Butler (1993) hardly requires further emphasis. Their ideas are no less similar to Grosz (1994) who focuses on the "pliability" of body, in opposition to the fixity human discourses attribute to body, which renders body *closed* to difference and alterity, and generative possibilities of matter.

The definiteness Saussure attributes to the opposition between "material objects" and "immaterial signs" has no meaning in Kirby's (1997) Derrida-inspired framework, where difference is the key force to reckon with–one that inscribes writing as a kind of materiality and irreducibly permeates material world of objects. In such framework, “plasticity” of culture begins to co-function with the differential and generative materiality of body or objects. Here there are clear parallels with Grosz (1994) who alludes to Derrida in her notion of corporeality. Kirby’s affinity with Butler (1993) is evident but there is a divergence too. While Kirby (1997) sees reaching of a prediscursive condition as impossible given the infinite play of sign, Butler (1993) is cautious to point out that foreclosure inherent to signification, notably, power, secures and founds through language a place for certain entities as prediscursive. Kirby (1997) adds that there is another position, the idealist–which sees representation as the effect of reality. The outside is conceived as unintelligible to be made sense of only through cultural data–upholding anti-foundationalism and anti-essentialism, based on the assumption that the outside is subject to variable representation and devoid of definite essence. In such “groundlessness”, Kirby finds (1997), “a … groundedness whose immutability is never in question” (p. 61). This is not acceptable as it retains an idea of outside or exterior (see Kirby, 1997).

Kirby (1997) demarcates Derridean deconstruction which infuses matter with difference from the idealist approach that sees the outside as reality-effect of representation. Kirby argues “writing in … general sense” (Derrida quoted in Kirby, 1997) poses the impossibility of separating “representation and substance”, thereby making substance subject to representation. In a similar vein, if bodily materiality is conceived via writing, body becomes an “unstable” entity–one that writes and is written simultaneously. The idealist conception of the material as “rock solid”–“an absolute exteriority that qualifies or limits the efficacy of representational practices …” is problematized through such formulation (p. 61). Bodies therefore matter, not only in the sense of acquiring significance but also materialize or acquire material form, in light of Butler’s (1993) thought, through representation.

For Kirby (1997), what escapes Saussure's thinking, while he declares that difference is integral to sign, is that this difference is posited against immutability of the reality to which signification corresponds. That "material objects" are "volatile texts", "not indifferent to the regime of sign", did not occur to Saussure. The attribution of "passivity", "inertness", and "lack of differentiation" to matter indicates the presumption that by its essence matter possesses "nothing but itself" (p. 66). The influence of both Derrida and a Derrida-inspired Grosz (1994) is locatable in Kirby (1997) as she ruminates on the possibilities of matter enacting difference like the "pliability" characteristic of body that renders it capable of embodying otherness.

These feminist renderings on matter and bodily materiality inspire asking: *what happens to the notion of dispensability when it confronts such renderings*? The answer is simple: such feminist renderings help locate bodily materiality as the locus of a biopolitics of hope which is characteristic of modern biopolitical dispensations as much as it helps locate what legitimizes a biopolitics of dispensability. However the ways in which Grosz (1994), Butler (1993) and Kirby (1997) conceptualize bodily materiality cannot be extrapolated without much thought from the feminist context to analyze dispensability in the biopolitical project? No. Two clarificatory explanations are necessary here: firstly, by positing bodily materiality as a sign, these feminists transform it into a shifting and unstable field of openness or difference or otherness–characterized by perpetual deferral of actualization of fullness of meaning. In doing this, these feminists foreground the unexamined societal and biological constraints that limit the meaning of bodily materiality to its naturalness as the single most significant constitutive force to reckon with. By positing that the societal–with its gamut of power asymmetries and ideological closures constitute the naturalness of bodily materiality as much as the natural does, they reconceptualize bodily materiality in terms of otherness and difference–which discourses of biologism and naturalism conceals and feminism reveals and interrogates. Secondly, concepts of otherness and difference as these feminists deploy have a specific ethical and political charge. They allege that patriarchy and masculinism are responsible for constructing the woman and her bodily materiality as an inferior version of the man–*a difference within the same*–one that inevitably leads to the depressed location of woman's body within the social hierarchy. Intrinsic to this inferiorization of the other whose difference is not conceived of as difference as such but as deprave instance of the same, is based on a series of "violations" (Butler, 1993), both cognitive-intellectual and physical-material which rules out possibility of locating bodily materiality outside of discourse, power and ideology. "Violations" or to be more specific, violence is productive of the body in its naturalness and sociality. That "violation" or violence is intrinsic to the constitution of bodily materiality renders possible thinking of latter as the locus of biopolitics of dispensability. Violence marks the body in the most visceral ways and generates a material-semiotic field out of it–one that renders possible biopolitical determination of which bodies count as worthy of living and the ones to be dispensed with. "Violations" or violence are not only constitutive of bodily materiality conceptually, its materialization as concrete empirical entity belonging to the right bearing citizen also takes place through "violations". The body is a material effect of material-semiotic violations which erase difference, impose sameness and put in place a system of hierarchy which derives from a power-laden and ideologically-informed concept of *differential scale of sameness*–one that classifies, categorizes, glorifies or degrades particular forms of bodily subjectivities viz-a-viz others. The crude hypostatization of the dyadic processes of materialization and semiosis that renders body a purely material effect disavows and garbs the violence inherent to the production of body as essentially and effectively material and glorification of certain forms of bodily materiality over others–the dispensable bodies–both conceptually and empirically.

At the heart of such formulation, inspired by Agamben (1998), is the connivance of law with the biopolitical in the determination of dispensability and deductive acts against dispensable bodies. A resort to Butler (2004) is a necessary step here as she links conception of what counts as human to regimes of truth and normative structures of action and role performance generated by power. The final step involves reconsidering Agamben (1998) to foreground law is as crucial as the normative in constitution of human and "less-than-human" (see Butler, 2004) bodily subjectivities in modern biopolitical dispensations.

Bodily materiality as locus of biopolitics of dispensability

This chapter has no specific feminist point to prove. Yet the assumption that underpins the mode of analyses adopted emanates from the realization that no discourse on marginality addresses bodily materiality and dispensability as sensitively as feminist thinking of contemporary times (see for instance, Butler, 2004). Their reading of bodily materiality can be extrapolated beyond the feminist question to theorize a biopolitics of dispensability by recourse to a general theory of body, involving marginalized social collectivities and bodily subjectivities (see Figure 2.3 Positional Map).

The moot question is: what rationalizes biopolitics of dispensability? This has to do with the notion of bodily materiality as a hierarchical effect, an idea arrived at via Grosz (1994), Butler (1993) and Kirby (1997), but it is necessary to resort to Butler (2004) to grapple with how differentially evaluated bodily materiality enacts the logic behind deductive acts against bodies that do not count as human.

Butler (2004) connects the question of what counts as worthy of living and what does not, and therefore easy targets of corporeal harm, to entrenched structures of power where the human is conceived of in opposition to forms of life that are seen as "less-than-human". In relation to the gender question, Butler argues that "normative" conception of what constitutes gender impacts on “one’s personhood … the capacity to persevere in a livable life”. In this framework, gender is performative, a continual act of reiterating gender norms of society, neither premised on the actor’s knowledge or willingness or initiative, nor “automatic” or “mechanical” (p. 1). Butler defines gender as “a practice of improvisation within a scene of constraint” (p. 2). To put in simpler terms, the constraints are socially structured norms which determine human agency, yet there is scope for “improvisation” in acts of reiterating the norms. But that actors can “improvise”, does not mean that the norms are at the disposal of individual actors. Rather power of the socially structured norms is realized in the fact that “viability” of “individual personhood is fundamentally dependent on these social norms” (p. 2).

Butler’s (2004) invocation of “viability” of personhood is crucial. According to Butler, the Hegelian tradition conceives of “recognition” as the key to viability. The problem with the Hegelian tradition, in Butler’s view, is that the exposition by way of which “recognition” results in social viability of particular social collectivities, deprives others of that “viability”, amounting to a condition where the system that grants and bestows some with humanness, deprives others. The other of “recognition”, the deprivation of certain groups or collectivities from humanness and viability is overlooked in the Hegelian tradition. A system of recognition thus continually generates its other through misrecognition, to invoke Butler, which puts in place a system of hierarchical juxtaposition of “the human and the less-than-human”. Such system has impact on how human rights is conceived of, whom or which social category falls within the ambit of human rights’ consideration and which does not. Thus the human is not a unified, monolithic category for Butler. Rather it stands for difference. It is fractured by race, ethnicity, sex, age and ability, which combined produces “Certain humans … as less than human, and that form of qualified recognition does not lead to a viable life”. Butler emphatically argues, that “Certain humans are not recognized as human at all, and that leads to yet another order of unlivable life”. In short, Butler contends if “recognition” is the basis of a system that can make or break personhood, then “recognition” is a “contested” site as much as the structures of power which defines the human and marks it differentially and hierarchically (p. 2).

In Butler’s (2004) view, critique of anthropocentrism is hinged on the view that “human life” is constituted of the “human” and “living” but paradoxically all living entities are not conceived as human. Therefore, from point of view of such critics, the juxtaposition of “human” and “living” in “human life” is untenable in that the expression “human” in “human life” does not “qualify” all “life” because there are forms of life which exceed or are excluded from the “human” as a category, the non-human forms of life for instance (p. 12). This is the schism that punctuates the concept of “human life” which excludes its immediate non-human other. Not only non-human lives do not count as “human”, there are other socially conceived lower forms of human life which does not count as viable life (p. 17). In Butler’s view, racial, ethnic and sexual minorities constitute lives which do not count as “human” and are thus less viable lives viz-a-viz others. The “less-than-human” or those exceeding the “human” in Butler’s formulation are traceable through vectors of precarity and grievability which are connected to embodiment.

Embodiment for Butler (2004) is paradoxical in that it is the ground of finitude and vulnerability as much as it is the basis of agency and resistance. The corporeal exposure to “gaze”, “touch” and “violence” is as real as demands for right to one’s own body. In short, the body is ‘“doing” and “being done to”’ at the same time. The “public” dimension of body is non-negotiable in Butler’s formulation, for the body is, in her words, “… formed within the crucible of social life, the body is only later, and with some uncertainty, that to which I lay claim as my own” (p. 21). This “fundamental sociality of embodied life” in Butler’s conception derives from the fact that our bodies are “already given over, beyond ourselves, implicated in lives that are not our own” (p. 22). This vulnerability is manifest when power produces particular social collectivities as expendable to forces of violence. Not only life in general is precarious, according to Butler, in that life is subject to forces of power beyond immediate imagination (p. 23), this precarity is differentially distributed across global population, where some lives are “protected” (p. 24), at the cost of lives seen as lacking “viability”–less worthy of living, and therefore dispensable.

Contemporary biomedical technologies and practices of cure and healing like organ donation and transplantation work within a frame of reference that presupposes a disavowed schism between human and “less-than-human” or “abject” bodies (Butler, 2004)–to the extent that the biomedical technology and related biomedico-legal apparatus that aims to safeguard life of some, recuperate them from illness involved in organ failure, protect them from death, puts some selective, specific others at the brink of death or exposes them to corporeal harm, premised on theft, deception, manipulation and persuasion. The macabre foregrounds the selective reversal of life-fostering gestures of organ donation and transplantation technologies and medico-legal apparatus surrounding it, seeking to curb monetary transaction in human organs. The macabre also brings to light that the inflicting of corporeal harm on dispensable bodies work in the most ghastly yet banal and subtle ways, involving deployment of strategies of cunning, overpowering bureaucratic mechanisms, often involving medical professionals and government functionaries. Such criminal involvement however does not simplistically demonstrate how protectors of law and life get embroiled in biopolitics of dispensability but foregrounds at a more general plane, how conceptions of dispensability are built into the biopolitical weave of life-saving technologies which renders law circumscribing them into a dynamic field of rational alertness–potentially reconfiguring its moral premises in face of new challenges, endogenous or exogenous, often, if not always involving the purveyors of law.

Case reports demonstrate (trans)national forces which selectively, specifically target particular social collectivities or bodily subjectivities for donor organs–some are victims of organ theft, without any knowledge of organ removal, like Mohammad Salim Khan, Shakeel Ahmed and Naseem Mohammad of the first case and Rita Sarkar of the third, whereas others are the impoverished collective of the fishermen's village of Bindol, who live a "precarious life" (Butler, 2004), and are rendered easy targets of machinations of (trans)national illegal organ sale rackets in the second case. Be it organ theft or organ sale, organ donors are mainly members of marginalized groups and communities. In the first case, the victim donors are from informal day-wage labourers from Muslim minority community, living and working in the outskirts of New Delhi, close to the border of Uttar Pradesh. In the second case, the alleged male donors who have sold their kidneys and coaxed their female counterparts to sell their kidneys are poor fishermen, mostly of tribal background, living in the backward district of North Dinajpur in West Bengal. In the third case, the victim donor, the woman is an intimate partner or wife of the perpetrator of corporeal harm involved in organ theft, whose kidney was removed at a hospital in Kolkata for live donation on "pretext" of an appendectomy–a foul play about which the victim donor had no idea until she had stomach pain, underwent an ultrasound and came to know to her horror that a kidney is missing (see Figures 2.1 Situational Map, 2.2 Social World Map & 2.3 Positional Map).

Biomoral state, organized crime and biopolitics of dispensability

Agamben (1998) in his incisive critique of Foucauldian biopolitics argues that classical Greek philosophy did not subscribe to a unitary concept of life. Agamben observes, in classical Greek philosophy, *zoe*, the natural fact of life is believed to be common to all forms of life, lower or higher, whereas *bios* is "qualified life, a particular way of life". *Zoe*, the natural fact of life, limited to the realm of home, childbearing and rearing is seen as external to political life or *bios politikos* (p. 3).

This for Agamben (1998) is the entry point for Foucault to locate the distinctiveness of modern biopolitics–an unprecedented moment in human history when natural fact of life gets implicated in technologies of power of modern state, rendering *bios politikos* of classical Greek philosophy into the quintessential field of modern biopolitics–where biological life becomes subject to techniques of power. According to Agamben, this for Foucault (1978) facilitates the transition from sovereign power to governmentality–the control of the population. Agamben is of the view that the modernity Foucault conceives of in terms of a discrete biopolitics, characterized by life-fostering gesture of modern power, is the one that legitimizes worst forms of violence against particular form of life, for instance, the Nazi holocaust against Jews.

Agamben (1998) argues that the newness of modern biopolitics does not lie so much in the entry of life in the sphere of political strategies, rather in its age-old obsessive preoccupation with natural life. In Agamben's view, for Foucault, "the entry of *zoe* into the sphere of the *polis*–the politicization of bare life as such–constitutes the decisive event of modernity and signals a radical transformation of the political-philosophical categories of classical thought" (emphasis original, p. 4). In emphasizing this "radical transformation", Agamben argues, Foucault moves beyond traditional juridico-institutional conception of power to a biopolitical conception where power penetrates individual bodies through disciplines and the body of population through controls (p. 4). In opposition to Foucault, Agamben posits the impossibility of separating juridico-institutional and biopolitical conceptions of power, given the fact that "inclusion of bare life in the political realm constitutes the original … nucleus of sovereign power". Agamben observes, "*It can even be said that the production of a biopolitical body is the original activity of sovereign power*" (emphasis original, p. 5). The placing of natural fact of life at the centre of political technologies of modern state, in Agamben's view, does not divulge the "secret tie" between *zoe* and *bios politik* of classical Greek philosophy, rather points to the consolidation of the inextricable interconnection that has existed between *zoe* and power ever since (p. 5).

In Agamben's understanding, Foucault unproblematically accepts the Aristotelian dictum that man is a living being which has the "additional capacity for political existence" (Aristotle quoted in Agamben, 1998, p. 5). But this "additional capacity" in Aristotelian framework is only attributable to good or qualified life, whereas *zoe* is excluded. This exclusion of *zoe* is however an inclusive exclusion in Agamben's view one which founds the political prerogatives of man, the living animal (p. 5-6). Agamben explains this by saying, "… man is the living being who, in language, separates and opposes himself to his own bare life and, at the same time, maintains himself in relation to that "bare life" in an inclusive exclusion" (p. 6). The figure of *Homo Sacer* in ancient Roman law, one "who *may be killed and yet no sacrificed*" (emphasis original) for Agamben becomes an instance of inclusion in the form of exclusion. As a corrective to the Foucauldian contention, Agamben argues that the natural fact of life in the political realm has been at the centre of technologies of power, by way of which *zoe* or "bare life", which is marginal to politics, is included but as exception, into the political realm thereby blurring the line of separation between *zoe* and *bios* (p. 6).

Modern democracies in Agamben's (1998) view celebrates this inclusion through exclusion or exception as "liberation of *zoe*" but the contradiction is that although modern democracies locate the "happiness of men" in the freedom from "bare life". In this politicization of bare life, Agamben argues, lies the subjection of men. In such politics, nothing is more valuable than life itself, and this is reflected in its most violent form in Nazi and fascists regimes "which transformed the decision on bare life into the supreme political principle …." According to Agamben, the biopolitics of both modern democracies and totalitarian states are hinged on a politics that is “no longer founded on the *exceptio* of bare life …” rather increasingly pushes “theory” and “praxis” of power towards a possibility where rights and citizenship are realized “through blood and death” or in the ways in which such society “condemns” acts of violence (p. 7).

With reference to this chapter, it can be argued that that contemporary techniques and technologies of organ donation and transplantation are sovereign in the exercise of power over bodies, because the exercise of such power is intrinsic to modern biopolitical dispensations. This is not to deny that modern biopolitical dispensations aim at normalization (see Foucault, 1975/1995, 1978; see also Golder & Fitzpatrick, 2009). Rather technologies of normalization and machinations of sovereign power of juridical-institutional structures, for instance, the biomedical and related biomedico-legal domain of organ donation and transplantation in this case, work in tandem in contemporary societies to exercise control over life in general and bodies in particular towards betterment–efficiency, productivity and vitality. This control over life has productive and deductive dimensions. Production and deduction of life are concomitant aspects of biopolitical technologies and machinations of modern governmentality as they works through a dispersed network of juridico-political structures like the state and various off-shoots of disciplinary control like the biomedical institutions and the associated biomedico-legal system.

Concomitant to the exercise of power over life exist an entire gamut of moral processes that legitimize control over life and body of the citizen. The organ transplantation laws in India can be conceived of as biomoral texts–representing moral concerns of the Indian state with reference to organ donation and transplantation practice and its biomedico-technological investment in the project of fostering life. These are inherently moral in that biopolitical and disciplinary control over life and body is legitimized on moral premises like the need to protect and safeguard life and body of citizens (see for instance, Fassin, 2015).

Organized crime involving illegal removal of organs from bodily subjectivities with marginal socio-structural location throws up moral concerns which modern biopolitical dispensations have to answer to reaffirm grounds of legitimacy of its control over life in the face of violent violations. Intrinsic to power–sovereign or biopolitical–is violence. The “violation” or violence involved in the macabre cases of organ theft or illegal organ removal demonstrates that power over life is exercised differentially, premised on an intimacy between biopower and dispensability. The infliction of corporeal harm on certain dispensable forms of life is intrinsic to life-fostering gestures of modern biopolitical and biomoral state, and biomedical technologies of cure and healing like organ harvesting and transplantation and the entire juridico-institutional apparatus which legitimizes and regulates the practice of organ donation and transplantation (see Figures 2.1 Situational Map, 2.2 Social World Map & 2.3 Positional Map).

Chapter Two

Xenotransplantation, Chimeras and the Biopolitical: Troubling Animal Futures

Transgenic controversies and the problematization

Let us begin with the story of Robert Pennington who suffered from acute liver failure in 1997. Since no human liver was available to replace his failing organ, a transgenic pig liver engineered by a biotech company named Nextran was connected to his body in vitro for three critical days until a human liver was found as replacement. Within few weeks of completion of the procedure a moratorium placed on such experiments involving transgenic animals by USFDA[47], based on the fear that infectious viruses could spread to humans via such experiments (Frontline, 2001a). Dr. Marion Levy, Pennington's transplant surgeon, however said:

> Robert has done well. The other patient that we have experimented with in this way has also done well. Their family members continue to be alive and well. Our staff doesn't seem to have been infected with any unknown or strange disease. (Frontline, 2001a)

The Frontline report on transgenic experiments entitled *Organ Farm* pointed to the notoriety of such experiments. Earlier the Frontline had raised a scare that viruses transmitted to humans via xenografts[48] pose risk not only to recipients but human community at large. Robin Weiss, a virologist, published a paper in the *Nature* in 1997 describing how pig viruses infected human cells in the phase of laboratory culture. Weiss's publication prompted USFDA to impose ban on transgenic experiments, for he emphasized the public health risks posed by pig xenografts. In September 2000, Jay Fishman of Harvard Medical School, published an article in the *British Medical Journal*, focusing on pig-virus related infection

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[47] United States Food and Drug Administration.

[48] A cell, tissue or organ from a particular organism transplanted into another species.

among humans but concluded there is no concrete evidence about such risk (Frontline, 2001b).

In May 2000, Uncaged Campaigns, a British animal rights' activist group revealed documents testifying to the involvement of Imutran, a xenograft engineering company in U.K., in transplanting pig organs in baboons for experiment. The documents revealed to the horror of Uncaged Campaigns that between 1990 to 2000 over 420 monkeys and 50 baboons have succumbed to the harmful trials of Imutran. The average survival duration of such animals under trial was barely thirteen days. Uncaged Campaigns circulated the documents on internet with a special report on transgenesis-induced animal violence; *Diaries of Despair* trying to draw attention of the British government to the urgent need to stop transgenic experiments and set up a committee to investigate the matter. Imutran however manipulated the scenario which led to the removal of the documents from internet on grounds of confidentiality and copyright breach. The incident received public attention via media coverage, generating furore about violence against animals. The *British Daily Express* also came up with an article on the concocted tales of Imutran about its achievement in the field of xenotransplantation and extent of animal suffering in its transgenic experiments. Imutran's defended that animals did not suffer as result of its trials. It managed to get a court order issued to restrict circulation of controversial content about its involvement in animal violence (Frontline, 2001c).

The *Daily Express* report focused on a baboon by the name/label/code x201M which was one of the victims of the trials conducted by Imutran. Baboon x201M's heart was replaced with an external transgenic pig heart and survived on it for thirty-nine days. The Imutran published a paper in the *Journal of Heart and Lung Transplantation* showcasing its success in facilitating cross-species transplantation[49] using the instance of baboon x201M. It allegedly claimed that the baboon remained agile with a transgenic pig heart fitted to its body, even beyond thirtieth day of transplantation. The *Daily Express* contradicted the claim by bringing to light Imutran's own log records which reflected contrary details that the baboon suffered severe weakness as result of the procedure and by the time the poor baboon passed away, the pig heart had become thrice the size of the baboon due to inflammation (Frontline, 2001c). Dan Lyon of Uncaged Campaigns narrated the incident to *Daily Express* detailing what exactly had happened to the poor baboon. Here is a quote Dan Lyon's interview with the *Daily Express* correspondent:

> One of the most unfortunate animals had a piglet heart transplanted into his neck. It was a particularly disturbing example, I think, because for several days he was holding the heart. It was swollen. It was seeping blood; it was seeping pus as a result of the infections that often occur in the wound site. He suffered from body tremors, vomiting, diarrhea [*sic*]. And the animal just sat there. I think living hell is really the only sort of real way you can get close to describing what it must be like to have been that animal in that situation. (Frontline, 2001c)

In another interview to Frontline, Dan Lyons stated that acts of violence against animals cannot be justified as they involve "deliberate infliction of pain, suffering and death on someone else." Lyons spoke unequivocally against animal trial. He argued that any success in human organ transplantation can be made only by through human route. He opined that human organs are far "safer" and "reliable" means to handle organ failure, rather than "incarcerating an animal, cutting it up, and killing it, and then transplanting the non-human organ into a human being" (Frontline, 2001c). Researchers involved in such experiments, interviewed by Frontline, had their defense in favour of animal trials. Robert Michler of the Ohio State University Medical Center, who was directly involved in transplanting the

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[49] Transplantation of cells, tissues or organs from one species to another.

transgenic piglet heart in baboon x201M's body, said that it is not tenable to proceed with xenografts without conducting experiments on animal. Any therapy to be applied in humans, its efficacy and safety is to be tested on animals he opined. Michler confessed that, "Human life is what I am designed to help and it's something that I understand in a very intimate way" (Frontline, 2001d).

Alan H. Berger of Animal Protection Institute and Secretary's Advisory Committee on Xenotransplantation, in an interview to Frontline on the public usability and financial feasibility of xenotransplantation, exclaimed that public health care expenditure should prioritize the benefit of society at large. Xenotransplantation is expensive and a privileged few can have access to it. It is not worth spending health care funds in xenotransplantation. Same funds could be used to improve health conditions in general, aiming to prevent illness, rather than finding fancy cure pre-factum. Berger shared that, from consumer point of view, xenotransplantation costs would be "astronomical", amounting to $20 billion a year, according to a 1996 estimate of Institute of Medicine. According to Berger's estimate of 1999, the cost would be around $35 billion a year. Berger observed that expenses are so huge, offering xenotransplantation would mean that the cost have to borne by the government or private medical insurances, resulting in additional burden on the government and increase in premiums of private medical insurances. Transgenic organs and total xenograft packages are "frighteningly" expensive, Berger exclaimed, estimated to be between $10,000 and $50,000 dollars and $125,000 and $450,000 dollars respectively (Frontline, 2001e).

This varied information introduces us to the complex issues this chapter seek to address: ranging from solving organ scarcity through transgenic pigs as source of human-compatible organs to ethical problems involved in inflicting pain on animals in transgenic experiments, from promise of transgenesis to fear of xenozoonosis[50], from hopeful involvement of bioengineering companies in transgenesis or xenograft engineering to the financially unviability of such alternatives for public use (see Figure 3.1 Situational Map). These complex issues call for critical sociological attention not only because of specific empirical instances of bioethical breach, but for larger sociological concerns these instances raise by putting into flux the whole idea of a fixed biology, which points to the fact that we are at a moment of biological history where biology is constituted more of what it is not or has not been (Franklin, 2007). Biology no longer, contemporary sociology and anthropology of biology and biomedicine suggests edifies itself on the schism between humans and animals, man and nature and so on (see Fox Keller, 2002, 2002, 2010; Franklin, 2007; Haraway, 1988, 1991; Martin, 1991; Oudshoorn, 1994, Rabinow, 2005). Conceptually these schisms may hold relevance in disciplinary training and ideologies but critical look at empirical reality demonstrates that biology today is more of an engagement with hybrids than pure essences (Haraway, 1988, 1991; Latour, 1993). Bioengineering in general and genetic engineering in particular has put humanity at the threshold of hybridization, where life and biology in its most microcosmic form and vital processes have become subject to what Franklin (2007) has called unprecedented "biological control," oriented to the illusory hope for better life through new rehabilitative animal futures. This compels this chapter to ask: What factors enable the hope associated with these illusions? What conditions and imperatives propel attempts to realize these illusory hopes? What troubles such pursuits and generates opposition? What implications opposition or scrutiny has for the notion of biopolitical life, technoscientific practice and relation between two?

Attempting to answer these questions, this chapter looks at bioengineering companies as cases for understanding how finance and market are intrinsic to biopolitical processes and

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[50] Infections transmitted from animals to humans by the transplantation of animal cells, tissues or organs in human bodies.

microcosmic control of life which give direction to biomedical and biotechnoscientific innovations. The following section analyses bio-technoscientific innovations engendered by bioengineering companies centering on engineering transgenic or porcine alternatives to human organs as corrective to organ scarcity. It analyses press releases of Revivicor (http://www.revivicor.com/index.html) and eGenesis (https://egenesisbio.com/) for tracking their history and present through achievement claims of bio-technoscience experts and their managerial team about their xenograft engineering initiatives or ventures and potential market collaborations. Biotechnoscience experts and their managerial team foreground the biomedical positivity toward life xenograft engineering initiatives uphold and problematize the prohibitive forces, which in the guise of animal rights' activism, hinder the public use and massification of these promising biomedical technopractices. The case analyses that is in order sets the tone of this chapter by foregrounding the conviviality that marks the relationship between biotechnoscience experts and financial investors in the xenograft engineering venture–the hopeful march towards better life and its biomedical management through animal solutions to human problems. Yet in the hopeful posturing, the analyses shows the reign of illusion and misfortune is categorically obscured–the uncertainty that looms large insofar as animal future and poor fate of animals in transgenic experiments is concerned (see Figures 3.1 Situational Map & 3.2 Social World Map).

Case studies of xenograft engineering companies: Revivicor and eGenesis

Revivicor, a Virginia-based bioengineering company, emerged as spin-out[51] from U.K. based PPL Therapeutics. Revivicor aims to remedy "human diseases through regenerative medicine" and offer "superior-quality, high-volume, alternative tissue source as a solution for the critical shortage of human-compatible tissues, cells and organs" through genetically

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[51] A process of corporate realignment involving segregation of a specific department or division, with its operations, assets and liabilities, to become a separate corporation.

engineered pigs–deploying cloning[52] technology of PPL Therapeutics. The pigs so engineered, Revivicor promises, could be used as viable alternatives to or substitutes of human kidney and heart. Revivicor's main mission is to provide pig organs to meet the urgent needs of approximately ten percent of U.S. population that die in the absence of a viable, transplantable human organ (Revivicor, n.d.-a).

Revivicor reported that it successfully engineered pigs whose organs are resistant to human "immune response to cross-species transplantation" known as hyperacute rejection[53]–the rejection of foreign organ or tissue or cell by human immune response system. Pigs have a particular type of sugar group known as galactosyltransferase[54] on their cell surface, popularly known as "gal" in biomedical parlance. This trait is foreign to human bodies and possibility of rejection of such cells looms large when transplanted into human bodies as their introduction may trigger severe immune response. To avert this, Revivicor has genetically engineered pigs in which the "gal" has been inactivated or "knocked out"[55] rendering them safe for transplantation in human bodies. This involves inactivation of "gal" gene through manipulation of pig cells, and production of cloned pigs devoid of "gal" and thus human-friendly (Revivicor, n.d.-b).

The inactivation of "gal", though clinically most crucial to achieve pig-to-human xenotransplantation, there are other enzymes too that may trigger human immune response. To meet that end, Revivicor has introduced a human gene in the pig system to generate a protein known as CD64[56] which weakens human immune response. Revivicor's strategy of inactivating the "gal" gene and generating human protein in pig cells in the production of

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[52] A laboratory technique of making genetic copies of living organisms.

[53] This is characterized by the fatal non-acceptance of a transplanted tissue or organ within few minutes of transplantation procedure.

[54] An enzyme that catalyzes the transfer of galactose, which similar to glucose. Also known as "gal" as mentioned in the text in popular biomedical parlance.

[55] The removal of the "gal" or pig sugar from the pig gene through gene editing.

[56] Cluster of differentiation 64 is a type of integral membrane glycoprotein.

genetically engineered pigs to launch a successful pig-to-human xenotransplantation derive from purportedly successful pig heart transplantation experiments in primates which survived for more than six months. The integrated inactivation of “gal” gene and generation of CD64 protein approach, according to Revivicor, has the potential to reduce cost and side effects of immunesuppression in animal-to-human xenotransplantation (Revivicor, n.d.-b).

This is a brief introduction to Revivicor based on the study of its website contents. Next in order is a critical look at various press releases of Revivicor between 1998 and 2010 which help trace the history of its achievements and related claims of the company voiced through its bio-technoscience experts and managerial team who have run the company during the period.

In 1998, Dr. David Ayares of PPL Therapeutics (then Revivicor was yet to emerge), announced the birth of first calf using the cloning technique through which “Dolly” and “Polly” were genetically engineered by PPL (Revivicor, n.d.-c). The calf was named “Mr. Jefferson” because it was born on the President’s Day in the State of Virginia in U.S. Dr. Julian Cooper of PPL hailed the birth of the calf as “an important step towards using transgenic cattle to produce large quantities of cost effective therapeutics quickly.” But Cooper was quick to add that “Mr. Jefferson” was not transgenic cattle *per se* but was engineered through the method of nuclear transfer[57] which has the potential to introduce minute, specific genetic modifications toward developing less costly treatments for various diseases (Revivicor, 1998, News section). “Mr. Jefferson”–the cloned calf was soon to be obscured from scientific and public imagination by newer viable clonal achievements. Just within two years, a press release by Dr. Ayares of PPL Therapeutics declared in 2001, that on March 5, 2000, Revivicor has achieved “a major step towards successful production of xeno-

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[57] Also known as somatic cell nuclear transfer, it is a laboratory technique for producing an embryo from a body cell and an egg cell.

organs for human use" through the production of five cloned piglets using adult cells through cloning (Revivicor, 2000, News section). Evidently proud of the achievement, as it marks a significant step ahead, Dr. Ayares and Dr. James of PPL emphatically claim:

> The successful cloning of these pigs is a major step in achieving PPL's xenograft objectives. It opens the door for making modified pigs whose organs and cells can be transplanted into humans; the only near term solution to solving the world wide organ shortage crisis. Pigs are preferred species for xenotransplantation on scientific and ethical grounds. Clinical trials could start in as little as four years and analysts believe the market could be world $6 billion for solid organs alone, with as much again possible for cellular therapies, e.g. transplantable cells that produce insulin for treatment of diabetes. (Ayares and James quoted in Revivicor, 2000, News section)

Trying to explain why this was path-breaking compared to previous achievements such as genetic engineering of "Dolly" or "Mr. Jefferson", Dr. Ayares and Dr. James claim, foregrounding how the "intractability" of pig reproductive system has been overcome through their technique:

> Nuclear transfer in pigs has proved to be more difficult than for other livestock … because pig reproductive biology is inherently more intractable …. (Ayares and James quoted in Revivicor, 2000, News section)

They argue that the method used for producing "Dolly" was different from the method that has been adopted to produce the five female piglets, which involved many new, "inventive" steps for which PPL personnel stationed at Virginia has applied for patents. Funding in part came from the NIST[58], under the Government of United States. In the face of "intractability" of pig reproductive system that Dr. Ayares and Dr. James of PPL foregrounds, which is also a way of positing that it is no mean an achievement, they argue that the objective that brought them the NIST funding was that of knocking-out or inactivating a specific pig gene and PPL was able to realize the objective by inactivating the

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[58] National Institute for Standards and Technology.

"alpha 1-3 gal transferase"[59] (Revivicor, 2000, News section). Dr. Alan Coleman of PPL claims in the press release:

> … PPL has built up the technical expertise and intellectual property to be the first to produce the type of pig which should become the industry standard for xenotransplantation–a pig that lack the alpha 1-3 gal transferase gene. (Coleman quoted in Revivicor, 2000, News section)

Dr. Ayares adds that initially they thought only three or four fetuses would survive but to their surprise even the fifth one started developing. Showcasing the challenging achievement of the PPL personnel, Dr. Ayares states:

> Solving nuclear transfer in pigs was quite a challenge, so our ultimate challenge was all the more rewarding. This was a great team effort by all at PPL. (Ayares quoted in Revivicor, 2000, News section)

According to Dr. Ayares, pig xenograft produced by PPL team has substantially reduced the risk of four types of graft rejection, and researchers at PPL are on their way to, apart from the "gal knock-out" they have already achieved, to add new genes in pigs cell in order to make them resistant to causes of graft rejection. The press release further states they are hopeful that modified pig cells will "tolerize" the human recipient and rule out rejection. Dr. James seemed confident and hopeful about the biomedical and market promises of the unparalleled technique they have devised which "knocks-out" genes and adds new ones as part of the project to facilitate unhindered xenograft transplantation in humans (Revivicor, 2000, News section). Inviting market collaborations, Dr. James says:

> We are unaware of any other group that has as comprehensive an approach to xenotransplantation as PPL. All the known technical hurdles have been overcome …. An end to the chronic organ shortage is now in sight …. We are now looking at various ways to fund our xenograft program, including discussion with potential market partners. (James quoted in Revivicor, 2000, News section)

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[59] Glycoproteins present in all mammals except humans, apes and monkeys.

This is the what PPL Therapeutics and its biotechnoscience experts and managerial team had in their mind when they embarked on the project of producing cloned pigs, and the project culminated in success in 2002, when PPL's press release declared the birth of world's first genetically knocked-out pigs–through nuclear transfer or cloning combined with PPL's own patented technology of gene targeting[60]. This, according to PPL, is a "key milestone … in the area of xenotransplantation" (Revivicor, 2002a). Explaining why market players should invest in PPL Therapeutics, the press release proposed to have a spin-out partner that will co-function with PPL to generate returns from PPL's achievements in the field of xenotransplantation and stem cell research. Given PPL's demonstration of its success in the field, the release seemed hopeful that companies will be willing to co-function and co-fund its unprecedented, promising research initiatives. The release promises that clinical trials will commence soon, as market analysis projections estimate that xenografted solid organs market would be worth $5 million in future (Revivicor, 2002a, News section). The market for PPL's products is projected as lucrative and worth venturing into, which is why Dr. Ayares convincingly says, alluding to the market potential of pigs which are less porcine and more humans:

> The birth of these pigs is a milestone in our xenograft program and should spark renewed vigour from both the scientific and investment communities. (Revivicor, 2002a, News section)

Dr. James of PPL adds as a gesture of trying to publicize PPL's scientific breakthrough through open invitation to market partners and investors as premise for marching collectively towards further breakthrough in this field of biomedicine:

> Today's announcement is a natural breakpoint for PPL to spin out the valuable technology it has developed thus far … finding a third party at this particular time to take forward this very exciting area of science, which addresses major markets, will ensure that PPL's shareholders gain maximum value, while protecting the Company's

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[60] The technique of altering gene sequence at a particular location in the genome.

> limited cash resources needed to bring its lead product, reAACT, to market as quickly as possible. (James quoted in Revivicor, 2002a, News section)

Dr. Coleman of PPL also emphasizes the potential of their xenotransplantation program to “revolutionize the transplant industry” (Revivicor, 2002a, News section). This potential is associated with the achievement of biological conditions which can facilitate reproduction among cloned pigs–the only means of reproducing “animal capital” (Franklin, 2007) which cloned pigs embody. This press release basically meant to announce the birth of female piglets, which marks the realization of half a step towards future breeding of such pigs.

In the same year, PPL declared the birth of male “knock-out pigs” which marks the beginning of an era of production of cloned pigs through breeding of male and female “knock-out pigs” (Revivicor, 2002b, News section). In the same year, Dr Ayares and Dr. Geoff Cook of PPL Therapeutics confirmed that they have engineered doubly “knocked-out” pigs in which the “gal” contained in pig genes, which pose hindrance to xenotransplantation, has been “doubly” deleted. They confidently declare:

> Because both copies of the gene have been inactivated, tissues from these pigs have been shown to be completely devoid of pig sugar that causes hyperacute rejection to take place. (Ayares and Cook quoted in Revivicor, 2002c, News section)

Unprecedented achievements of PPL generated confidence and the confirmed reproducibility of cloned pigs created possibilities of lucrative market ventures involving takeovers and acquisitions. A year after, when PPL therapeutics has been renamed Revivicor, after spin-out of the former; the latter self-declared itself a global manufacturer of “therapeutic products” for xenotransplantation (Revivicor, 2003, News section). Revivicor eventually purchased IP[61] rights and tangible assets of Australia based xenotransplantation company, XTL[62] (Revivicor, 2005, News section). Elaborating the biotechnoscientific

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[61] Intellectual property.

[62] XenoTrans Limited.

promise and commercial profitability of the acquisition as a step towards production of porcine biological equivalences for human use[63], Dr. Ayares stated:

> The acquisition of the XTL assets, combined with our IP and expertise in pig cloning technology positions Revivicor well for successful commercialization of a variety of therapeutic products derived from pigs … providing a solution for the adequate supply of equivalent human tissues. (Ayares quoted in Revivicor, 2005, News section)

The support for market expansion through investment and funding did not only come from private players but also the U.S. government, which facilitated the market for porcine biological equivalences. Few years later, Revivicor declared that it is one among the few fortunate companies to have received federal grants under the QTDP[64], under the aegis of Life Sciences Committee, NewVa Corridor Technology Council. These federal grants were received in the form of a "tax credit program"[65] as part of the Patient Protection and Affordable Care Act of 2010 to provide much needed fillip to biotechnological and pharmaceutical companies which produce unique medicines and introduce competitiveness in biomedical sciences in U.S. The Therapeutic Discovery Project made funds available either as grants or "qualified investments"[66] (Revivicor, 2010, News section). Applauding the selection for federal grant and its implications for competitiveness, Dr. Ayares stated:

> As a small biotech company with limited resources, in this economic climate, programs like QTDP are essential to move technology forward at a competitive pace. (Ayares quoted in Revivicor, 2010, News section)

The convergence of the futuristic promises of Revivicor and facilitating gesture via funding from the U.S. government is also traceable in a contract PPL therapeutics entered into with Department of Defense of U.S. for producing "countermeasures" to biological warfare. Through gene targeting and cloning techniques, PPL was expected to develop

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[63] Genetically engineered alternatives for essential components of human body.
[64] Qualified Therapeutic Development Project.
[65] A program that reduces the final tax liability of the tax-payer.
[66] Investments which are not subject to taxation.

"human polyclonal antibodies"[67] to vaccinate soldiers and general population against diseases such as anthrax, which is a biological warfare pathogen[68] (Revivicor, 2004a, News section).

A close study of press releases of Revivicor during 2003 to 2005 reveals that the company was receiving grants and purchasing intellectual property licenses from other bioengineering companies–indicating its active market presence. In 2003, Revivicor declared that it has received a substantial grant of $1.9 million, the third one in line, under the prestigious Advanced Technology Program of NIST, under the United States Department of Commerce for developing "perv free"[69] xenografts. It was believed that success in developing such xenografts will render smooth biomedical and public acceptance of xenotransplantation. The declaration however noted that there is no concrete evidence that "pervs" can affect humans, but owing to wider academic belief that there is a risk of transmission of pig virus via xenografts, research is much needed in this direction (Revivicor, 2003, News section).

In 2004, Revivicor received another $1.8 million grant from same authority, to work towards inactivating "immunoglobulin genes"[70] in pigs and putting "human equivalents" in its place to produce pigs that have "human polyclonal antibodies" in its blood. This would involve making pigs "bioreactors"[71] for treating infectious human diseases (Revivicor, 2004a, News section). In the same year Revivicor's announced its acquisition of licensing rights to use Geron Corporation's nuclear transfer technology to produce xenografts for human transplantation as well as therapeutic use. In return of acquisition of licensing rights[72], Geron

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[67] A collection of immunoglobulin molecules that work against a specific antigen.

[68] Strategic use of disease-causing biological agents to kill or incapacitate humans, animals or plants on large scale.

[69] Genetically engineered pig xenografts which have the pig endogenous viruses removed or deleted through gene editing.

[70] These are antibody secreting cells or glycoprotein molecules which recognize and combine with particular antigens such as bacteria or virus aiding their destruction.

[71] An engineered device that supports a biologically active environment in vitro.

[72] Licensing rights allows one party to use and earn revenue from the property of the owner.

Corporation will receive “equity interest”[73] and “royalty”[74] from Revivicor’s continuing and future ventures (Revivicor, 2004b, News section). As a reaction to these lucrative market transactions, Dr. Ayares states in applaud:

> These licenses involve an important milestone in the implementation of Revivicor’s business strategy. (Ayares quoted in Revivicor, 2004b, News section)

Dr. David J. Earp of Geron Corporation said in friendly response, which is symbolic of biotechnoscience-market conviviality production of cloned pigs for xenotransplantation generates:

> Geron has granted a number of licenses for this technology to companies that are positioned to be leaders in their fields. We are pleased that these licenses to our technology will help enable Revivicor’s product development and commercialization plans. (Earp quoted in Revivicor, 2004b, News section)

Apart from the mutual show of confidence and trust between marker partners in biomedical and biotechnoscientific research, there is also a disclaimer to the hopeful claims of the announcement. There is a caveat that potential investors should be aware of the risks involved in such ventures. Confidence and concerns of risk relating to the market are voiced in the announcement, but only as a caveat. That’s where scientific promise and confidence gets over-represented *viz-a-viz* market risks of such ventures. But that is no denial of the risk either.

eGenesis (https://egenesisbio.com) is another U.S. based genetic engineering company whose mission is to create a world with no shortage of transplantable organs. It aims to use “a wide range of gene editing tools to push the boundaries of science for the field of transplantation” to “address previously unbeatable biological hurdles in the transplantation field”: the risks of infectious diseases and molecular mis-match between species (eGenesis, n.d.-a, b). Justifying the need for biotechnoscience to move beyond dominant paradigms, eGenesis calls for a “new option,” which is xenotransplantation–the best solution to the

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[73] Ownership interest in a business venture.

[74] Payment made to an individual or company for using its assets.

shortage of donor organs. Xenotransplantation using porcine organs, eGenesis advocates, is the most viable way to ensure steady supply of organs for transplantation. But eGenesis is quick to add that there two major obstacles to pig-to-human xenotransplantation: "virological": the risk of infection in humans from porcine endogeneous retroviruses, i.e., the "pervs"[75], and "immunological": obstacles resulting from molecular mis-match between human and porcine organs, leading to graft rejection (eGenesis, n.d.-b). eGenesis offers gene editing technique as solution to both obstacles.

In 2017, eGenesis announced that they are about to revolutionize xenotransplantation through a "lifesaving" procedure, which also made space for itself in the *Science* (eGenesis, 2017, News & media section). The procedure involves "inactivating pervs" in pigs to facilitate cross-species organ transplantation. The eGenesis scientists developed a technique through which they could edit "pervs" in pig gene to avoid transmission of these viruses to humans. Using a technique termed CRISPR[76], eGenesis scientists aimed to produce "perv free" piglets, like "galsafe pigs"[77] of Revivicor, which can safely be used for providing porcine organs for transplantation in humans. In the press release they mention that eGenesis has successfully produced "perv free" piglets which address the risk of cross-species "virological" infection and "immunological" response generated by recipient human body (eGenesis, 2017, News & Media section).

CRISPR is a gene editing tool that can "selectively delete, modify or correct a disease causing abnormality in a specific DNA segment" (eGenesis, 2017, News & Media section, para. 7). According to eGenesis scientists, CRISPR paves the way towards producing piglets

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[75] Pig Endogenous Retroviruses.

[76] Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) – a unique advanced technology that can edit parts of the genome by removing, adding or altering DNA sequence. Cas9 is CRISPR-associated protein 9.

[77] Cloned pigs from which the "gal" or sugar endogenous to pig gene has been removed through gene-editing.

which will have profound scientific and ethical acceptance in the field of xenotransplantation. In the words of the eGenesis team:

> Researchers developed a strategy to enable efficient and precise genome editing in primary cells using CRISPR-Cas9 technology. In conjunction with a method to inhabit primary cell death during multiplex genome editing, researchers successfully produced viable PERVfree porcine embryos via somatic cell nuclear transfer, using engineered primary cells. Then they implanted the PERVfree embryos into surrogate sows and demonstrated the absence of PERV re-infection, initially in fetuses and finally in recently born piglets. These piglets are the first animals born free of endogenous virus and will be monitored for any long-term effects and impacts by the eGenesis team. (eGenesis, 2017, News & Media section, para. 5)

eGenesis collaborated scientifically and financially, like Revivicor, with other biotech companies in the project. Itinerary of such collaborations can be traced from content analysis of press releases on the eGenesis website (see eGenesis, 2017). In 2018, eGenesis announced its collaboration with a China-based biotechnology firm, Qihan. Qihan was established in 2017 by Dr. Luhan Yang and Dr. George Church of eGenesis, with the objective of making CRISPR widely used in xenotransplantation (eGenesis, 2018). Dr. Yang states with regard to eGenesis' collaboration with Qihan Bio:

> Aiming to tackle the tremendous unmet need for organs for transplant, Qihan and eGenesis are built with the shared mission to make xenotransplantation safe and accessible. (Yang quoted in eGenesis, 2018, News & Media section, para. 3)

Dr. Yang further emphasizes how hopeful they are about their collaboration:

> We look forward to collaborating with Qihan on R&D[78] efforts, bringing together leading scientists from China and the U.S., with the hope of one day making xenotransplantation a reality for the many patients waiting for an organ transplant. (Yang quoted in eGenesis, 2018, News & Media section, para. 3)

In 2019, eGenesis announced that it has received a handsome $100 million series B financing[79] from Fresenius Medical Care Ventures, with newly participating investors like

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[78] Research and Development.

[79] The second round of funding for a particular company that has reached a specific level of achievement, beyond the initial startup stage, involving funding approximately between seven to ten million dollars.

Leaps by Bayer and Wellington Partners, with the aim to produce “safe and human-compatible” kidneys for xenotransplantation (eGenesis, 2019, News & Media section, para. 1). Elaborating the “transformational” clinical and market potential of the collaboration with eGenesis, Dr. Olaf Schermeier of Fresenius Medical Care Ventures says:

> The eGenesis approach represents a truly transformational option for patients with kidney disease…. We look forward to providing our industry leading experience in treating patients with kidney disease to support the company as they aim to bring their solution into the clinical setting. (Schermeier quoted in eGenesis, 2019, News & Media section, para. 4)

Jurgen Eckhardt of Leaps by Bayer, a key investor in the project, emphasizing how eGenesis could change the future of life sciences and organ transplantation market, says that the company is:

> … dedicated to spearheading paradigm-shifting advances in the life sciences that can fundamentally change the world for the better…. We believe eGenesis is poised to revolutionize the entire organ transplantation market, which could save lives in a way that was previously not thought possible just a few years ago. (Eckhardt quoted in eGenesis, 2019, News & Media section, para. 5)

Dr. Paul Sekhri, Chief Executive Officer and President of eGenesis in response to the appreciative gestures of their financial collaborators states:

> With this new round of financing from industry leaders, eGenesis is well positioned to continue to advance the development of human-compatible organs to address the dire shortage in the U.S. and around the world. (Sekhri quoted in eGenesis, 2019, News & Media section, para. 3)

Exchanges among investors and eGenesis biotechnoscience experts-cum-managerial body demonstrates the investment and market-oriented nature of biotechnoscientific practice in general and xenograft engineering initiatives in particular, and the trust and confidence market players have on the biomedical ventures of a company like eGenesis.

Upon receiving a voluminous $125 million series C financing[80] in 2021, involving leading healthcare investors, Dr. Sekhri, thanked the “new and current investors for their vote of confidence” (eGenesis, 2021, News & Media section, para. 4). He further states how such financing will ensure eGenesis’ progression in the path of evolving innovative solutions to biomedical issues:

> With this financing we are now well positioned to address two of the greatest disease burdens in the U.S. and global healthcare systems. (eGenesis, 2021, News & Media section, para. 4)

Not only eGenesis and its bio-technoscientific and managerial-cum-administrative team made every effort to let the world know about their achievements, the international media also took interest in the unprecedented, hopeful and futuristic visions of eGenesis. With reference to eGenesis, an article published in *Time*, convincingly talks about how engendering human tissues in a laboratory setting is no longer a fiction. With the advent of CRISPR, manipulation of human tissues has become a scientific fact. The articles states in a positive tone of evaluation that that while some find such development disconcerting, they are “not as Frankenstenian as it seems” (Park, 2018, para. 9). A *Guardian* article speaks of CRISPR and eGenesis in an extremely positive light. It quotes William Westlin of eGenesis who foregrounds the spectacular character of xenotransplantation and the biomedical urgency to deploy it:

> I think this is a magical point in the field of [animal transplants]. It is not longer a question of if. It’s just a question of when. (Westlin quoted in Weintraub, 2019, para. 4)

Elaborating how the promise of endless supply of organs from pigs is no longer a distant dream, the article cites Dr. David Cooper, who then co-directed the xenotransplantation programme at University of Alabama, Birmingham:

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[80] The final round of funding or capital-raising by a startup in the journey towards becoming a full-fledged corporation.

> Transplant-ready pigs could do far more than just provide organs. Eventually, they could be used to produce the islet cells–clusters of hormone-producing pancreatic cells–needed by people with diabetes. Pig blood could be used to give transfusions to trauma patients and people with chronic diseases like sickle cell anemia, who often develop antibodies against human blood cells because they have had so many transfusions. Even dopamine producing cells could be made by pigs, and transplanted into patients with Parkinson's diseases. (Cooper quoted in Weintraub, 2019, Endless supply section, para. 2)

Deeply convinced of the benefits of CRISPR and eGenesis contribution in this respect, Dr. Cooper reiterates:

> It'll revolutionize medicine when it comes in.…You would have these organs available whenever you want them…. If somebody's had a heart attack, you could take their heart out and put a pig heart in on that spot. There is huge potential here. (Cooper quoted in Weintraub, 2019, Endless supply section, para. 3)

Media enunciations constantly emphasize the spectacular promises and achievements of CRISPR and eGenesis's technique to achieve successful xenotransplantation. But that's not all; the *Guardian* article also takes into account great resistance to the "road ahead" through animal rights' activism (Weintraub, 2019, Road ahead section). Researchers are often apprehensive about how the society will receive or accept xenotransplantation, even if it saves human life. Scientists allegedly do not make public location of their laboratories owing to the fear of animal rights' activists. In the article, Dr. Cooper convincingly says that his desperately ill patients would be happy to get a pig organ as long as it ensures survival (Weintraub, 2019, Road ahead section, para. 2). In an angry response to the negativity, Dr. Cooper says, "When it hits you personally and you are going to die, I think your attitude changes" (Cooper quoted in Weintraub, 2019, Road ahead section, para. 2). Dr. Cooper's, argument is continuous with the eGenesis slogan, "We are empowered. We are entrepreneurial" –a slogan that anticipates an entrepreneurial approach to disease remedy and alleviation (see Weintraub, 2019). The eGenesis xenotransplantation program is projected as empowering in that it helps humans take control of their destiny and CRISPR makes that achievable, but it is human inhibition unless at the throes of organ failure or animal rights' group resistance that smothers such empowering, life-fostering moves. Dr. Cooper thinks of the opposition to these developments or inability to encourage them as matter of undermining public use of the technologies towards greater good.

Close look at these two cases invite reflection on the nature of relations that between financial investment and market involvement on the one hand and biotechnoscientific innovation and biomedical research on the other. Analyses of the press releases point to the fact biotechnoscientific initiatives are entrepreneurial and biotechnoscience experts are entrepreneurs. Engineering of biotechnoscientific innovation in the biomedical field requires financial investment and market involvement, without which biotechnoscientific research and practice is limited in terms of nature and scale of production. The promising commercial products biotechnoscientific research and practice offers render it a lucrative market for financial investment for speculative gains. They incite collaborations among companies which amount to the strengthening of market forces around such bioengineering research and practice through procuring, buying and acquiring of licenses and patents. Such organizational posturing on part of the biotechnoscience experts and managerial team of bioengineering companies foreground the unprecedented “control” contemporary genetic engineering in general and xenograft engineering initiatives in particular has come to exercise on the so-called “intractability” of biology, thereby facilitating a transition to a tractable biology.

Thus xenograft engineering initiatives play around with the “plasticity” of biology (Franklin, 2007). This unfolds via “gal” inactivation and “perv knock-outs” toward producing “galsafe” pigs or “perv free” piglets and introduction of CD64 in pig gene to “tolerize” human recipients to xenografts or transgenic organs, among other feats. This involves acts which de-porcine and humanize the pig, leading to the genetic engineering of chimeras[81]. “Galsafe” or “perv free” piglets are nothing but chimeras. Biotechnoscientific practitioners

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[81] An organism with cells from more than one distinct genotype.

and financial investors are aspiring market partners in this chimerical play towards achieving “revolutionary” and “transformational” rehabilitative and remedial goals, supporting each other through public show of trust and admiration, and organized calls for concerted action (see Figures 3.1 Situational Map & 3.2 Social World Map).

The “plastic” biology at the centre of interventions of Revivicor and eGenesis no longer conceive of DNAs, genes and cells as pre-given concrete materialities. Their discourses and interventions thrive at chimerical level as much as they reside at the material, for they constantly invoke fantastic visions and spectacular images to explain what they have achieved or could achieve in future. Discursive enunciations of these companies are full of scientific inflections and market allusions, which push cellular materiality to the chimerical level.

In the contributions to *Science’s* “breakthrough of the year, 2015”, the chimerical materializes through combined material “cuts” of CRISPR and the ideational conundrum around “pervs”. The engagement with chimeras [Chimera (genetics) & (mythology)] and their material-ideational construction necessitates close scrutiny of innovative manipulation techniques of genetic engineering and xenotransplantation. Science journalism is the means through which biotechnoscience experts and enthusiasts communicate with the public and society at large, letting them know what new is on offer. Science journalism offers the textual-material weave for grappling with the discursive moves involved in achieving and publicizing biotechnoscience feats (see Figure 3.3 Positional Map).

CRISPR, chimeras and the “perv” conundrum

John Travis (2015), staff writer for *Science* wrote a short history of CRISPR technique of gene editing and the complexities related to it. The write up was subtitled in a rather hyperbolic manner: “CRISPR genome-editing technology shows its power”.

Travis (2015) began by tracing the history of CRISPR to 2007 when a yogurt company discovered that bacteria developed a defense mechanism that destroyed viruses. This was the humble beginning of CRISPR but bigger announcements about its potential came up in 2012, subsequently in 2013 and “massive growth” happened in 2014, which resulted in the appearance of CRISPR as “Breakthrough of the Year, 2015” (p. 1456). The CRISPR had earlier appeared in the same section in 2012 and 2013, but as runner up to other techniques of gene editing. In 2015, the technique made public “it’s true power in a series of spectacular achievements” of which one was a gene editing method that could eliminate viruses from genes and the other was editing of DNA[82] of human embryos (p. 1456). While former paved path for rendering pig organs compatible with human body, the latter created possibility of correcting human genes. Xenotransplantation is related to the former. The summit did not focus on ethical problems related to elimination of viruses from pig genes. It was more interested in the ethics of human gene editing. De-poricined and humanized pigs did not evoke ethical problems, which human gene editing did.

After elaborating the genesis of CRISPR through stiff competition, Travis (2015) focuses on the feasibility of the technique and its evaluation by the biotechnoscience community. Travis states that as a method of gene editing, CRISPR can alter sequences of DNA with great precision and in less costly ways compared to existing gene editing methods like zinc finger nucleases[83] or TALENS[84] (p. 1456). Substantiating his views on CRISPR’s productivity and efficiency, Travis cites Dana Caroll of University of Utah, Salt Lake City, who introduced zinc finger nucleases, and was convinced that CRISPR has led to “democratization of gene-targeting”, indicating universalized gene editing that the technique facilitates (p. 1456). Travis also cites Bioethicist, Hank Greely of Stanford University,

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[82] Deoxyribonucleic Acid.

[83] Engineered or artificial restriction enzymes that can target and modify specific DNA sequences within the genome.

[84] Transcription Activator-like Effector Nucleases–an efficient and precise gene-editing in a desired sequence in live cells.

California, who compared CRISPR to Fordist production method, which is uncomplicated; “dependable” and “affordable”, and can lead to great biomedical productivity through highly standardized, assembly-line engineering system of human cells and DNAs (p. 1456).

Demonstrating the warm reception of CRISPR by technoscientific community Travis (2015) wrote, with a caveat that there is very little exaggeration in his claim:

> … it’s only slightly hyperbolic to say that if scientists can dream of a genetic manipulation, CRISPR can now make it happen. (p. 1457)

To get the claim seconded, Travis cites Emmanuelle Charpentier of Max Planck Institute for Infection Biology at Berlin, whose reflections on “mind blowing” capacity of CRISPR at the gene editing Summit echoed Travis’s thoughts (p. 1457).

Elaborating the accomplishment of CRISPR, Travis (2015) notes that through the technique scientists can locate “viral scraps”[85] from past infections between “repeated bacterial DNA sequences” which can guide RNAs[86] to trace DNA of potentially infecting viruses before dicing them up with a nuclease (p. 1457). This fine dicing up has the possibility of being deployed in productive ways in many areas of gene research. One such area is xenograft engineering, which aims to produce human compatible pig organs for transplantation in humans, by deleting or inactivating porcine genes that could be harmful to humans.

Servick (2017), staff writer for *Science,* wrote an article ruminating on CRISPR breakthrough and the “pervs” in xenotransplantation debate. Servick wrote that probable solution to the “nagging” question of “pervs” came in the guise of eGenesis, claiming to have produced a dozen of “perv-free” piglets through CRISPR technique (News section, para. 1). Despite the promising revelation, the epistemological location of “pervs” within the virological discourse is contested; virologists do not exactly know whether “pervs” could

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[85] Remnants of dead viruses.

[86] Ribonucleic Acid.

actually pose xenozoonotic threats to humans. Yet the threat is seen as tangible, thereby generating a breeding ground for experimental exercises of “perv knock-outs” within xenograft engineering initiatives.

Servick (2017) cites Joachim Denner of Robert Koch Institute at Berlin, an expert on “pervs”, who confirms that scientists still do not have concrete information as to whether “pervs” cause deadly disease in humans but sounds hopeful about eGenesis’s promising venture towards genetic engineering “perv free” piglets (News section, para. 2). Servick quotes Denner who said:

> If this correct, it’s a great achievement … If it is possible to knock [PERVs] out, you should do it. (Denner quoted in Servick, 2017, News section, para. 2)

Servick (2017) is of the opinion that “concern about PERVs has been hard to dismiss … especially because studies have shown that viruses can infect human cells in a dish” (News section, para. 3). Servick reports how Denner and his colleagues tried to remove “perv” genes from pig cells using zinc finger nucleases but owing to imprecise “cuts” on the DNA, the cells perished, yielding no concrete output, pointing to the difficulty of achieving the feat (News section, para. 4). This way Servick substantiates the point that concern regarding “pervs” is not invalid, supporting the research initiatives of eGenesis.

In Servick’s (2017) opinion, a ray of hope emerged when CRISPR appeared in the gene editing scene, through Harvard geneticists, Dr. George Church and Dr. Luhan Yang, who deployed the method combining a “guide RNA … and a DNA slicing enzyme” which could introduce very precise, productive manipulations in pig cells. The Harvard duo founded eGenesis in 2015 for producing xenografts for transplantation in humans. In the same year, the duo “knocked-out pervs” at 62 sites in pig genome, making CRISPR the most widely talked about method of eliminating “pervs” (News section, para. 5), making significant step towards producing de-porcined, humanized pig organs for xenotransplantation.

Servick (2017) further notes that Dr. Yang had earlier stated "there was huge scientific uncertainty about whether the pig [produced after this editing] is viable" (Yang quoted in Servick, News section, para. 8). However in a later publication in *Science*, Dr. Yang and her team reported on the basis of several gene editing experiments in pigs, that they have produced healthy pigs through their cloning method. Out of 37 piglets born, all were found to be "perv free", which was achieved through CRISPR (News section, para. 8). But Servick reiterates lack of consensus among scientists about "perv knock out" as precondition for xenograft engineering initiatives. To substantiate this lack of consensus, Servick (2017) cites Dr. Mohammad Mohiuddin of Maryland School of Medicine in Baltimore, who says:

> At this moment, I don't think we are very worried about PERV… If FDA mandates us, to move forward you need to get rid of this PERV since George Church has shown you how to do it … then of course, yes. (Mohiduddin quoted in Servick, News section, para. 9)

But it is worth noting that Dr. Mohiduddin, like Dr. Denner, is appreciative of the Harvard duo who claimed to have "knocked" the "pervs" out. Contestation within biotechnoscience does not always work in the form of pure opposition. Even when practitioners disagree in relation to a new biotechnoscientific move or argument, they nonetheless support innovative moves, for they embody new possibilities. Elaborating her position on the issue, Servick (2017) writes that if there is an insistence on "perv free" piglets as source of xenografts or transgenic organs, this pre-requisite will add clinical and monetary complications to the production of xenografts (News section, para. 9). In support of this view, Servick (2017) cites Dr. David Cooper, Transplant Immunologist at the University of Alabama in Birmingham, who argues:

> If this is required, it will add to the time before pigs can be used as transplants in patients in desperate need. And it will add to the cost of providing pigs for the initial clinical trials. (Cooper quoted in Servick, News section, para. 9)

Regarding the hype around "perv knock outs", Servick (2017) echoes Dr. Yang in her insistence that many other challenges are involved in the way ahead when she writes:

> Pervs aren't the only thing standing in the way of transplant-ready pigs. Researchers will need to knock out pig genes that provoke the human immune system, and insert others that will prevent toxic interactions with human blood. eGenesis is working on such modifications, too. Compared to the PERV feat, Yang says, those compatibility issues are "second challenge, and probably more challenging". (News section, para. 10)

In Servick's (2017) opinion, an attempt to eliminate "pervs" is not baseless. But mandatory "perv" inactivation or deletion will impose hindrances upon xenograft engineering initiatives. This is not individual cognitive dissonance but representative of the confusion that prevails in bio-technoscience in general. Bio-technoscience builds on such confusion. "Pervs" in xenograft initiatives symbolize the quintessential moment of confusion or conundrum bio-technoscience builds upon.

Servick (2019) notes that the Chinese company Qihan and eGenesis, its U.S. collaborator, have declared that they have used CRISPR to produce the most advanced genetically engineered pigs. This time the achievement was not merely "perv" centric, other manipulations were also involved. To overcome the multiple hurdles involved in achieving human compatible transgenic organs, the collaborators claimed that CRISPR has facilitated "elaborate set of genetic tweaks" (News section, para. 4). Earlier they had already performed "perv knock-outs" along with as many as thirteen genetic modifications in pig cells to prevent rejection by human immune system. Further, six extra genes were inserted to prevent severe immune response and three more to prevent coagulation of blood (News section, para. 5). The pigs so engineered apparently had "healthy and fertile" organs, less susceptible to rejection and interacted better with human cells. Yang's team tested the viability of the engineered pig organs on monkeys (News section, para. 7). The team received positive response from USFDA on the production of "perv free" piglets, although never explicitly mandated "perv knock-out" as a precondition for human trial (News section, para. 8). Qihan however notified that trials will be completed by the end of 2025 (News section, para. 9).

This brings us to an interesting juncture in the understanding of CRISPR technique and the “pervs”. On the one hand, eGenesis publicizes its innovative CRISPR technique, which has the “pervs” at the center of their discourses and posits them as object of their interventions, because of the purported hindrance they pose to pig-to-human transplantation. The “knocking-out” of “pervs” through CRISPR, publicized by eGenesis and celebrated in *Science* is a crucial material-ideational moment in the production of de-porcined-humanized or cloned pigs–the chimeras. Ontologically speaking, if “pervs” are integral to pig identity and is antithetical to what human is, then “deletion” or “inactivation” of “pervs” mark the quintessential chimerical moment, the chimeras being “galsafe” pigs or “perv free” piglets. On the other hand, despite eulogies and “supportive” counter-claims relating to the prowess of CRISPR and its onslaught on “pervs”, a close study of *Science* reveals that genetic engineers and virologists in particular are not sure whether “pervs” pose hindrance to pig-to-human transplantation. This raises two notable issues: first is the recognition that though there is no concrete evidence about “pervs” affecting humans, pursuit of “perv” freedom is nonetheless not seen as unnecessary and eGenesis efforts in that direction receives appreciation, the second is the recognition from within eGenesis, and the team of bio-technoscience experts associated with it, led by Dr. Yang, that “pervs” are not the only hindrance, there are other challenges for which extra “genetic tweaks” like gene addition is required. The production of the chimera, in the eGenesis project, would reach tentative completion when “genetic tweaks” involving multiple modifications via addition in pig gene is achieved in order to render it more acceptable to human body. The “perv free” piglet precisely is not the final chimera; rather it is a single, discrete point in the engineering of series of chimerical moments, final realization of which is perpetually deferred. These moments are not only material, but ideational, and are discursive in nature. This is not to deny their reality. Chimeras are engineered materially as much as ideationally within the xenograft engineering initiatives.

Bio-technoscience as research and practice thrives on uncertainty. The CRISPR technique, eGenesis and Harvard geneticist duo have devised thrive on uncertainty of biotechnoscientific knowledge, which propels biotechnoscientific initiatives toward newer ventures. Biotechnoscientific initiatives are incremental and accumulative not because they discover firm grounds of certainty one after another, but by flickeringly navigating the slippery ground of human knowledge, biotechnoscientific initiatives carve out ways of remaining relevant by capitalizing on uncertainty or conundrum. The CRISPR technique and the “pervs” *per se* or “perv” freedom are various aspects of the conundrum this chapter attempts to disengage. Everything is contingent in the biotechnoscientific frame of reference. The way zinc nuclear fingers and TALENS gave way to CRISPR as the most advanced method of gene editing. In similar manner, though “pervs” happened to be at the centre of xenotransplantation discourse in general and the locus of CRISPR revolution at a particular point in the history of biotechnoscience, they are *always already* to give way to newer confusions and for more innovative attempts to tame confusions. Biotechnoscientific initiatives therefore thrive not only on confusions *per se* but on incremental and accumulative confusions.

The following section demonstrates how these issues are connected to larger biopolitical processes through immunesuppression as a biopolitical modality that works parallel to xenograft engineering initiatives (see Figure 3.3 Positional Map). The inspiration for positing immunesuppression as a theme concomitant with the objective of this chapter does not emanate from any contradiction between the two but from the parallels they embody, irreducible to any essential mono-causal relation. Rather this section juxtaposes the two empirical trends against each other remaining sensitive to the undecidability that haunts the relation between the two.

Immunesuppression as biopolitical modality

Immunesuppression in organ transplantation is the quintessential biopolitical moment, where modern biomedicine and biotechnoscience controls the immune system of the human body in order to “tolerize” the foreign organ, human or animal. Immunesuppression as biopolitical intervention works by suppressing human immune system to ensure its survival. Although suppression works in the manner of sovereign deductive power of the antiquity, but because its end is enabling life, which is essential to modern biopower (Foucault, 1978), suppression gets reframed biomedically through a discourse on how immunesuppression is productive of life.

Immunesuppression has a long and significant history in modern biomedicine and organ transplantation. Immunosuppressive drugs have evolved significantly over time (Institute of Medicine, 1996). It has always been an issue of concern to ensure viability of the graft in xenotransplantation. Graft rejection is more “vigorous” in this case (IM, 1996, p. 17). But immunesuppression in xenotransplantation trials met with severe negative outcome in the initial days (IM, 1996, pp. 6-7). At Tulane University in 1963-64, chimpanzee kidneys were transplanted in six patients, of which only one survived for nine months. By the end of 1974, at the University of Pittsburg, trial surgeries were conducted on twenty patients, out of which all died, either due to failure of vital bodily functions or excessive immunesuppression (IM, 1996, p. 6). In 1990s the same team at Pittsburg transplanted baboon livers with heavy immunesuppression in two patients with severe liver disease. Unfortunately both died due to heavy immunesuppression related infection, although there was no xenograft rejection as such. The first survived for seventy days, the second for twenty six days (IM, 1996, p. 7).

Organ transplantation generates immunological response. Risks are heightened in case xenotransplantation where incompatibility is huge, requiring heavy immunesuppression. This is why xenotransplantation technoscientists have sought to develop new therapies that could be administered with immunesuppression to ensure xenograft viability while not rendering recipient body fully unguarded against infections (IM, 1996, p. 18). Risk of hyperacute or chronic graft rejection looms large at all phases of organ transplantation procedure but new immunesuppresives promise to prolong graft survival, not without side-effects though (IM, 1996, pp.18-21).

There are two clear trends: one is the attempt to develop newer alternatives to immunesuppression through genetic engineering of porcine alternatives to human organs, the chimeras–for instance, “galsafe” or “perv free” piglets. This is because immunesuppression does not work in the face of hyperacute xenograft rejection. The other is the emergence of whole new range of immunosuppressive drugs which have the capacity to increase xenograft survival by significant number of days, a facility absent in 1990s when the baboon liver transplantation recipients received traditional immunesuppresives and died due to infection. While the first trend has supported the xenograft initiatives of bioengineering companies, the second has created a hugely promising pharmaceutical market–a prominent sub-set of what Sunder Rajan (2017) calls “pharmocracy”–dependent to a considerable extent on demands generated by the organ transplantation sector. Pharmaceutical market research and analysis firm projections also foreground the promising immunosuppressive drugs market and factors which promote or hinder it.

According to a market research report, immunosuppressive drug market will grow to become a $1.39 billion market at an annual growth rate of 4.63% between 2019 and 2025. One of the reasons behind growth is attributed to the demand for immunosuppressive drugs for organ transplantation. The report cites high cost of organ transplantation and immunosuppressive drugs as major obstacle to further growth of the market during the period (Market Research Future Report, 2020). In a report published in Cision PR Newswire, another market analysis firm estimates that immunosuppressive drugs market is projected to realize a market value of $45,000 million by the end of 2027 and is forecasted to grow at a rate of 14% per annum during 2020 to 2027. This report mentions high prevalence of autoimmune diseases as the reason behind the rise of the market, whereas lists drug regulation as one inhibiting factor. Analyzing the dynamics of the market, the report connects the growth of the market to prevalence of kidney and liver failure. However, dearth of donor organs and huge cost of immunosuppressive drugs limits the market. The report proposes greater knowledge about organ transplantation would facilitate the market in future (Acumen Research and Consulting, 2020). In another report published in Cision PR Newswire, immunosuppressive drug market is projected to grow at a rate of 4.17% per annum during 2020 and 2028. The report states that while successful organ transplantations have fuelled the market, serious side effects have inhibited its growth (Reportlinker, 2020).

There is no attempt to posit a mono-causal relation between the two trends–xenograft initiatives and immunesuppression. Rather these two are part of larger biopolitical processes which seeks to control life in its hierarchically higher and lower forms in most pervasive microcosmic ways, working through a nexus of biomedicine and bio-technoscience, industry and market. Immunesuppression is one among many modalities of biopolitical control, not only in that it controls vital functions of human body through biomedical and technoscientific regimen, which is well-known and obvious, it also offers the scientific and moral rationale behind gene editing, genetic engineering and production of chimeras or cloned animals, and new research initiatives to develop a new range of effective immunosuppressive drugs and greater biomedical and financial investment in the sub-domain of immunosuppressive drugs within the larger global pharmaceutical market (see Figure 3.3 Positional Map).

These factors render life and body in general a target of more pervasive and immediate forms of control beyond immunesuppressing particular empirical bodies to ensure graft viability. The biopolitical framework and associated life-fostering ethos within which immunesuppression functions and is embedded generates an instrumental-rational approach to life in general. The nexus of biomedicine and biotechnoscience, and industry and market related to it, renders life a discursive site of operationalization and quantification. Beyond life as a gamut of mundane experiences, this nexus posits life in general as a quantifiable field and issue of survival in particular, of both humans and animals, in terms of number of days, which pushes the project of operationalization of life to its logical limit (see Agamben, 1999). This has implications for investigating the biopolitical in relation to xenotransplantation, because the power of biomedicine, biotechnoscience and market over body in general or conceptually and each empirical bodies, renders life a quantitative fact and field subject to incessant interventional operationalization toward hopeful optimization (Rose, 2007).

Biopolitics and the others of hope in xenotransplantation

Significant questions remain to be answered which are of ethical and political import. Even when there is no mandate from FDA that “perv” deletion is mandatory, xenograft engineering and xenotransplantation initiatives attempt to retain their autonomy in experimental research and financial investment by engaging in testing and trial, which imply that chimerical productions continue despite raging critique within and beyond the biomedical and biotechnoscientific domain (see Figures 3.2 Social World Map & 3.3 Positional Map). How does this inform our understanding of biotechnoscience as research and practice on one hand and industry and market on the other? How does this impinge on anthropocentric-humanistic notions of hope, pain and violence? How does the concept of life figure in these discourses and concept of biopolitical facilitate understanding of the discursive field?

Genetic engineering in general and xenograft engineering initiatives in particular hopes to achieve a better biological future for humans (Rose, 2007). Xenograft engineering by producing xenografts or transgenic organs for transplantation in humans hopes to offer animal solution to human organ scarcity–which helps anticipating an animal future–an escape from human predicament via animal route. The power biomedical sciences in general and particular branches of biomedicine, namely, bioengineering exercises over life–aiming to foster it, render it productive and ensure its viability is reflected in the control such power through corporeal manipulation of life in the most minute form (Foucault, 1978; Rose, 2007). At the centre of such manipulation of a "plastic" biology or a biology rendered "plastic" is the hope for a better life (Franklin, 2007; Rose, 2007). To hope to achieve ample supply of xenografts or transgenic organs for transplantation in humans in the face of shortage of transplantable organs, is a positive, optimistic venture for both biotechnoscience experts, and financial investors and private players in the field of xenotransplantation.

When Marion Levy, Pennington's transplant surgeon fitted him with pig livers in-vitro so that he survives until a human replacement is found, he was banking on the hopeful venture of xenotransplantation. Xenograft engineering companies like Nextran and Imutran in U.K. and Revivicor and eGenesis in U.S.–the cases in the chapter–are hopeful about investing in transgenic organ or xenograft engineering market for it is immensely promising and profiteering. But the hopeful venture which ensures survival of patients facing organ failure, brings accolades for biotechnoscience experts, and profits and market presence for bioengineering companies and xenograft engineering initiatives, discounts animals, cloned or otherwise–the targets of transgenic trials and hapless products of xenoengineering feats, from any humane treatment. A Pennington's survival necessitates the suffering and death of a cloned pig. Robert Michler, who was engaged in fitting a transgenic pig heart in baboon x201M's body as part of a transgenic experiment perceived nothing wrong in using animals as means for human welfare. Dan Lyons, the animal rights' activist however described the fate of the poor baboon fitted with the pig heart as "living hell". The hope that surrounds xenografts or transgenic organs for human survival has pain, physical harm and violence in the animal register, which is disavowed in the humanistic-anthropocentric-technoscientific frame of reference. Even in face of critiques from animal rights' activists, xenograft engineering initiatives thrive, for a utilitarian science presumes lower moral worth of animals *viz-a-viz* humans (see Lafollette, 1989). Moreover, in the vocabulary of xenograft engineering experts and companies, the genetically engineered or cloned pigs or chimeras are "galsafe" pigs or "perv free" piglets. They are lucrative commodities, with attractive names, to be potentially sold on the market. The expressions "safe" in "galsafe" and "free" in "perv free" uphold the market promises of xenograft engineering initiatives.

Fox Keller (2002) emphasizes on power of words in technoscience for they enable communication with the larger public and function as instruments of persuasion. If chimeras enable biotechnoscience communicate with and persuade the larger scientific public, the market players and civil society at large about xenograft engineering feats and the promises of xenotransplantation as a solution to the scarcity of transplantable organs, they are able to do so only because inherent to the persuasive moves of biomedical and biotechnoscience enterprise is the rhetoric of hope and promises of cure and healing. Communication and persuasion via chimeras become meaningful only because they operate within a humanistic discourse of hope for better life at present and future for humans through the animal route. This is evident in the discourses of Revivicor and the eGenesis. The troubling question of the fate of animals, transgenic, cloned or otherwise, in transgenic experiments, from which the xenografts are to be potentially retrieved or harvested, is reluctantly set aside in the hopeful humanistic discourses of the two xenograft engineering companies. But this hope is not only exclusive in that it envisions an animal future for humans in a register that has no place for animals, it is also illusory. To say that it is illusory is not to deny the materiality of the chimeras–which would entails denying their pain in harmful transgenic experiments. Within xenograft engineering initiatives, deletion of the “pervs” acquires the status of a conundrum–premised on the purported belief that their removal will ensure safe xenograft transplantation in humans. Although there is no consensus about “pervs” as obstacle to xenotransplantation, “perv” freedom is nonetheless seen as desirable. The hopeful humanistic discourses of xenograft engineering companies and biotechnoscience experts associated with them build on the confusion surrounding the “pervs”, even when it is not mandated by any regulating body.

The illusory nature of the chimeras or cloned animals xenograft initiatives and xenotransplantation research engineers through their research, funding and monetization, offer a speculative dimension to their practices. To say that xenoresearch is illusory is not to deny the reality of the objective or material world technoscience forges through its discursive techniques. This involves a critical gesture of suspending the assumptions of self-evidential truthfulness and self-presence related to so-called scientific facts–the facticity of the objective world that technoscience generates and chimeras with which technoscience hopes to people the world for a better future (Latour, 1993). Biotechnoscientific practices like xenograft engineering initiatives require thriving at the level of illusory hopes and promises–which enable humans envision enhanced and optimized conditions of living (Rose, 2007)–which are not falsities and lies *per se* but illusory and to a great extent mythic as is the chimera in Greek mythology [see Chimera (mythology)]. Within xenotransplantation discourse, illusion is a positive-productive propelling force towards fantastic and spectacular visions of biological future. The more technoscience thrives on chimerical possibilities as justification for its existence and relevance the more it approximates its other–the mythic. But the language of enunciation of such possibilities and the control they engender in contradistinction is rendered more and more rigidly molecular, cellular and genetic.

In such biopolitical project, financial investors are partners of biotechnoscience practitioners, for, in the absence of the market, chimeras and the hopeful corporeal promises they embody as solution to human predicament have no meaning and cannot materialize. What gets occluded in hopeful narratives of animal future, where a biopolitical biomedicine-biotechnoscience-industry-market nexus overcomes human predicament and suffering, is the fate of the chimeras–the animals engineered or cloned or used as means to serve human ends–the “abject” (Butler, 2004) others of the biopolitics of hope. Further occluded is how life in general, in its lower or higher forms, gets entangled in the biopolitical nexus of xenograft engineering companies producing chimeras useful for xenotransplantation on the one hand and the large pharmaceutical market of new immunosuppressive drugs which aim to augment xenograft survival on the other hand. The hope of human survival in general and survival of the xenograft in the human body in particular rationalizes immunesuppression and curves out a scientific and moral field for legitimization of its deployment as a biopolitical modality of controlling both empirical bodies and body in abstract–one that engenders viable xenografts as alternative to critical human organ scarcity, and develops new immunesuppresives and a specialized pharmaceutical market to combat xenograft rejection which potentially thwarts human life in a project that aims to foster human life.

Chapter Three

New Donation Initiatives, Biomedical Power and Subjectivation: The Biopolitical beyond State and Biomedicine

New donation initiatives, new subjectivities

This chapter revolves around new donation initiatives, power and modes of subjectivation. Organ donation initiatives, whether new or old, represent field of power beyond institutions of State and biomedicine yet deeply implicated in the imperatives of modern biomedical power, in that they shape subjectivities through knowledge about human body towards specific goals. Shaping of subjectivities through regimes of truth about–what body is, what biomedicine stands for and biomedical subjectivities ought to be like (Rose, 2007)–and the field of power they put in place through donation advocacy initiatives, offer an interesting dimension to the tracing of sociality of human organs, which is worth taking into account in a project aiming at overall mapping of contemporary organ donation and transplantation discourses, from institutional levels of biomedical law and bio-technoscience to subjective level of lived experiences–with organizational level of donation initiatives in-between.

The field of power represented by new donation initiatives is not an authentic biomedical space, in that it is not solely controlled by expert discourses. The field overlaps with extra-biomedical spaces. This however does not imply that this field of power can be conceived of without recourse to the power-knowledge of biomedicine and technomedicine. The emergence of newer biomedical and bio-technoscientific practices towards alleviating human predicament and suffering have implications for new donation initiatives. To say that new initiatives represent a field of power distinct and discrete from modern biomedicine would be as much problematic as assuming that they represent the expert domain of organ retrieval and transplantation. Organ donation and transplantation practices have essential biomedical and inalienable socio-psychological dimensions. Since new donation initiatives aim at generating awareness about organ donation and how it contributes to the pool of donor organs for patients facing organ failure–such initiatives entail interventions of power involved at the level of society and psyche. Critical analyses of discourses of power new donation initiatives bring forth and shape subjectivities and human experiences in ways unimaginable in the past or in the prevailing modes of thought is the objective of this chapter. This is no attempt to compare old and new donation initiatives. They generate and thrive on ideas, concepts and categories, of which some are similar (intrinsic to such initiatives) and some are dissimilar (which have been acquired through time, with changing circumstances) and not immediately comparable. The attempt is to investigate the unique reconfiguration of older categories in circulation in organ donation discourses and the generation of absolutely new, hitherto un-thought of categories associated with donation initiatives, which offer newer possibilities of thinking the pervasiveness of the biopolitical beyond institutions of State and biomedicine and new modes of subjectivation, these new reconfigurations and new categories bring into play. The effects of the reconfigurations is particularly perceptible in the most personal domains of human experience which throws light on the psychical workings of the biopolitical in the production of new subjectivities in and through new donation initiatives–which are unique in that they are products of unprecedented experiential and structural conditions–new contexts which Rose (2007) contends are produced at intersection of a biopolitics of ethics and bioeconomy of promise or hope.

This chapter proceeds via symptomatic analyses seeking to uncover the uniqueness of ideas and categories within regimes of power represented by new donation initiatives that are taken-for-granted as routine and obvious. Through content analyses of various secondary materials available on website of select new donation initiatives: namely, Mohan Foundation (https://www.mohanfoundation.org/), ORGAN India (https://www.organindia.org/) and

Shatayu (https://www.shatayu.org/), the chapter looks at singular instances from within these initiatives which help approximate the situated newness of concepts and categories projected as obvious. There is no attempt to generalize from singular instances. Nevertheless singular instances throw light, although prematurely, on the varied nature of discursive practices of new initiatives. These instances are not specific, full or whole cases; rather these are singular threads from each instance that are critically engaged and analytically juxtaposed against personal-ethnographic insights. This chapter is a gesture towards grappling with the grounds of newness of new donation initiatives and the implications they have for our understanding of power and subjectivation, following Foucault (1978) and Rose (2007), with special reference to organ donation and transplantation (see Figure 4.1 Situational Map). This is an integral part of the overall project of locating the biopolitical moorings of the "imbroglio" under investigation.

Next in order are three striking encounters with website contents of two new donation initiatives, which propelled content and case analysis of the domain, and will set the tone of the chapter. Firstly, one initiative in its attempt to popularize pledging of organs and bodies for donation beyond death among youngsters in collaboration with MTV[87]–a popular music channel, invoked the idea of organ donation as the "OTP"[88] to heaven (Organ, n.d.-a). Secondly, website of another initiative devoted a page for donation advocacy merchandize meant for boosting sale and awareness among youth (Mohan Foundation, n.d.-a). Thirdly, the same website notified about short-term courses on donation-transplantation practices and the scope of internship for the youth with the organization (MF, n.d.-b). These encounters taken together indicate a move towards a new entrepreneurial orientation to donation advocacy and transplantation, and its consolidation as an emerging area of expertise. This new orientation is not only about carving out of new areas of capitalization; it has implications for how donation

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[87] Music Television.

[88] One Time Password.

initiatives are reconfigured after professional and managerial models, so much so that providers, beneficiaries and agents of advocacy–in short, the entire system is remodeled after a new entrepreneurial ethic–which has implications for not only how new initiatives function, subjectivities are constructed and reconfigured but also for how biomedical power and its control mechanisms unfold and circulate (see Figure 4.2 Positional Map). Sections below trace the itinerary of the reconfigurations anticipated above through singular instances as reflective, not representative though, of some emerging trends.

Entrepreneurial subjectivation and speculative approach to affect

This section looks at intriguing discursive spaces engendered by Mohan Foundation. Instead of resorting to full-fledged case analysis, this section engages an adjacent discursive space–a fundraising programme called Anudaan (MF, n.d.-c) created by the Foundation to generate funds for poor patients through the Milaap platform (https://milaap.org/fundraisers/support-transplants-affordable).

Mohan Foundation has been into donation advocacy for a long time. A recent addition to their advocacy program is "Anudaan-Making Transplant Affordable" which emanates from the realization that organ transplantations in India do not happen not only owing to scarcity of donor organs, but the lack of funds available to bear the cost involved in transplantation (MF, n.d.-c, Anudaan section, para. 2). The huge cost of transplantation and post-transplantation care, according to Mohan Foundation website, calls for serious consideration by donation initiatives (MF, n.d.-c, Anudaan section, para. 5). The Foundation therefore seeks to make transplantations available to deprived sections through Anudaan programme, which aims to make transplantation affordable in India where "organ transplants are … prohibitively expensive" (MF, n.d.-c, Anudaan section, para. 6).

Anudaan promises financial “help to the economically poor and needy patients so that they can also have access to life-saving donation and transplantation” (MF, n.d.-c, Anudaan section, para. 6). It aims to generate a monetary corpus through personal grants and corporate partners (MF, n.d.-c, Anudaan section, para. 7). Towards this end, the Foundation collaborates with Milaap, which claims to be a “free” fundraising organization for medical issues affecting individuals unable to meet huge treatment costs (Milaap, n.d.-a). “Our crowd funding platform charges NO fees” says the Milaap website whose interface is linked to that of Mohan Foundation (Milaap, n.d.-a). It presents itself as “friend” in “hour of need” and major support system because it claims “…With Milaap, you receive timely help to pay medical bills” (Milaap, n.d.-a). The Foundation through the Anudaan programme and Milaap, the crowdfunding organization, invokes friendship or partnership as the uniqueness of their support. Such invocations offer new dimension to the tracing of the tacit workings of the biopolitical in and through new donation initiatives.

Moreover they function in a manner as if the domain of organ donation and transplantation is a marketplace, which calls for immediate response, planned action and a technical orientation to organ failure. What they offer to the potential recipients of organ transplantation is more of a “package” that they ought to book or pay for in expensive, private hospitals to undergo treatment. Rather than getting embroiled in ethical dilemmas like commercialization of live donation, since such contexts relate to existential issues of life and death, they deploy the language of immediacy and promptitude, rather than ruminating on the need for legal regulation or hurdles to donation and transplantation, punctuated with friendly gesture of quick problem-solving as is evident in their promise of “round the clock assistance” (Milaap, n.d.-b, Related FAQs section, question four, para. 1)–responding effectively to issues of financial need. Unless the financial question is properly addressed, full potential organ transplantation technology as remedy for organ failure cannot be realized is what such new donation initiatives foreground.

The approach of the Foundation in collaboration with Milaap is highly goal-oriented, case-specific problem-solving, involving consideration of medical and financial aspects, as well as enrolling trained volunteers in managing digital orchestrations for crowdfunding. New initiatives like Mohan Foundation have great online presence or otherwise, and hence a pervasive reach. They put in place expansive mechanism of outreach via digital platforms and collaborate with private companies as part of their CSR[89] or public service engagements, thereby ensuring greater visibility and claims to relevance.

This is no eulogy of Mohan Foundation or similar new initiatives. This is rather a way of making sense of how new initiatives function via a gamut of entrepreneurial approaches that have great resemblance with contemporary marketing strategies. An engagement with the price or cost question insofar as Mohan Foundation and Milaap are concerned, is necessary to gauge how these singular instances help us grapple with the reconfiguration of affect and moral action such as philanthropy and donation through entrepreneurial regimes which draws from bioeconomic moorings of contemporary biopolitics (Rose, 2007). This can be worked out through a critical look at the instance of "pricing" which is market dependent (Milaap, n.d.-b). The "pricing" section of Milaap website, the Foundation's collaborator in Anudaan programme brings a lot to the fore, which is obfuscated by claims of "free" fundraising with zero platform fees (Milaap, n.d.-b). "Free" fundraising and philanthropic undertones of it, obscures the "pricing" section–a critical look at which reveals hidden costs (Milaap, n.d.-b). Such costs emanate from conditions which Milaap cites as exception to its philanthropy.

The "pricing" section of Milaap website legitimizes hidden costs by claiming that they provide "best-in-class social fundraising technology" via social media outreach and

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[89] Corporate Social Responsibility–a business model that upholds the necessity of accountability of the corporate to the stakeholders or the society at large.

digital promotion platforms (Milaap, n.d.-b, Related FAQs section, question four, para. 1). Such services are provided by experts for whom Milaap charges social outreach fees upto fifteen percent of amount raised by the fundraiser (Milaap, n.d.-b, Related FAQs section, question four, para. 3). Under such circumstances, how can fundraisers claim to be "free"? The proposition that the fundraiser is "free"–that there is no charge for using the Milaap platform but charges are involved for amplifying the cause in the public realm, and on social and digital media platforms deploying most profiteering means, which requires expert assistance (see Milaap, n.d.-b, Related FAQs section, question four, para. 2), is a contradiction in itself. How can one distinguish analytically, let alone empirically, fundraising from social outreach, particularly because outreach is deeply embedded in fundraising and fundraising cannot happen without outreach–without the latter the former becomes too limited to be feasible. Any charge for social outreach, however pervasive the medium may be, is at the same time, a charge for fundraising. The excerpt from Milaap website foregrounds its "free" service, yet adds as caveat the conditions under which the service is chargeable. This call for engagement and the chapter shall revert to it later with insights from a personal encounter:

> Over 95% of Milaap's campaigns which have raised money do it for FREE using our best-in-class social fundraising technology and round-the-clock assistance and support from our relationship managers.
>
> In certain scenarios, where the beneficiaries come from a disadvantaged background with no digital literacy, exhausted most of their finances with no other sources available and require funds very urgently; Milaap may consider them on a case-by-case basis for outreach on social media and digital promotion platforms after verification and a signed request letter from the beneficiary. This is subject to availability of our team members and situations where we believe promotions can achieve something significant for the cause.
>
> Similar to payment gateway costs where it's paid to payment processor, outreach costs are paid towards social media and digital promotion platforms. To ensure that donor money goes primarily to the intended purpose, we cap the outreach costs to not more than 15% of funds raised. (Milaap, n.d.-b, Related FAQs section, question four, para. 1-3)

In 2019, I was interviewing a friend, when issues of fundraisers in organ failure and transplantation came up.[90] He began sharing his experience about how his maternal uncle's daughter and her husband managed the congenital liver disease[91] of their three year old daughter, who required liver transplantation. For some time it did not register in the minds of the parents that their daughter has such a serious condition. Initially they were getting the treatment done in a popular south Kolkata clinic, well-known for gastroenterological treatment. But they realized that the challenge is to get a donor organ for their daughter and thought that Kolkata is not the right place for this, so they immediately decided to shift to the biggest multi-organ transplantation facility in India located in Chennai. After thorough screening, a package for sixteen lakh was finalized as transplantation cost by the medical team. The amount was huge but they were ready to arrange the money by prematurely withdrawing their savings. Both are well-placed engineers but the cost was a pressing issue. Their extended family, grandparents from both sides made contributions but the pool generated was far from the required amount. There were additional expenses as well, of lodging and fooding during their stay at Chennai. When they approached the hospital authorities for concession, the management told them that the transplantation package cost quoted to them was already at discounted rate. They can do nothing in terms of subsidizing the cost further. Hospital authorities informed them that there are representatives of a fundraising organization in the hospital. The management generally forwarded cases of fund deficit to the organization which creates fundraiser platform.

They met the representatives of the organization. Every medical and financial detail of the patient and her family was recorded. They were asked to undergo documentation for formal application and the amount for which the fundraiser would be initiated was estimated

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[90] The sections quoted in the text are from a long conversation and interview with a friend who, when contacted, consented to share information about the liver failure of a close relative. Although the parents of the child could not be contacted, the friend, who was proactively involved in their crisis, provided valuable information on the topic. Portions quoted here are selections from the field diary, reconstructed in the narrative mode, for analysis.

[91] Liver disorders present at birth, such as Biliary Atresia.

after consultation. Before the fundraiser was made online on social media, photographs were taken with my friend’s niece launched in the hospital bed with her parents; a short video was recorded with the parents appealing to the public for help, which were made online with an appeal to raise eight lakh rupees for her transplantation. “Money started pouring in fast as result”, my friend said. But another challenge was to arrange for the donor. Both parents had undergone blood tests in the meanwhile. The mother’s liver was compatible with the child, and they decided to go ahead with transplantation, but the fundraiser was yet to reach the estimated target. Since they could no longer endure their daughter’s suffering, they decided to go ahead with transplantation, with the remaining amount to be self-funded by incurring a personal loan.

Finding a donor organ is a big challenge and arranging the money necessary for funding the transplantation is equally worrisome. The role of fundraisers draws attention in this context. I have personally come across fundraisers on social media, and on one occasion donated money towards a particular cause. The moment I donated the amount, I received an email from the fundraising team, and in the subject of the mail I found written: “Pinaki, you’re awesome!” (Milaap, personal communication, September 28, 2018) I was slightly taken aback as I did not expect such a flamboyant reply from a team raising money for liver transplantation of a six month old. I was further shocked to find that tax relief for donation towards any cause raised by the fundraiser is given only to organizations, not to individuals. I was therefore curious to know about the experiences of my friend’s sister and her husband who had immediate exposure to the organization. He shared:

> Fundraisers are good. But how fast the amount is raised depends on the publicity. Families have to depend on the fundraisers for outreach. They can always share the fundraisers on their social media profile and raise money, but the population there is limited. For fast generation of funds through outreach, publicity strategies of fundraising team are necessary. They do not charge money for the platform they provide but charge money for outreach ….

> Because they had relied on the organization’s outreach strategies and had signed contracts, ten percent of the proceeds went towards financing the outreach.

The transplantation took place successfully but complications occurred when my friend’s niece suffered from a post-transplantation trauma and needed money for further treatment. My friend stated that this time they decided not to resort to organizational fundraiser:

> When my niece got an infection after the transplantation and they needed money to continue the treatment, they decided not to resort to any fundraiser. They opened a bank account and made a Facebook appeal about the condition of my niece, that they needed to money to continue her treatment. All testimonials and reports were shared along with bank details. The post was shared by relatives, friends and acquaintances and they were able to raise a decent amount. They could not rely on any mediator, who will have a claim to the fund. Funds directly entered the joint account of my sister and brother-in-law, and they immediately acknowledged the receipt on the Facebook page with a note of gratitude.

My friend further said:

> Through fundraisers money raised is huge but there is no full control, especially if outreach is managed by the team. The second time they needed money they were not keen about getting funds raised by any organization, that involved a lot of work–documentation, signing of consent letters and contracts, getting photographed and videographed and all that. My brother-in-law was not at all comfortable with the idea of being contract-bound with an organization which claims a percentage of crowdfunded money. After all it is donated money, why should the organization claim a percentage of it? My brother-in-law felt cheated. He thinks the organization made money showcasing his helplessness.

One thing is clear that fundraisers are no unadulterated philanthropy, especially if expert strategies are involved. Their involvement in life-saving ventures has bioeconomic moorings in that they put biology at the centre of discourses of capitalization (Rose, 2007). These discourses in their entrepreneurial *avatar* are connected to new biopolitical modes of subjectivation in relation to both contributors and beneficiaries of fundraisers. The first is the public showcasing of the helplessness of people involved in the tragedy. In this publicization of personal tragedy as ground for generating funds, people hit by the tragedy get involved in the publicization process through acts of performing emotional labour, which in turn becomes the ground for capitalization (Hochschild, 1983). The emotional labour of people hit by the tragedy is staged and orchestrated in specific ways aimed at manipulating affect, widely circulated and consumed by the virtual public, which incites them to contribute compassionately to the cause. The Milaap website says, “We rely on the generosity of our users to power the platform” (Milaap, n.d.-b, Related FAQs section, question one, para. 1). Philanthropy via mediated platforms is not only monetarily conditional, it is conditional in other ways, especially when it involves a performative engagement of people hit by the tragedy in public showcasing of their grief as the basis of generation of funds. In fundraiser vocabulary however, this is part of the larger paraphernalia of establishing credibility of grief, and public accountability of the organization towards people who donate out of compassion for a cause.

The second issue is related to the first. Documentation and contract-bound activity is oriented towards making each case for generation of funds firm on grounds of credibility and accountability. This involves strategies of surveillance via contract which controls activities of people involved. Philanthropy is not unconditional, rather involves people hit by the tragedy giving in to surveillance regimes the fundraisers bring in their wake. But there is no point seeing such giving in to surveillance regimes through documentation and contract as prohibitive. The production of emotional performers out of grief-stricken parents or relatives, documenting the grounds of authenticity of their grief and the tragedy that is publicized, operates through a managerial regime that conceives of people hit by the tragedy as entrepreneurial subjects, who resort to organizational crowdfunding for their cause and partake performatively in the mediated representation, documentation and publicization of their grief, hoping to get their cause funded by donations made by the virtual, compassionate public. Subjects under expert guidance of crowdfunding organizations are entrepreneurially reoriented to their grief through counseling sessions, rather than seeing their experiences in limiting terms. Entrepreneurial subjects so shaped are subjects of performative orchestration of affect as ground for capitalization and objects of surveillance through scrutiny of credibility of grief. Next in order is the process of subjectivation from the point of view of the contributors or funders in crowdfunding.

Like reward-based crowdfunding[92] where contributors are hopeful that they will receive tangible returns, in case of donation-based crowdfunding[93], the contributors or funders are hopeful, but not about any tangible material return but an intangible satiation that an ailing person or a relative in grief, a tragedy-hit family, has been supported through donation in face of financial crisis through a compassionate, moral act. Within the crowdfunding framework, contributors or funders and beneficiaries or recipients are entrepreneurs working in and through an orchestrated network–involving creation of an entrepreneurial profile, publicizing of the cause, engaging the target audience, providing updates and so on–from a venture capitalist reference point. Ideally speaking, the object of speculation in donation-based crowdfunding is no material reward or tangible return. But donation-based funding like reward-based crowdfunding has the crowd or public trying to realize an aggregate financial effect. This complicates the philanthropy and compassion of contributors towards a cause. Such acts of philanthropy or compassion in donation-based funding involve a speculative entrepreneurial and psychological investment on part of contributors more on the generation of the fund itself rather than alleviation of the problem related to the cause, in which case tragedy and grief are rendered mere means to an end. This is not a diminution of human compassion but a critical approach to the entrepreneurial reconfiguration of affect in the context of organ donation advocacy.

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[92] A way of generating a financial corpus by asking for monetary contribution as donation from the public for a particular project or cause.
[93] Financial funding with returns for a project by the public towards a project or cause.

Such contexts also engender feelings of having been “cheated”–evident in the experiential narrative–when a percentage of the raised amount is claimed by the fundraising organization. Essentially speaking, donated money has an unconditional status in that neither the recipient can claim it as a matter of right, nor the funders or fundraisers can set conditions on the payments they make or receive or generate towards a cause. But in the context of donation-based crowdfunding, where both contributors or funders and beneficiaries function as entrepreneurial subjects, donation becomes conditional. The beneficiary may feel deprived of an amount with which he or she has no relationship of entitlement or right whatsoever, yet has the legitimate right to feel so because personal emotions have been capitalized through the fundraiser and the money crowdfunded by a compassionate public. The fundraising organization plays the a pivotal role in this context through subjectivation of beneficiaries (who may calculate loss) and contributors (who may speculate on an aggregate monetary effect) as entrepreneurial subjects by putting in place an apparatus of management of affect, functioning via the gesture of friendship or partnership–in the hopeful journey towards cure and healing.

But hope for cure and healing ceases to be the ultimate value or end to be met through philanthropy and donation. Rather hope becomes an object of entrepreneurial speculation with the possibility of situations where involvement with hope is far less than desired by value. This is no simple marketization of tragedy and grief or commoditization of hope but a speculative recasting of an entire corpus of practices hoping to foster, engender and optimize life. What implications this entrepreneurial and speculative orientation to affect has for the biopolitical moorings of new donation initiatives needs to be spelt out categorically. What this orientation does is that it locates the technology of organ donation and transplantation within a bioeconomy of promise or hope that appropriates and transforms biomedical and technomedical pursuit for optimization of life into an economic effect (Rose, 2007), where hope figures more as rhetorical than real (see Figures 4.1 Situational Map & 4.2 Positional Map).

Next in order is another instance from within the discursive domain of new initiatives where processes of subjectivation overflow production and management of entrepreneurial subjects to the domain of psyche and disciplinary practices of psychology and psychotherapy. The latter is deeply connected to the former in essence and practice.

Pyschologization of trauma and psychotherapeutic approach to self

This section looks at the website of an initiative by the name, ORGAN, under the aegis of NOTTO[94], funded by the Parashar Foundation (ORGAN, n.d.-a, para. 1). The ORGAN India represents a discursive field which aims to nurture responsible subjects but the focus is not only on responsibility towards society through selfless act of organ donation. It is also oriented towards cultivating a specific "self-perception" when faced with the crisis of organ failure and urgency of transplantation (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 3). The ORGAN approach is interested in the psychological processes of the actual or potential transplantation recipient. The social welfarist or reformist orientation is undermined, because ORGAN is primarily involved in donation advocacy (see ORGAN, n.d.-c). But chooses the route of psyche, trying to nurture subjectivities willing to embrace transplantation rather than opt for a life of dependence or dejection, demonstrating what Rose (2007) identifies as a new corporeal ethic towards one's life. Not that there is no journey to the external world–the realm of altruistic donations (see for instance ORGAN, n.d.-d, e, f) but the emphasis is on the mind–the management of interiority as way of coping with organ failure and transplantation (ORGAN, n.d.-b). This move of ORGAN is oriented mainly towards recipients than donors. The psyche of the recipient is treated as the site of

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[94] National Organ and Tissue Transplant Organization.

engagement compared to the donor, who confronts erasure–the quintessential other in the transplantation context. Management of interiority produces psychotherapeutic subjects. Such production is based on the schism (the donee/recipient and donor), a theme this chapter shall take up in the context of Shatayu.

Moving beyond clinical vocabulary, which looks at post-transplantation phase in clinical terms, the ORGAN adopts a psychotherapeutic language which posits "positive self-perception", "high self-confidence and self-esteem" as ways of coping with bodily trauma and acceptance of foreign organ in post-transplantation phase (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 3). By inviting the recipient to shake off victimhood and embrace an attitude that vitalizes "inner strength" towards harmonizing the troubled body–the body in disarray–with a positive, welcoming attitude to life (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 4). Invoking psychological variables such as "optimism, self-belief and inner strength" the ORGAN inspires potential recipients to exercise "a choice to either stand up and move forward with our head held high or continue to worry, blame and succumbing to our fears. … trust ourselves, have faith that we are always taken care of, and generate new possibilities in our life…." (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 5-6). Here a psychotherapeutic approach to self coalesces with a theory of voluntarism within overall workings of what Rose (2007) as a moral-economic approach to hope. Before moving further with the analysis a critical look at an excerpt from the ORGAN website is in order:

> Organ failure and/or a transplant can be a very demanding experience. Of the many factors governing its outcome, 'self-perception' is an important one. The physical functioning of our body after transplant, that is, how our graft will function and how our overall body would function, can depend largely on how we think and feel about ourselves and how we view our overall life. A positive self-perception indicates high self-confidence and self-esteem, thereby making this journey easier and more rewarding.
>
> For example, if this experience makes you feel like a victim of sorts and you believe your life is a burden now, then your body could respond to that energy. It is

> possible that more struggles and challenges may come your way, further reaffirming those beliefs. On the other hand, if this experience inspires you to value your inner strength and you allow yourself to create new possibilities in life now, then we believe that your body would respond accordingly, inviting ease and joy, as though driving on a fast smooth highway.
>
> Additionally we believe that your feelings of optimism, self-belief and inner strength would create ease in your journey while your fear, anxiety and confusion would invite challenges at every step.
>
> The good news is that no matter where we are in our journey, it is never too late. We simply need to take a strong intention of turning around our life through this experience, right now! We always have a choice to either stand up and move forward with our head held high or continue to worry, blame and run the risk of succumbing to our fears. It is now that we can trust ourselves, have faith that we are always taken care of, and generate new possibilities in our life while feeling – How does it get better than this! (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 3-6)

New donation initiatives are constituent elements of a (de)centralized pastoral biomedical regime where various off-shoots of the central biomedical institution acts as decentering agents, branching out via meso and micro-level organizational arrangements such as ORGAN, run by a private foundation and affiliated to the NOTTO, and Shatayu, a non-for-profit, public service organization, led by a realty firm. Two tendencies are perceptible in these developments. Firstly, there is an invitation on the part of meso and micro-level organizations to go beyond the clinical conditions of the body–the physical body–to a serious reconsidering of the healing powers of mind through “positive self-perception”, “high self-confidence and self-esteem” (ORGAN, n.d.-b). This invitation performs the function of discursively freeing the body from the control-regimes of hard, clinical sciences such as anatomy and physiology, medicine and surgery but surrenders the new freedom to the soft therapeutics of psychology and psychotherapy, thereby rendering a problem that has biological origin and social-structural location into a problem of the psyche–which can be overcome through correct ethical posturing and maneuvers of the self, trying to overcome the physical trauma of organ failure and transplantation through a self-therapeutic approach to psychological determinants. The second is related to the first. Not only initiatives like

ORGAN decenter biomedical discourses by inviting the subject take control of the situation and embrace what Rose (2007) identifies as a new corporeal ethic. They also inspire subjects to reclaim their agency by not succumbing to "fear, anxiety and confusion" (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 4). These two tendencies combined together represent a pyschologization of the problem, which has the inherent defect of reducing corporeal dimensions of organ failure to conditions amenable to maneuvers of the self, as if the solution lies in the right posturing of the subject, wherein adopting a positive attitude to life becomes an ethical imperative, which echoes Rose's (2007) "ethopolitics".

"Ethopolitics" for Rose (2007) is the morality of contemporary biomedicine which aims to produce bodily subjectivities who take control of their biological present and future under guidance of experts of the body. "Ethopolitics" of organ transplantation technology and practice and donation initiatives related to them aim to produce psychotherapeutic subjects and carefully lays out the managerial hierarchy that guides and supervises the transplantation recipients, actual or potential, and their families through the trauma and its management.

Psychotherapeutic subjects are constantly told that they are not alone, which is similar to the friendship or partnership motif of Mohan Foundation. By recruiting the family members or care-givers of the transplantation recipient in the process of disease management, new initiatives seek to ease the difficult phase of life organ failure and transplantation represent. Such support mechanisms involve sharing of information to produce informed patients and families who have knowledge about the condition affecting them and ways of alleviation. Transformation of docile patients into involved agents in disease management is integral to the process. Such transformation takes place under pastoral guidance of corporeal experts (Rose, 2007) in these organizations who are not necessarily transplant specialists, but non-conventional support mechanisms. This is demonstrated using "A New Beginning", an initiative of ORGAN, as an instance:

> Join us in our new endeavour, ‘A New Beginning’. An initiative especially created for you, who are dealing with a traumatic phase in life that comes with organ failure and/or transplant. As part of this endeavour, we will be conducting a series of webinars, exclusive to patients, transplant recipients, their family and care-givers, donors and their families and all who wish to join us and want to turn their struggles into their strengths. These webinars are about harnessing your inner strength and making your journey easy and joyful, by sharing experiences and learning practical tools and effective techniques. (ORGAN, n.d.-b, Support Group section, A New Beginning)

The ORGAN website elaborates that its support system is structurally differentiated and functionally specialized, and accommodative of new roles. Patients can take up pastoral roles (Foucault, 1982) of mentoring to facilitate others manage the crisis situation of organ failure:

> If you are struggling through a transplant or through a donation in the family, just remember that you are not alone. There are many people who are going through the organ donation process for whom support goes a long way. It isn’t easy to simplify the range of challenges people face while going through a transplant or an organ donation.
>
> Our program provides support groups for organ transplant patients and their families. The groups are designed to provide the support in coping with the stress involved in the transplant process.
>
> Keep in mind there are also some good reasons to attend transplant support group meetings …. You will be able to meet others with similar thoughts and concerns, and realize you are not alone ….
>
> Patients often learn from each other and exchange important information. Other patients and their relatives can help you become familiar with members of the transplant teams. Knowledgeable staff members, who can help provide support and education, facilitate the groups ….
>
> We can help you through our program ‘A New Beginning’ which is a Support Group, or by finding a Mentor to guide you through the transplant. In case you are a patient, a donor, a relative or a caregiver, and are at some point in the transplant process and need support, we have several initiatives for you.
>
> You can apply to join our Webinars, and become a Mentor to someone going through the transplant process, or request for a mentor to guide you and be your crutch…. (ORGAN, n.d.-b, Support Group section, A New Beginning)

Elaborating the organizational structure and ways of reaching out to those in need of support, apart from transplant specialists, ORGAN provides “support groups” and “mentors”, which points to the decentering of modern biomedicine, as explained by Rose (2007). A significant aspect of this decentering is that, exposure to a definite set of experiences rather than specialist knowledge begins to wield power in the process of subjectivation:

> Seeking out Support Groups in your community and educating yourself about organ donation and transplantation is the best way to get through the process. Social support and knowledge can be valuable tools for coping with donations and transplantation.
>
> Seeking a Mentor will be a good way to cope with the entire process. They can help you guide at an individual level through your specific challenges. (ORGAN, n.d.-b, Support Group section, A New Beginning)

Another significant dimension of contemporary biomedicine is the emphasis on “holistic healing”, which overflows modern biomedical model and institutional management of disease to include non-dominant healing practices like Shamanism, Reiki and Redikall healing, apart from psychometric evaluations which are integral part of soft clinical sciences (ORGAN, n.d.-b, Support Group section, About the Facilitator, para. 1). One can locate here contemporary biomedicine’s involvement in decentering its own preoccupation with hard clinical sciences to include the other–non-dominant, alternative practices of healing, which have for long been in contestation, competition and dialogue with contemporary biomedicine. The production of psychotherapeutic subjects and management of interiority through various off-shoots of decentered pastoral biomedical regime has dual aspects: on the one hand, it transforms organ failure and transplantation into an essentially psychological experience as if extra-psychic factors, biological and societal are irrelevant. On other hand, premised on such pyschologization of trauma, the fundamental presumptions of modern biomedical regime are subverted through a new managerial regime of contemporary biomedicine–involving a journey from hard facts of the body to soft dynamics of the mind, to the reclaiming of agency of the subject through volition and knowledge, and a psychotherapeutic approach to one’s troubled self and body, which in turn decenters specialist-dependent discourses of modern biomedical sciences to include non-experts as facilitators in the psychotherapeutic approach to self. Like the production and management of entrepreneurial subjects which brings about a speculative orientation to affect and moral acts of philanthropy and donation, and humane experiences of grief and tragedy, through the singular instance of ORGAN we are confronted with a situation where contemporary biomedicine wields power on the subjects through a new managerial apparatus that engages the psyche as the object of control, and decenters the widely held assumptions of modern biomedicine (see Figures 4.1 Situational Map & 4.2 Positional Map).

Contradiction in any discourse calls for critical engagement. In the following section, the chapter focuses on social hierarchies and class contradictions built into contemporary regimes of biomedical power and its offshoots, with essential continuities and discontinuities, which aim to produce socially and biomedically responsible subjects.

The following section looks at a letter by the Chairman of Ganesh Housing Corporation Limited and Govindbhai C. Patel Foundation, who manages the not-for-profit, public service oriented, organ donation initiative, Shatayu–The Gift of Life (Shatayu, n.d.-a, About us section, Who are we). The letter is written as an introduction to an awareness generation material–a comic book by the title, "Super Donor: Everyone Has the Power to Save Lives" (Shatayu, n.d.-b, Our Story section, Downloads).

New donation initiatives, "responsibilization", class contradiction

Critical reading of the letter and the enunciations in the comic book is part of the project of demonstrating new modes of subjectivation through awareness generation campaigns and the production of responsible subjects to invoke Rose (2007). The awareness generation material is not a comic book in the strict sense but deploys elements that are attractive to youngsters, creating grounds for awareness. A close look at abridged version of the introductory letter and sections from the comic book is in order:

> Dear Friends,
>
> How do you feel when you have to wait for something you really, really want and need? What if this was something you literally couldn't live without? Well, even I did not think about it, until I was diagnosed with cardiomyopathy[95] and a heart transplant was the only option of survival. If it wasn't for my family, the competent team of doctors, and the kind donor who agreed to donate his heart, I would be dead by now. I was lucky to find a donor but most people are not.
>
> Organ donation is a selfless way to give back to others, and to be able to make a huge difference by giving another person a second chance at life. Unfortunately, the number of patients waiting for organs far exceeds the number of people who have registered to become organ donors….
>
> I believe that only heightened public awareness can raise the cadaver organ donations in the country and India could rid herself of the problem of organ shortage. And I realized that people need dramatic examples to shake them out of apathy, so in the year 2009, I founded SHATAYU–an organ donation awareness initiative whose sole intent was to spread awareness about this lifesaving miracle….Today, with great pride I gift you this book and hope in my heart that you would decide to give the most amazing gift anybody can give-The gift of life.
>
> I was gifted my life by a person who is now my SUPERHERO. I wish that each one of you, the young India should get inspired and be someone's SUPERHERO. (Shatayu, n.d.-b, Our Story section, Downloads)

The letter by the Chairman begins by recognizing that faced with cardiomyopathy and the need for heart transplantation, a "kind donor", his family members and doctors helped him survive the crisis. He considers himself "fortunate" to have received an organ that saved his life. But in India many people die due to organ failure in absence of donor organs. In 2009, the Chairman founded the Shatayu, an organ donation initiative to generate public awareness about cadaveric organ donation. The letter introduces the public to an awareness generation material published by Shatayu. The Chairman narrates his own life-story where he was rescued from death by the kindness of a heart donor, which acts as the prelude to the awareness generation material. The Chairman describes the donor as his "SUPERHERO" and

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[95] An acquired or hereditary disease where the heart is unable to deliver or supply blood to all parts of the body.

invites younger generations in India to develop knowledge about organ failure and feel motivated to rescue someone from death by pledging to donate organs beyond death.

The comic awareness generation material centers on the concept of “SUPERHERO”, the story of an ordinary individual who becomes an extraordinary person by saving life by pledging to donate organs at death, like other superheroes in popular culture. The comic book appropriates the aspirations of younger generation who want to become superheroes in their personal lives through some extraordinary act and seeks to channelize that aspiration towards greater public good. In the narrative of the comic book, Rohit, the protagonist, after listening to the presentation by Shatayu volunteers, feels motivated and evidently happy when comes to learn that he could be superhero. This, according to Rose (2007), is the production of responsible subjects–where the regime ignites the capacities of the individual or the subject to take responsibility for his or her own and others’ future. Rohit says: “I often wonder what it feels like to be a superhero and save so many lives. I wish someday I could be a superhero”. Inspired by Shatayu, Rohit decides that he would become an organ donor (Shatayu, n.d.-b, Our Story section, Downloads).

This is one part of the narrative where Rohit, the protagonist feels inspired to become an organ donor, recognizing his responsibility and makes the moral choice. His aspirations get charged with a moral quotient and individual volition. In the other part of the narrative, Rohit, the protagonist, encounters a real life situation where he facilitates body donation of his brain dead driver, Ramu Kaka, after a road accident, to which he succumbs but Rohit escapes. In this gloomy part of the narrative, Rohit acts responsibly and makes an informed move towards ensuring greater good. When Rohit learns Ramu Kaku has suffered brain death he facilitates the latter’s body donation by convincing the driver’s mother to give consent to organ donation, which saves the life of Sanjana, who was suffering from kidney disease. At school, Rohit is felicitated for facilitating body donation and engaging in a moral act–

transforming the aspiration built in the first part of the narrative into reality through the act of facilitation. His friends applaud him by saying: “Hurray! Rohit you are a true hero. We promise that we all would pledge for organ donation today and encourage others to do so too” (Shatayu, n.d.-b, Our Story section, Downloads).

A strange turn takes place in the narrative at this juncture. The donor, Ramu Kaka, the one who actually saves the life of Sanjana beyond death, although unknowingly, without any expressed choice or wish, is obscured from the narrative. The facilitator, Rohit, the protagonist, becomes the “true hero”, whereas the narrative had begun with the point that by pledging to donate and by actually donating organs one becomes a “super hero”. This surely does not happen in case of Ramu Kaka, Rohit’s driver, if one carefully traces the itinerary of the narrative. While there is no point arguing that the role of facilitator is lesser than the donor in cadaveric donation, which is true for India where pledges do not see the light of day in absence of facilitators, immediate–familial and communitarian, and institutional–medical establishment, what appears striking is the strange reversal of claims in the narrative. From glorification of the donor as “super hero”, there is an obscuration of the deceased donor in the narrative. This can be attributed to two reasons: one is the inherently hierarchical nature of the context of organ donation, where the donor gets obscured by narratives of survival of the recipient, there being a hierarchical opposition between the donor and the recipient, and the second is the class character of the specific narrative that the comic book revolves around, where the driver, Ramu Kaka’s posthumous contribution is overpowered by the facilitating gesture of his master’s son, Rohit. This second point is continuous with the inherently hierarchical relationship between the donor and the recipient, especially in the Indian context were most of the donors are socio-economically vulnerable.

This act of obscuration of the donor is noticeable in the introductory letter to the comic book that the Chairman writes–where the generosity of the donor is recognized, yet at the same time disavowed through lack of identification. It seems from the way in which the letter is written the Chairman received an organ from a live donor, even though the Shatayu project is mainly centering on cadaveric donation. That the donor could be a live person is evident when he says: “I was lucky to find a donor but most people are not” (Shatayu, n.d.-b). Although there is recognition of the selfless act of the donor, who gave him the chance to live, the donor is obscured, like the character of Ramu Kaka, in the narrative of the comic book. This appears not only as legal compulsion, because of the multiple illegalities involved in live donations. There is an inherent schism, despite the eulogies in favour of the donor and the selfless act the donor engages in, that separates the recipient from the donor, setting aside the latter in a zone of individual and legal indistinction, into abstraction, beyond the empirical act of donation, which however invites valourization.

This opposition between indistinction and valourization with its inherent class dynamic calls into question the modes of subjectivation through the pastoral biomedical power, characterized by dynamics of centralization and decentralization, where supposedly non-clinical or extra-biomedical, yet extended or connected institutions, practices and agents come to wield power over individuals. This power is not only traceable in empirical contexts but also in enunciations. Not as coercions or impositions from above but as facilitators in the production of right kind of subjectivities which are morally inclined to exercise power towards greater good. That there is no coercion or imposition from above in the production of such subjectivities need not imply that these discursive spaces are level playing fields–devoid of socially generated asymmetries. A critical look at a tiny, apparently insignificant fragment of discourse throws enough light on how traditional or conventional hierarchies like class seeps into popular awareness generations materials like the Shatayu comic book in this case.

A deconstructive reading of the introductory letter and the comic book facilitates a problematization of the class-based schism between the recipient and the donor in the organ donation and transplantation context in India that inadvertently punctuates the narrative, producing a critique of how the specter of live donation comes to haunt the purportedly public service oriented, cadaveric organ donation awareness generation programmes. Responsible subjects like Rohit, produced in and through awareness generation materials, too are perpetually haunted by class hierarchies that seep into the production of selfless, altruistic subjects. Whether this is a garb of selflessness in an inherently class-based society or whether production of such subjects is an inadvertent, yet unavoidable outcome of processes of subjectivation through biomedical power calls for engagement with power and subjectivation with reference to (de)centralized biomedical power and its various off-shoots and agencies (see Figures 4.1 Situational Map & 4.2 Positional Map).

Beyond modern biomedical power?

This chapter began with the objective to offer a critical analysis of discourses, institutions and practices of new donation initiatives with reference to transformations in modern biomedical power and pastoral processes of subjectivation related to them (Foucault, 1982; Rose, 2007). Two concerns have been integral to this project: firstly, power in contemporary biomedical discourses exceeds the discursive limits of state as an inherently biomedical institution (Foucault, 1973/2012) and the discrete institutions of biomedicine to penetrate and inhabit extra-biomedical spaces. New donation initiatives in this respect represent the extra-biomedical space in that they are not intrinsic to the institutions of state and biomedicine, yet in their ideologies and preoccupation they are deeply seeped in the biomedical regimes of power and truth, and modes of subjectivation, modern biomedical power brings in its wake. Secondly, the fact that modern biomedical power exceeds the boundaries and closures erected by its own discourses to get disseminated in other fields and function and operate through newer agencies, wings and off-shoots, does not necessarily imply that modern biomedical power has been decentered irrevocably and for good. There has been substantial decentralization of modern biomedical power in organ donation and transplantation through the emergence of new agencies and off-shoots of power–the new organ donation initiatives. This does not however imply that the biomedical field and the field of organ donation and transplantation has become a level playing field with no power asymmetry or ideological foreclosure whatsoever. Power asymmetries and ideological foreclosures assume new dimension in the contemporary biomedical discourses, characterized by the constant interplay of forces of centralization and decentralization of modern biomedical power, truth and subjectivity–its pivotal premises.

The Anudaan programme of Mohan Foundation, supported by Milaap, and the ORGAN India approach to donation advocacy represent constant interplay of forces of centralization and decentralization of modern biomedical power and modes of subjectivation. Deeply implicated in this interplay are unique reconfiguration of older concepts and emergence of new, unthinkable categories. Firstly, the entrepreneurial orientation to disease and suffering, and its alleviation and management can be seen as general extension of the biopolitical practices of modern biomedicine in the contemporary or postmodern context. But the emergence of a speculative orientation to affect and moral acts like philanthropy or donation for medical cause is a new possibility to grapple with for a social scientist, for it represents a unique moment in the history of contemporary biomedicine where power and subjectivity associated with biomedical practices come to be informed by a venture capitalist frame of reference–indicating a movement towards new biological economy of promise and hope (Rose, 2007). Secondly, conceiving of disease and affliction, trauma and pain, from psychological and psychotherapeutic point of view, amenable to the workings of a positive mind is not new. A positive psychological orientation to disease and affliction has been central to the “ethopolitical” maneuvers of modern biomedical power for some time now

(Rose, 2007). The tendentious positing of ethical rightness of the patient taking control of the crisis by wielding power through nuanced maneuvers of the self is nonetheless a few steps ahead of the older conception. So far as unanticipated possibilities are concerned, there are multiple instances: the movement from body-centric to mind-centric discourses, from control via hard, clinical sciences to soft therapeutics, from specialist involvement to engaging people with common experiences in support system, from dominant biomedical discourses to incorporation of alternative healing practices. These too are attributes of decentralization. However these should not be read as indicating general trends of linear transition from modern biomedicine to postmodern technomedicine, from centralized biomedical institution to decentralized biomedical system. Rather these are observations emanating from the study of singular instances of new donation initiatives. These two points taken together indicate an essential aspect of new donation initiatives as off-shoots or agencies of contemporary biomedicine. New donation initiatives generate newer modes of producing and controlling subjectivities, which are structural and psychic at the same time, for on the one hand, these initiatives produce subjectivities in accordance with the prerequisites of contemporary entrepreneurial dispensation–converting affect into object of manipulation and speculation, on the other, they convert bodily experiences of disease into sites of psychotherapeutic maneuvers. More specifically, these newer modes of control and management appropriates individual moral acts like philanthropy and donation, affect such as grief as response to a corporeal tragedy, and the experiences of trauma, affliction and pain associated with the tragedy and reconfigure them along new lines. This point to how contemporary biomedical power and control operates at most intimate level, generating new enactments of subjectivity.

Beyond the apparent decentralization of modern biomedical power through new donation initiatives, the Shatayu initiative shows that although contemporary biomedicine looks promising in that it pushes existing boundaries of biomedical research and frontiers of life, death and survival, it reaffirms older hierarchies and schisms, which has implications for how subjectivities produced by new initiatives appear as breaking given social boundaries but end up reproducing them. Biomedical experiences amidst emerging entrepreneurial and psychotherapeutic models are unprecedentedly new, yet the subjectivities thus constructed are implicated in the reproduction of modern biomedical assumptions–their conceptual foreclosures and inherent mechanisms of control (see figures 4.1 Situational Map & 4.2 Positional Map).

Chapter Four

Ganadarpan, Techno-Materialist Ethic and an Ambivalent Marxism: Body-Idioms of an Old Initiative

Beyond the singular body of modern biomedicine

Bodily materiality is a site of discursive contestation (see Butler, 1993; Cheah, 1996; Grosz, 1994). The first two chapters–one concerning biomedical law and the other concerning bio-technoscience relating to organ donation and transplantation–is enough proof of this. The dominant way of understanding bodily materiality is by recourse to the modern biomedicine which fixes bodily essences in terms of standardized clinical parameters (Franklin, 1997). The biomedical conception of bodily materiality pervades discourses of Ganadarpan and similar rationalist movements. Yet extra-biomedical discourses seep into the biomedical conception presupposed by these movements, thereby producing other ways of conceiving the body, obfuscated by the biomedical orientation to bodily materiality (Lock & Farquhar, 2007). Attempting to grapple with the other ways in which an all-encompassing biomedical discourse and extra-biomedical discourses come to encounter each other, this chapter looks at body-idioms which pervade the discourses of Ganadarpan, which represents the domain of donation advocacy–the meso-organizational situation of engagement with the problem at hand (see Figure 5.1 Situational Map).

Idioms communicate meaning by putting words together in a way which does not have immediate consonance with meanings of constituent words. They convey meaning going beyond mere literality of words. They therefore embody an element of excess which makes them meaningful in unthought-of ways, which can be understood only by recourse to cultural usage and learning–historically specific and spatially located. This chapter studies the body-idioms–the figurative enunciations of body in the Ganadarpan's donation initiative–

which are posited via the modern biomedical discourses but go beyond the literality of biomedical assumptions–the clinical concepts which locate bodily materiality in three-dimensional space (Das, 2010), to conceive of other possibilities of articulation of meanings about what the body *is* or *could be*. This gesture involves engaging the excesses modern biomedical discourses generate or fail to contain or which escape the foreclosures of modern biomedicine thereby engendering the possibility of excursus into figurations of body or body-idioms which overflow the strictures of the biomedical domain. This however is no positing of a binary opposition between the body in modern biomedical discourse and the body in the extra-biomedical domain.

This is because the hegemony of the biomedical orientation to bodily materiality is too strong not to impact domains beyond its discursive space. At the same time, the plural–culturally and historically situated conceptions of body too are not negligible, in that they too have the potential to emerge as significant discursive spaces, destabilizing or entering into exchanges with the biomedical discourse which is premised on a singular notion of bodily materiality. It is interesting therefore to look at the body-idioms emanating from the discursive field of Ganadarpan and how they help conceive of bodily materiality in ways, not necessarily in opposition to dominant biomedical conception or the extra-biomedical domain but in conversation, thereby generating plural, unthought-of ways of coming to terms with the singularity of body in modern biomedicine (see Figure 5.1 Situational Map).

This chapter broaches the body-idioms of Ganadarpan by tracing how a techno-materialist ethic derived from left-leaning philosophical and political orientation informs the concept of body of this old initiative, yet the ethic gets reconfigured in unthought-of ways which bring to light traces of biopolitical moorings of liberal governmentality (Foucault, 2007) within the overall Marxism-leaning weave of the initiative. The biopolitical moorings of Ganadarpan is tracked through an exegesis of discursive enunciations–monthly journals, pamphlets and booklets, and seminar and workshop proceedings in English and Bengali, collected from the Ganadarpan office during ethnographic fieldwork in 2015-2016 and 2019, which embody the co-articulation of oppositional ideologies which conventionally uphold varying trajectories of power in the imagination, formation and government of the subject and the body.

Oppositional ideologies and their co-articulations

This section engages in a reading of the advocacy materials of Ganadarpan in the attempt to cull out how oppositional ideologies, world-views, theories of man and society, subject and power, co-articulate within the discursive space of the initiative. The excerpts quoted in this section emphasize the posthumous societal and medical value of human body via modern biomedical knowledge which has divulged the potential of organ harvesting from cadavers. Modern biomedical science is seen as carving the path towards realization of proprietary control of society over individual bodies, by reclaiming human body from communitarian forces. Body becomes the object of effective control beyond death, where control does not function through coercion but as informed persuasion through which the dead attains greatness by serving society through donation.

The foregrounding of posthumous medical and societal value of bodies and the urgency of proprietary control of society over individual bodies in relation to organ transplantation is demonstrated in the passage from an associate of Ganadarpan, who writes:

> The value of human body after death is immeasurable and it has immensely contributed to the corpus of scientific knowledge, particularly of medical science. A number of scholars have shown that pursuit of knowledge centering around human body including dissection kept alive scientific enquiry against metaphysics in ancient India which constitutes an integral part of our scientific heritage. Today medical science has opened up tremendous possibilities of healing and rehabilitation through transplantation of human organs. If donated bodies can be utilized properly it can do what seems to be a stupendous. More important is that the movement has the intrinsic possibility of leading demystification usually associated with body after death. Thus

> the generation of scientific temper will help us to comprehend that human body, even after death, is a social property and has its social function. (Ray, 2011, p. 21)

Two arguments are remarkable in this excerpt. Firstly, in the posthumous realization of medical and societal value of bodies via an exogenous Western biomedical model, both the Western and the indigenous or endogenous technoscientific history of India, it is argued, has developed a contradictory relation with the endogenous spiritual or mystical tradition in India–an argument which posits how indigenous constraints hinder in the whole-hearted local acceptance of Western scientific innovation. Science, whether Western or of indigenous conception is posited here as an antithesis of metaphysics which purportedly prevailed in ancient India. The project of realization of posthumous medical and societal value of body, with its origin in Western biomedicine and technoscience, and accommodated within the indigenous context therefore finds an enemy in the figure of abstruse metaphysics, which acts as a prohibiting factor. This is interesting in that it is not an argument that the Indian culture as a whole is not receptive of Western science or that it does not have an indigenous scientific tradition of its own. Yet the inherent presuppositions of the opposition posited between Western science and biomedicine, and metaphysics in the ancient Indian context, becomes a constant geopolitically and epistemologically specific and influenced mode of articulation. An articulation that is open to admixtures yet works strictly within a strict modern versus pre-modern or Occident versus Orient binary opposition.

Secondly, the emphasis on posthumous societal function of human bodies as social property echo the Marxist position, trying to reclaim the body from individual control beyond death as well as from meso-social aggregates such as community or family. This articulation involves a marriage of functionalism and Marxism, where expressions like utility, which has liberal-functionalist origin, and value, which within Marxism has a typical socio-economic trajectory, are deployed synonymously. This involves a co-articulation where one ideology or world-view is reframed via another. For instance, within Marxism, the community (although in a much broader sense) is never the enemy, because much of Marxist thinking conceives of the realization of freedom of the community from the state, class, hierarchy, exploitation, alienation, and so on, as the goal of Marxian praxis. Yet in the Marxism that animates the enunciations, a liberal conception of civil society creeps in, and acts as the modality in and through which the civil society retrieves the ailing individual from throes of death while the community figures as remnant of atavistic forces not responding favorably to the modern technology of organ transplantation. The opposition between community and society, which this articulation offers, fits exactly into the pre-modern versus modern binary opposition of modern sociological functionalism, leading to a co-articulation which is important for the project at hand.

From these enunciations, it can be deduced that Ganadarpan operates within a frame of reference constituted of a continuum with society at one end and individual at the other, with intervening variables in the continuum such as family and community–the meso-level social aggregates which impede posthumous transfer of the body from individual control to the proprietary control of society towards fulfillment of societal function. Reworking of the community/pre-modern versus society/modern binary opposition unfolds in this frame of reference, where a continuum replaces the opposition, and logic of progression from a lower to higher level of evolutionary complexity gets overshadowed by a conception where, family and community in between the rationally-predisposed and right-bearing citizen, and the morally responsible and conscientious civil society at the two ends, represents atavistic, indigenous non-rational forces. Despite this reworking, because family and community pose hindrance even when the deceased has pledged posthumous body and organ donation, the language in which the proprietary control of society over individual body is posited conforms to the materialist vocabulary of Marxism. This is evident in what a senior advocate and associate of Ganadarpan writes, or chides by way of writing:

> We have seen in our experience that though the person concern in his/her life time had pledged the body for scientific research and organ transplantation, yet after the death the near and dear of that person refuse to part with the body as if the same was their own property. Can the dead body be a private property? (Bhattacharya, 2011, p. 19)

This rehearses the ideas of the other member, interrogating the meso social aggregates which prohibit donation of cadavers in a manner as if the body of the deceased is their private property. A point is perceptible here. While there is a decisive resort to Marxian vocabulary through a critique of claims to or actual privatization of dead bodies, this Marxism is not uncomfortable with the liberal concept of man as a rational, decision making agent. This can be surmised from the thrust of Ganadarpan initiative which foregrounds social ownership of dead bodies or posthumous proprietary control of bodies by society. The liberal individual as the rationally deciding and pledging agent is crucial to such Marxian formulation. There is no explicit proprietary claim of society over the living individual and the body. The discourse is essentially posthumous, excluding the living body and deciding mind from proprietary control, thereby reaffirming the centrality of the living and deciding individual, in short, the liberal subject as the origin and end-point or boundary of the donation discourse. Origin as in, the pledge by the living, deciding individual is the starting-point of the donation discourse, and when the decision is realized in the posthumous context, the end-point or limit of the discourse is affirmed. This Marxism that does not view the subject as inherently alienated, constrained by an exploitative economic regime. Rather the decision of the subject becomes crucial, which is undermined or obfuscated when the posthumous body or potential organ donation encounters familial and communal hindrances. The Ganadarpan initiative not only attempts to reclaim the body from prohibitive control of family and community by rendering it socially contributive, it also decisively works towards reaffirming the significance of the prior rational decision of the dead, who had pledged to donate when alive. The Ganadarpan discourse hence is a critique of the privatization of dead bodies as much as it is a celebration of the rational decision of the living subject, now dead. The anger hindrances to organ donation generate operates not so much in contexts where people are not pledging to donate which is often cited as the reason behind low ODR in India, rather in situations where the pledge to transform the personal body into public property was already made and control of the body handed over, at least notionally to the society, the state and biomedical machinery, but was thwarted in reality or actuality, which is recurrent and very common. This anger is authoritatively expressed when the author writes:

> …the dead body cannot be the property of the family members or the kin of the pledger. On the contrary the same becomes the property of the state being the sovereign. (Bhattacharya, 2011, p. 19)

This statement posits state control as necessary step towards assertion of posthumous social ownership of bodies, as means to promote their public use. The act of calling for such control over body, seeks to render the body an object of power. Discourses of control of body can be traced in two separate registers: liberalism and Marxism. From the enunciations of Ganadarpan, it can be surmised that the living body and deciding mind–one who pledges–comes under the purview of liberal theory of subjectivity and body, whereas the dead body–one that lacks physical and mental agency comes to be made sense within the initiative via a Marxian frame of reference, where realization of rational decision of the dead emerges as the primary ethic. The ethico-politics of Ganadarpan does not rely on denial of the individual’s proprietary control over the body. Rather the position is: if an individual has rationally decided or pledged while alive or during lifetime, to lend the body for a social cause, like organ transplantation or medical research, then waste of such body and organs should not be allowed from medical and, broadly, moral-ethical point of view, centering on obfuscating religious beliefs and sentiments. There is thus no denial of individual will or freedom in Ganadarpan’s enunciations. The will of the individual rather takes shape in the form of the written pledge. The liberal subject serves as the bed-rock for realization of social contribution of cadavers towards the pool of donor organs.

In a national seminar-cum-workshop in 2008, the then Vice President of Ganadarpan and National Deceased Donor Transplantation Network, in his welcome address emphasized on utilizing “invaluable life saving materials (which) will either be turned into a handful of dust or ashes” (A report, 2008). The Vice President states that there are no legal obstacles to cadaveric organ donation in India, and therefore, aware and responsible individuals should pledge their bodies for donation. The Vice President further emphatically says:

> Any individual has the complete authority over his/her own body …. As long as the body is capable of doing something for the society, it should be allowed to do so. It is a scenario where the body as a whole is of no use, but the organs separately are of so many uses. This perception has to be spread over to the common man. Otherwise, destruction of bodies will continue by various religious means ….
>
> … Article 21 of the Indian Constitution is about Right to Life. The Supreme Court incorporates this as a right to live with human dignity. It is the duty of the law to protect the life of a person by donation of organ from another person who is deceased and to ensure that the living organs are retrieved so that the continuity of life marches on. It is an obligation to see that living organs are not destroyed …. It is a constitutional obligation to see that the living organs are protected. The thought has to be encouraged and the idea has to be projected properly. (A report, 2008)

The individual’s ownership of the body is posited as non-negotiable. This non-negotiability is communicated in a way which frames posthumous social contribution of cadavers and their material utilization towards social ends, which echoes Foucault’s (2007) technology of liberal governmentality. Liberal governmentality works by way of positing the individual as the centre of human discourses–a rational, right-bearing agent. In Ganadarpan’s case too, the individual figures as the embodiment of freedom, and the function of power becomes the optimization of the freedom of the individual. Power functions not via deductive effects, which is characteristic of the ancient regime to borrow from Foucault (1978), but as an enabling technology which fosters and promotes individual freedom. At the point of death, or beyond it, it becomes imperative for power to ensure that the freedom that is so ontologically innate to the human individual, yet bound to the temporal finitude of human existence is translated into a constitutional discourse that preserves the dignity of the human, the freedom innate to it, not only by guarantying rights but as an ethical-moral relationship that binds life across empirical bodies within an anthropocentric frame of reference.

Power, freedom and life gets inter-twined in the liberal technology of government of people, which ties the biomedical logic of posthumous optimization of vital, bodily material forces (see Foucault, 1978, 2007, 1973/2012; Rose 2007) with the functional role of power, through constitutional guarantees as facilitator of human dignity and ethical responsibility of each individual towards the vital forces which constitutes life in here and out there. The atavistic communitarian and religious forces come to be conceived as hindrance, for these forces undermine human dignity of the liberal subject and its responsibility to the other as an ethico-biological relationship emanating from the shared biological constitution. These constitute the antagonistic forces to the imperatives of the liberal state and its agencies. The Marxist orientation of Ganadarpan does not completely do away with the preoccupations of the liberal state. While the posthumous body is conceived as public property in a context where eternal freedom of the liberal subject confronts human temporal finitude, the posthumous realization of eternal freedom, human dignity and materialization of the pledge made when alive, works in and through the enabling mode of liberal governmentality (Foucault, 2007). It is a mode of government which encourages individuals to recognize their responsibility as humans toward themselves and others, and function through the facilitating apparatus offered by liberal power. This resonates with Rose’s conception of ethopolitics (Rose, 2007). After the decision has already been made through the pledge, the liberal apparatus that is responsible for transforming the pledge into actual, empirical donation– transforming individual body into public property, for this ensures survival of another or humanity at large.

This is evident when the Vice President of Ganadarpan resorts to constitutionalism to argue that right to live with dignity of one person is directly related to the function of law to put deceased organ donation in practice. The Constitution as guardian of citizen bodies has to ensure social utilization of bodies and organs through donation. The individual's pledge to donate is the bed-rock of final realization in such conception, but in circumstances where there are hindrances to donation, the state and the Constitution have to intervene and act via encouragement. Such encouragement would help materialize fundamental human obligation towards preservation of organs and sustenance of life at large when endangered.

For leaders of Ganadarpan, religious practices and stifling traditions are hindrances to the deployment of technoscience towards humanitarian and societal ends as is evident in the Ganadarpan publication. On one hand is the constraining factor constituted of religious prescriptions and traditional assumptions about human body. On the other, there is organ transplantation technology, which facilitates the posthumous use of cadavers to save lives. One is the conservative principle which hinders organ donation and transplantation, whereas the other is progressive and transformational in that it conceives of organs and bodies of dead people as having the potential to save people suffering from end-stage-organ-failure. In this frame of reference, tradition as a conservative principle prohibits the posthumous social use of bodies towards the life-fostering goal of the initiative. To deploy organ transplantation technology towards larger social goal, members of Ganadarpan, emphasize decisive 'break' with limiting traditions as the precondition. Societal facilitation of social use of cadavers is posited as urgent and imperative. A combination of state encouragement involving structural determination and voluntary participation based on individual volition is seen as the key to societal facilitation. Elaborating the tradition-technology opposition, which is rampant in South Asia, a former Principal Coordinator and Secretary of Ganadarpan writes to his utter "dismay":

> … I found to my dismay, that cadaver organ donation was extremely unpopular throughout the Oriental World, including Japan, China, Korea, Southeast Asia and the Indian Subcontinent. The rest of the world has an impression that the Oriental world is steeped in tradition which prevents people from coming forward for donating organs of their loved ones, even in the event of brain-stem death…. Such brain dead, heart beating cadavers form an invaluable pool of potential organ donors. Transplant doctors and organization like ours involved in setting up a transplant coordinating center, face a mammoth task of making our society break with tradition, in order to come forward and donate organs …. Availability of advanced transplant technology will ultimately help to break the tradition of not donating organs ….
>
> … Ganadarpan wants to turn this tradition of nonparticipation to a tradition of voluntary donation in order to save lives. (Banerjee, 2011, pp. 37-38)

Here the tradition-technology dichotomy gets recasted into a larger frame of reference through the positing of the Orient against an entire corpus of technoscientific knowledge and mentality that whole-heartedly embraces brain death and cadaveric body donation. Such an opposition fits into the pre-modern/Orient and modern/Occident dichotomy. The atavistic primordialism of the Orient translates into “nonparticipation” whereas progressive modernity of Occident/West comes to be associated with voluntarism. Another dichotomy emanates which does not conform to the pre-modern/Orient and modern/Occident binary opposition, and concerns the modern episteme and ideology–the dynamic interplay of voluntarism and materialism, not necessarily oppositional. The concept of voluntarism centering on liberal subjectivity, rational will and volition, impinges upon how Ganadarpan initiative conceives its mode of functioning. In order is how Ganadarpan’s materialist conception of body begins to converse with the concept of voluntarism.

In a thin booklet published on the occasion of twenty-fifth anniversary of posthumous body and organ donation program, the leaders of Ganadarpan elaborate their mission. In the introductory section, they write:

> কেন সাম্প্রদায়িক মতে অন্ত্যেষ্টি হবে? মরণোত্তর দেহ-র উত্তরাধিকারী পরিবার হলে, ব্যাক্তিসম্পত্তিকেই প্রাধান্য দেওয়া হয়। কেন মরণোত্তর দেহ-র অধিকার সমাজ পাবে না? এই সমাজ একজন ব্যাক্তিকে লালনপালন করে। সামাজিক মালিকানার দাবি আর মরণোত্তর দেহে সমাজের অধিকার না দেওয়া যেন একধরনের দ্বিচারিতা। … একজন ব্যাক্তির মৃত্যুর পর তাঁকে দেবতা বানানোর চেষ্টা চলে। ব্যাক্তিপুজো দ্বান্দ্বিক বস্তুবাদের বিরোধী। অথচ সমাজ বদলের

> সংগ্রাম এই পেটি বুর্জোয়া মানসিকতা থেকে মুক্ত হতে পারেনি। এটি ব্যাক্তিজীবন ও রাজনৈতিক জীবনের অন্যতম দ্বন্দ্ব।[96] (Keno Ganadarpan, 2014, p. 2)

This is a war against communal performance of rites. Beyond death, if community or family claims ownership of body and the right to decide the future of the body, giving in to demands of such atavistic forces is foregrounded as denial of the materialism of Ganadarpan. Two issues emerge unequivocally: a. the denial of posthumous social ownership of bodies is embracing of a concept of private ownership of property, and b. the inability to conceive of posthumous medical and social value of bodies amounts to deification of human individuals which in turn reinforces religious conceptions of self, thereby feeding into the distorted consciousness exploitative economic regimes generate to retain and reproduce power. The rejection of posthumous material utilization of body and deification of human individuals reinforce the bourgeois social order and associated class privileges. Broaching the problem from the materialist perspective, the authors critique deification of humans after death as a practice antithetical to the project of rationalization of society. But there is a twist in the narrative. Technically speaking, the Marxist materialist formulation does not conform to the community-society binary opposition. This is because both pre-modernity and modernity are viewed in dialectical terms embodying lower or higher forms of communitarian existence with the dialectically higher level bereft of non-rationality and exploitation. But the way this Marxist idea is assimilated within Ganadarpan frame of reference, the binary opposition of community as remnant of primitivism and civil society as champion of rationality-driven voluntary action towards social deployment of benefits of science and technology continues to inhabit Ganadarpan's dialectical and materialist approach, thereby indicating a nostalgia

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[96] Why funeral be conducted communally? If the family is the owner of the dead body, private property will get importance. Why should not the society own the dead bodies? Society nurtures the individual. The demand for social or collective ownership of everything and not giving up of the ownership of the dead body to the society is contradictory. After death an individual is considered as God. Deification of the individual is against dialectical materialism. The movement to change society has failed to recover from this petty bourgeoisie mentality. This is the greatest contradiction of individual and political life (approximate translation of the quote in Bengali).

for the liberal faith in civil society as the end of all social evil and realization of rationality in the public sphere by transforming personal body into public property against constraining forces of community and family. Primordial prevention of rational use of cadavers becomes a force contradicting the materialist philosophy of life. Yet this contradiction is posited through another contradictory move that reconfigures Marxist dialectics and materialism along liberal lines, in the manner of sociological theorization of progress and development.

Seeking way out of destruction of life-saving biological material and communal challenges that confront the project, an excerpt from a Ganadarpan publication states that communitarian forces are so powerful that individuals who have contested the stranglehold of community and limiting traditions throughout their lives fail to contribute their posthumous bodies for organ transplantation, even when they had expressed their wish or desire to do so in their lifetime. The curtailment of the decision–the expressed wish of the liberal subject now dead, appears as a serious issue of lamentation. J. B. S. Haldane’s posthumous donation of body and organs is juxtaposed as the epitome of an instance of realization of liberal faith in voluntary action and decision towards public good:

> উনিশশো পঁচাশী-র নভেম্বর। গণদর্পণ-এর কতিপয় সদস্যের মননে একটি প্রশ্ন আলোড়ন তুলল – জীবিতাবস্থায় অভ্যাস-আচরণে অসাম্প্রদায়িক, নিরীশ্বরবাদী হলেও মৃত্যুর পর তো যার যে সম্প্রদায়ে জন্ম সেই সম্প্রদায়ভিত্তিকই তার দেহের বিনষ্টি করা হবে, এর থেকে বার হবার রাস্তা কোথায়? পথ দেখালেন হলদেন – জীববিজ্ঞানী জে. বি. এস. হলডেন – যথার্থ অর্থে জীবনমনস্ক মানুষ। নিপীড়িত জনতার সংগ্রামের শরিক এই মানুষটি তাঁর মরদেহের আধিকার দিয়ে গিয়েছিলেন চিকিৎসাজগতকে। যাতে মানবদেহ সম্বন্ধে জ্ঞান আরও প্রসারিত হয়, বিশ্বপ্রকৃতির সঙ্গে জীবনধর্মের ঐক্যের বোধ আরও নিবিড় হয় সেজন্য নির্দেশ দিয়ে গিয়েছিলেন তাঁর কাছের মানুষদের।
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> আর ভাবতে হয়নি গণদর্পণকে। হলডেন-এর পঁচানব্বইতম জন্মদিনে উনিশশো ছিয়াশি-র পাঁচ নভেম্বর তার অন্যতম কর্মসূচি ‘মরণোত্তর দেহদান’ আন্দোলনের সূচনা করল। কুসংস্কারের সনাতনী পাথরটাকে নাড়া দিতে এগিয়ে এল চৌত্রিশজন মানুষ। অঙ্গীকার করল, তাদের মৃতদেহ হোক সমাজের। …
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> পথ চলতে চলতে গণদর্পণ বুঝেছে গণমানুষের চিন্তায় যদি অযুক্তি-কুযুক্তি প্রবল্য থাকে, তার চেতনা যদি অতিপ্রাকৃত ধ্যান-ধারণায় আবিস্ট থাকে তাহলে ব্যাক্তিমানুষের সর্বাঙ্গীণ বিকাশ ব্যাহত হবেই। ফলে সমাজের কল্যাণে কখনেই তার ইতিবাচক ভূমিকা দেখা যাবে না। মানুষে মানুষে গড়ে উঠবে অমানবিক সম্পর্ক যা তার বাঁচাটাকেই করবে বিপন্ন। এ

> ভয়ঙ্কর অবস্থাটাকে ঠেকাতে হলে মানুষকে তার বদ্ধচিন্তা থেকে মুক্তি দিতে হবে।[97]
> (Sampadakiya, 2010, p. 3)

This is about J. B. S. Haldane, who inspired Ganadarpan activists to pledge to donate body for the purpose of medical research. Haldane's tutelary contribution played a significant role in establishing that cadavers have social function which can be realized by body donation. This foregrounds the realization that there can never be any holistic development of individuals if they surrender to non-rationality. Non-rationality breeds relations devoid of responsibility–irreverent to the social role of individuals beyond death. The conception of human body–composed of organic material resources which are conceived as collective property beyond death emanates from the Marxist materialist frame of reference, yet the implementation is conceived through the liberal framework building on the will and rational decision of the donor expressed through a pledge and voluntarism of others, who have to act as facilitators, as required by ethics. The state and Constitution does not enforce, for India has no compulsory or presumed consent system of donation but an opt-in system which encourages donation and persuades individuals by pointing to the essential continuity of life across bodies and shared organic existence. However at the same time, the leaders emphasize the materiality of organs and their medical use beyond death. They also add as caveat that such materialist conception is no alibi for immoral commoditization of human bodies through illegal organ trade. This is reflected in what a Ganadarpan sympathizer writes:

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[97] In November, 1985, a question aroused in the minds of some Ganadarpan members. What is the way out of the situation where a person, who by habit and behaviour, is non-communal and non-believer, but beyond death, the community in which the person is born destroys the body. The corrective path has been shown by biologist, J. B. S. Haldane. As champion of the rights of the oppressed people, he had given the ownership of his dead body to the medical community. He directed his close ones that knowledge of the human body should spread and there should be an integration of nature and humanity…. Ganadarpan did not have to think after that. On the ninety-fifth birthday of J. B. S. Haldane, in 5th November, 1986, Ganadarpan embarked upon the 'posthumous body donation' project. To dismantle the conservatism of superstitions three-four people joined the project and pledged that their dead bodies will belong to the society….Over the years Ganadarpan has realized that if irrationality and non-rationality prevails in society and if consciousness is shrouded by supernatural thoughts, the holistic development of individuals is not possible. As a result, the positive contribution of the individual towards social welfare cannot be realized. The relationship between humans will become inhuman and survival will be affected. To prevent such dreadful condition, humans have to free themselves from such limiting conceptions (an approximate or close translation and paraphrasing of the quote in Bengali).

> এই আন্দোলনের প্রথম দিকে অন্যতম সহযোদ্ধা ছিলেন বিশিষ্ট আইনজীবী অরুণপ্রকাশ চট্টোপাধ্যায়। তিনি বলতেন দাহ করার আগে মৃতদেহ থেকে আংটি, চশমা, সোনার দাঁত, সোনার হার বালা চুড়ি খুলে নেওয়া হয়। কিন্তু তার পরেও মৃতদেহে থেকে যায় আরও মূল্যবান সামগ্রী। কিডনি, লিভার ইত্যাদি অঙ্গপ্রত্যঙ্গ।
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> আগের বাক্যে সামগ্রী বলেছি, ‘পণ্য’ বলিনি। কারণ লোভী ব্যাবসায়ীরা সোনা থেকে কিডনি সবকিছুকে পণ্য মনে করে। আমরা যারা এই আন্দোলনের কর্মী তারা কিডনি বা লিভারকে মটেই পণ্য মনে করি না। কাগজে বিজ্ঞাপন দেখা যায় ‘আত্মীয়কে বাঁচাতে দরকার অমুক ব্লাড গ্‌রুপের কিডনি’। কিডনির ব্যবসা বন্ধ করতে আইনও হয়েছে। এ সব পণ্যের কারবারিদের ব্যাপার।[98] (Bhattacharya, 2010, p. 39)

The sympathizer debunks probable misconceptions about Ganadarpan’s conception of body. There is a disclaimer that the materialist perspective of Ganadarpan does not render bodies as material things devoid of social significance. Citing a veteran leader, the sympathizer stresses that when sympathizers emphasize on the function of discrete, material organs of the human body as “things” of social importance, they do not equalize organs to marketable “commodities” or promote market transaction in organs. This explains why Ganadarpan is so expressedly against live donation, and promotes cadaveric donation, as there is purportedly no exploitation of the marginalized involved in the latter case, whereas the former is rife with such cases. There is a reaffirmation of the social embeddedness of things so subtly integral to the Marxist doctrine. Bodies and organs are material things and not commodities in that they have a material value which serves an ethical end, and not open to marketization. This conception locates human bodies within materialist frame of reference, recognizes their medical and social value by positing ‘সামগ্রী’ in opposition to ‘পণ্য’ and in doing so reinscribes human bodies within a framework of exaltation, medico-legally immune to forces of marketization. Beyond intended or unintended veneration of human organs, the Marxist involvement in the cause of the lower class people, suffering from organ failure and

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[98] In this movement one of the early supporters was the famous lawyer Arun Prakash Chattapadhyay. He said that before cremation valuable items like finger rings, spectacles, gold prosthetic tooth, gold chain and bangles are taken away or removed from the body. But even then valuable things remain in the dead body, organs like kidney and liver…. These are things and not commodities. For greedy businessmen, from gold to kidney, all are commodities. Workers of the movement do not think of kidneys and livers as commodities. Advertisement for kidney of a particular blood group to save a kin is visible in newspapers. To prevent kidney sale there are laws. All this is a matter of those who deal in commodities (this is no correct or authentic translation but an approximation of the meaning of the content in Bengali in English).

requiring support from Ganadarpan finds articulation in the following excerpt. But this descent to ground reality and empirical experiences of the poor class–oppressed and deprived–is also expressed in a manner which foregrounds the nonchalance of the existing political regime, (the TMC government) which banks on non-rationality and is unsupportive of Ganadarpan's rationalist and materialist formulation of body.

In a commemorative bilingual publication, Ganadarpan leaders clarify what the initiative stands for through short reflective essays. In a short essay, a senior member writes:

> গণদর্পণ-এর উদ্যোগে কলকাতায় সম্প্রতি দুটি উল্লেখযোগ্য কিডনি প্রতিস্থাপন সম্ভব হয়েছে। উপকৃত হয়েছেন বিত্তহীন দিনমজুর। যে পরিবারটি উদ্যোগ নিয়ে মস্তিষ্ক-মৃত পরিজনের কিডনি দানের মহান কাজ করলেন তাদের সংবর্ধনা দিয়েছে গণদর্পণ। কিন্তু রাজ্য সরকারের কোন ভুমিকা নেই। এই মহান কাজ কে বিজ্ঞাপিত করে ব্যাপক মানুষের মধ্যে উৎসাহ সৃষ্টির কোন চেষ্টা নেই। অথচ সরকারি টাকায় নাচ গানের পুরস্কারের মোচ্ছব চলছে। চিটফান্ডের চিটদের বাঁচাবার জন্য সরকারি টাকার নয়ছয় হচ্ছে। এভাবে সরকারি তাকার অপচয়ের পিছনে কাজ করছে যুক্তিহীন পপুলিজমের সংস্কার। বিজ্ঞানমনস্কতা নয়।
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> … ভারতীয় সংবিধান জীবনের অধিকারকে মৌলিক অধিকার হিসেবে স্বীকৃতি দিয়েছে। সেই মৌলিক অধিকার রক্ষার নৈতিক দায় রাষ্ট্রের। প্রতিটি নাগরিকের কর্তব্য মৌলিক অধিকার প্রতিষ্ঠার জন্য প্রতিনিয়ত নব নব বৈজ্ঞানিক চিন্তায় নিজেদের চেতনা বৃদ্ধির মধ্য দিয়ে জীবনের মান উন্নয়ন করা। কেবলমাত্র জৈবিক অস্তিত্বই মানবজীবন নয়। মানবজীবনকে পতিত না রেখে আবাদ করে সোনা ফলানোই আমাদের কাজ। দেহদান, অঙ্গদানের আন্দোলনে সক্রিয় অংশগ্রহণের মধ্য দিয়েই আমরা মানব জমিনে সোনা ফলাতে পারি।[99] (Bhattacharya, 2013)

Ganadarpan has been into grass-root activism and its approach is deprived oriented. The essay opens with the declaration that with Ganadarpan's support a poor, working class individual has undergone kidney transplantation. Ganadarpan felicitated the family of the deceased donor for the noble deed. But the complaint is that the state government has not

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[99] Owing to the initiative of Ganadarpan two significant kidney transplantations have been made possible in Kolkata. The beneficiary is a poor day wage labourer. The family which took the initiative to facilitate the kidney donation of their brain-dead relative/patient was felicitated by Ganadarpan. But the state government has taken no initiative to publicize this among people to generate interest. The government is spending money in celebrations, functions and squandering money in chit-fund scams. The government is uselessly spending in a non-rational culture of populism. There is no scientific bent of mind here…. The Indian Constitution has recognized right to life as a fundamental right. The moral right to preserve that fundamental human right rests with the state. It is the duty of every citizen to establish the fundamental right to life by embracing new scientific consciousness. Human life is no mere biological existence. Through body and organ donation movement we can contribute to human life (this is no correct or authentic translation but an approximation of the meaning of the content in Bengali in English for analytical purpose).

publicized the achievement. There is trenchant critique that while the state government expends money on public recreation it has not come forward to popularize the noble deed of the family of the deceased and how a poor, working class, ailing person got a new lease of life as beneficiary of the donation. When the commemorative booklet was published in 2013, the Trinamool Congress led government was in power and the Ganadarpan leaders criticized the government for indulging in overtly populist politics, showing no interest cultivating a rationalist and scientific attitude to life.

Embracing constitutionalism and state encouragement of organ donation, the senior member invokes that the Indian Constitution guarantees right to life and the state should be ethically predisposed to realize the right or put in place preconditions for its realization. Citizens do not merely have biological existence. Such existence is bound to social and ethical responsibilities. The realization of which during the life-course of the individual, Ganadarpan believes, can take place only via the state as facilitator–one that cultivates scientific spirit and instills the value of responsible citizenship–which is also the way towards realization of the fundamental right to life. In Ganadarpan’s Marxism, the critique of power and establishment does not imagine revolutionary social change. The recognition of essential human biosociality (Rabinow, 2005) carves the way toward constitutional reformation of societal and individual attitude to body and organ donation.

The need for constitutional reformation of societal and individual attitude is reiterated in a lecture a senior member of Ganadarpan delivered in memory of J. B. S. Haldane. Here are some relevant excerpts from the lecture:

> Scientific temper also respects and promotes the autonomy of a person and that explains why state does not intrude on the choice of a person’s cultural affinity and his religious belief and faith. Our constitution is therefore made expressly secular and protects a person’s freedom to preach, practice and propagate religion of his choice. No religion is sponsored by the State. It has also given everybody the freedom of conscience. This is a freedom of great value and significance and means that state will respect this freedom of every person whether he is a citizen or not. Of course, the

> Constitution balances this freedom and other freedoms on grounds of public order, morality and health and various other grounds of public interest. None of the freedom granted under the Constitution is absolute. It cannot be. The concept of absolute freedom is not compatible with scientific temper. Relativity is the idiom of science.
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> … the dignity of the individual is also protected in the Constitutional scheme of things. Thus the scientific temper in recognizing the inherent dignity of a human being is reflected ….
>
> Scientific temper of the Constitution is further demonstrated in that it gave remedy to every person the right to enforce those rights and made the right itself a fundamental right.
>
> … development of scientific temper has been made a fundamental duty of every citizen. In Article 51(A) clause (h) it is prescribed to be the duty of every citizen of India to develop scientific temper, humanism and the spirit of enquiry and reform and clause (h) postulates that everyone should abjure violence and protect public property.
>
> Scientific temper of the Constitution is also reflected in the Constitution's emphasis on socialism as constituting one of its main features. Socialism mingles very well with the concept of a democratic republic which guarantees equal right to all …. (Ganguly, 2013)

The member conveys significant ideas about the relationship between constitutional rights and scientific temper. Scientific temper protects individual autonomy and the Constitution by way of rights bestowed upon the individual guarantees that the individual's freedom to partake in religious and cultural practices is protected. The latter is reflected in the secular stance of Indian Constitution, which gives the individual the right to practice his or her own faith or religion without any hindrance whatsoever. But the excerpt cautions that too much of freedom may have serious consequences. Such freedom has potential to emerge as an anti-science force. It seems from the nature of exposition, that too much of freedom guaranteed by Constitution may result in situations where exercise of individual or collective freedom may end up curtailing process of societal rationalization. Extrapolating from what is said, it can be argued, if there is much emphasis on freedom of choice, given communitarian and familial hindrances to posthumous body and organ donation, in the absence of state's active involvement, the rational use of human bodies beyond death can never materialize. Hypothetically speaking, if a person had pledged to donate organs or the body posthumously, although he or she has made an explicit choice via exercise of individual freedom, the community or family may curtail the exercise of freedom by the deceased, based on religious ideas which amounts to appropriation of individual freedom guaranteed by the Constitution by other individuals working at the behest of collectivist sentiments and primordial forces. Under such circumstances, beyond death, the explicit choice of the deceased, translates into prerogative of community and family, in the absence of state enforced mechanisms to ensure realization of the deceased's choice in his or her absence. There is an implicit suggestion that socialism is a much-needed corrective to the frailty of liberal or individual freedom and its susceptibility to appropriation by atavistic forces. Because of its close affinity to scientific temper, there is an allusion; socialism has greater capacity to meet public ends unhindered by frailty or caprices of individual freedom. This is in consonance with the overall Marxist orientation of Ganadarpan (see Figure 5.2 Positional Map).

Techno-materialist ethic and an ambivalent Marxism

This chapter began with the proposal that Ganadarpan's initiative reflects a techno-materialist ethic (see Figures 5.1 Situational Map & 5.2 Positional Map). This techno-materialist ethic is traceable in the conception of body that is central to the discursive practices of Ganadarpan. For an initiative like Ganadarpan, falling back upon a techno-materialist conception of human body based on standardized parameters, as the basis of its claim to generate social awareness about posthumous body and organ donation, is clearly unavoidable. Such initiatives are essentially based on scientific knowledge about the so-called truth of the human body, and how these truths are manifest in the material space of the body to invoke Foucault (1973/2012).

The domain of intervention of Ganadarpan is the posthumous body in opposition to the living body of modern biomedicine. Modern biomedicine has produced truths about what constitutes the living and dead body, the latter being the other of modern biomedicine (Das, 2010), because fostering life is the main project of modern biomedicine (Foucault, 1978). Drawing upon the knowledge provided by modern biomedicine about the incident of death and the dead body, Ganadarpan embarks on the project of generating awareness about cadaveric organ donation centering on the principle of brain death which bifurcates the singular clinical moment of death and demonstrates how life thrives in the vital organs of human body even after the brain has ceased functioning irrevocably. Biomedical knowledge of brain death and biomedico-legal provisions of its institutionalized declaration under specific, favourable clinical conditions as basis of body and organ donation for biomedical research and organ transplantation is assimilated within Ganadarpan discourses to harness the revolutionary possibilities emanating from the new concept of death toward rational, social ends through the extrapolation of biomedical knowledge in the extra-biomedical domain–the public sphere, which according to Ganadarpan, is unwelcoming of the new concept of death premised on cultural, communitarian and religious conceptions of life, death and the aftermath.

From the biomedical point of view, human body is essentially material in that it is constituted of palpable organ and tissue systems which are empirically available. This conception of material body composed of anatomical structures and physiological functions is product of the spatial-empiricist preoccupations of modern biomedicine (Das, 2010; Foucault, 1973/2012), whereas with postmodern technomedicine, biochemical or hormonal conceptions of body (Oudshoorn, 1995) have taken over, thereby destabilizing the hegemonic body (Lock & Farquhar, 2007)–spatially localizable based on anatomic indicators (Das, 2010; Foucault, 1973/2012). There is no point denying that biomedical discourses have been historically contingent in the face of new technoscientific knowledge, which has reconfigured human body over time. Biochemical or hormonal concepts of body have come to co-exist with anatomic and physiological conceptions within biomedical discourse, sometimes in harmony or in conflict, with none replacing the other decisively. Scrutiny reveals nostalgia among biomedical practitioners for the modernist epistemological certainties anatomic and physiological conception offer to their practices, helping them locate the discursive object in three-dimensional anatomic space, in opposition to mixtures and overlaps, along with networked fluidity of bodily flows offered by biochemical or hormonal conceptions of body (Das, 2010; Haraway, 1991; Oudshoorn, 1995).

Ganadarpan is modernist in its preoccupation, in that it is nostalgic about the material body of modern biomedicine and its usability in the posthumous context and clings to it in order to foreground its rationalist and reformist claims. The ethic of Ganadarpan derives from close affinity to the modern biomedical concept of bodily materiality, where the ethics is premised on rendering the functional materiality of human body and the constituent organs biomedically and socially useful in the posthumous condition via the technology of organ transplantation, and biomedico-legal declaration and public acceptance of brain death as basis of successful organ transplantation programme. Many medical practitioners have for long time been members of the initiative. Ganadarpan discourses have been shaped and informed by expert involvement as well as by activists who are not medics *per se*, but have sufficient knowledge about science of human body and posthumous use of body and organs for medical purpose and social cause by recourse to organ transplantation technology. For the activists of Ganadarpan–medical and non-medical, its ethics is premised on social desirability of public acceptance of transferable functionality of material organs via technoscience as much as it is about the actual materialization of public use of this functionality and technoscientific innovation, ruling out organ wastage through communitarian and religious hindrances or infrastructural lag or lapses in institutional mechanisms. Ganadarpan's techno-materialist ethic is an ethic of materiality, one that recognizes functional utility of bodily materiality beyond death of the individual as well as the functional materiality of technology as the facilitator, as much as it is an ethic of materialization in that it foregrounds the social desirability of transferability of this functional materiality from one body to another and the necessity of putting conducive medico-legal institutional mechanisms in place to ensure smooth transfer.

But to overemphasize that Ganadarpan discourses are determined by a techno-materialist ethic inspired by modern biomedicine is to overlook the fact that such discourses are products of multiple causal factors. The concern has been primarily to locate how remaining within the all-encompassing rationalist discourse of modernity and its biomedical technoscientific assumptions, Ganadarpan discourse get framed by discourses or world-views which are oppositional, leading to confused co-articulations. Confused co-articulations help interrogate the homogeneity of Ganadarpan discourses in that they destabilize the singular conception of body presupposed within the discourse via contradictory inflections from within and without, leading to new ethico-political and ideological imagination, resulting in an ambivalent Marxism. Along with body, the notion of subject–the Subject as well as object of power–gets infused with complexities. These destabilizations are not to be understood in a negative, pejorative sense but are rather productive in that they generate newer conceptual possibilities emerging from co-articulation of ideas, concepts, world-views and imaginations of varied rationalist discourses, leading to new ways of conceiving the body, subject and power within Ganadarpan's discursive field. These co-articulations are confused not in the sense that they are directionless; rather they fuse and mix ideas, concepts and ideologies in unthought-of and unprecedented ways. To grapple with this unthought-of element this chapter has invoked the duality of literal and idiomatic as a way of foregrounding how body-idioms of Ganadarpan complicate its apparently seamless techno-materialist ethic within an overall Marxist philosophy and worldview.

This chapter is an analysis of discourses involving attempts to locate the literal and the idiomatic in the discursive enunciations of Ganadarpan, and the conceptual and cognitive confusions they generate. In this chapter, the biomedical conception of bodily materiality represents the literal, which emanates from the standardized clinical parameters. The clinical is the literal insofar as it is posited as stable and obvious. The idiomatic, on the other hand, represents the domain of signification beyond mere literality of signs. It is the realm of meaning which overflows literality of constituent words. But what role does the idiomatic play insofar as analyzing Ganadarpan discourses is concerned, if the human body, which is the object of its enunciations, is conceived of within the discourse essentially in standardized clinical terms? What critical function the invocation of the idiomatic serves? These question call for response in parts: firstly, the literal and obvious in this context is the techno-materialist ethic of Ganadarpan but that is not the be all and end all of the narrative, for that involves taking for-granted the stability of the ethic emanating from biomedical conception of bodily materiality. Secondly, taking cue from the former problematization, the invocation of the idiomatic in opposition to the literal facilitates grappling with the unthought-of excess in relation to this context and how it unfolds through a study of Ganadarpan’s discourses. The idiomatic leads the inquiry to the hitherto unthought-of excess in that it invites us to the realm of meaning beyond established modes of meaning-making. The idiomatic introduces us to the discursive space where the literal association between Ganadarpan and the techno-material ethic it stands for and the related baggage of concepts and assumptions gets destabilized, leading to unintended co-articulation of oppositional ideologies and marginal attempts to reclaim the ideological association compromised in the process.

Three immediate instances of this can be cited: Firstly, despite remaining largely within Marxist materialism which conceives societal development in dialectical terms, the Ganadarpan initiative is ensnared in typically modernist, evolutionary binary oppositions of pre-modern-modern, community-civil society, tradition-technology, Orient-Occident and so on, coming to think of the community as atavistic, the hindrance to organ donation and transplantation, to be resurrected through the welfarist voluntarism of the liberal subject under pastoral guidance of the state, to invoke Foucault (1982). Such conception fuses Marxian materialism within an overarching triadic matrix with the regressive community, the willful and volitional liberal subject or right-bearing citizen and the Foucauldian pastoral state (1982) as the three vertices. The second is more specific instance of Marxist orientation of the initiative but one that resorts to the liberal subject as the way out of the mire of community. In spite of conceiving of the posthumous body as public property, deploying a typically Marxian frame of reference and sporadically invoking the state's originary right to control individual body, Ganadarpan's discursive enunciations by and large posits the rational decision-making of the liberal subject or citizen as the vehicle for transforming an individual property into collective ownership. There is no invocation of revolutionary change of society as the means of materializing the transformation. The focus is on encouraging involvement of the state through constitutional provisions on one hand and rational and responsible citizen on the other, seeking to reclaim society's control of citizen bodies. These two instances represent the unthought-of co-articulation of oppositional ideologies. The third revolves around attempts to reclaim the field of discourse by retaining the Marxian dimension and minimizing liberal tendencies, foregrounding how the conceiving of organs as having "use value" is not a prelude to their or thinking of them as having "exchange value" (Marx, 1867/1995) and that thinking of absolute freedom of the liberal subject as the vehicle of materialization of organ donation and transplantation overlooks the frailty of individual freedom in the face of atavistic powers of community for which socialism as socio-political dispensation is the only panacea.

The analysis of body-idioms of Ganadarpan hides much more than reveal. The way the Ganadarpan initiative recasts the concepts of subject and body in liberal guise within a dominant register of Marxism or retains Marxian concepts within the framework of liberal governmentality shows how Ganadarpan's enunciations begin perform a Marxism that exceeds in its own premises, and turn ambivalent by locating a materialist conception of human body within a conceptual matrix with regressive community, liberal subject and pastoral state as the three vertices. Its ambivalence however is not only locatable in the admixture of oppositional ideas but in the suspicion that frailty of the liberal subject, despite having embraced it as the vehicle, renders it a slippery ground for materialization of donation and transplantation in the face of disenabling force of community in the absence of a state-enforced programme of presumed consent[100] or compulsory donation at death.

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[100] A system of organ donation where all individuals are treated as organ or body donors at the point of death, unless they have opted-out through prior declaration.

Chapter Five

Encumbered Ontology: An Intimate Foray into the Sociality of Human Organs

Tracking the sociality of non-social

Sociologies of natural entities and objects have opened up newer possibilities of thinking beyond the binary opposition of nature and culture (see Foucault, 1978; Fox Keller, 2002, 2003, 2010; Franklin, 2001, 2007; Haraway, 1991; Kopytoff, 1986; Martin, 1991; Oudshoorn, 1995; Rabinow, 2005). Such studies enable locating the unthought-of social trajectories and social asymmetries that are constitutive of the nature of being of natural entities and objects. At a deeper philosophical level, such studies facilitate a rethinking of the ontology of natural entities and objects by relocating them within socio-cultural discourses. Such attempts therefore have the import of freeing entities and objects conceived as natural from the naturalistic discourses by relocating them within the sociological and anthropological universe, thereby leading to an investigation of what has been called the "social life of things" (Appadurai, 1986)–an inquiry into the complex social embeddedness of entities conceived as non-social.

The moment one invokes the possibility of looking at things from sociological and social anthropological perspectives, which are mostly, if not always, concerned with non-material forms of human interaction and social structures; one begins to reconfigure the ontology of things. From the naturalistic point of view, ontology of natural entities and objects derive from the inherent regularity of their movements–courses of action, interaction and reaction, as if some inherent rationality runs through these movements, unrestricted by forces beyond the natural. In short, scientific discourses posit the ontology of things as un-encumbered and unmediated, which is not to say that they deny the atomic or molecular dynamics of things, but in a way to point to the essential lack of continuity and transference of such dynamics beyond the thing itself. This constitutes the denial of social life or societal life-trajectory of not only things and objects but also their constituent elements or parts, for in such discourse nothing beyond the thing itself impinges upon its ontology (see Das, 2010; Heidegger, 1967). The approach now popular in sociology and social anthropology as the "social life of things" (Appadurai, 1986; Kopytoff, 1986) calls into question this assumption of absence of encumbrance or mediation insofar as ontology of things and objects is concerned. This has led to the problematization of assumptions of self-sameness and internally consistent nature of things, pointing to how intricately they are embedded in social life and encumbered by social hierarchies and asymmetries.

The expression encumbered from which I derive the concept of encumbered ontology to think of an (auto)ethnographically grounded reconceptualization of Appadurai's (1986) "social life of things" is derived from legal vocabulary, deployed in contexts where there is a dispute over property–characterized by a contesting claim by a party which is not the proprietor, yet functions as a substantial restriction to its conveyance. The expression encumbered is useful to grapple with the disputes that may happen over the body and its constituent organs, which is, empirically speaking, the property of an individual–of a right-bearing citizen, yet there are contesting ideational and material claims to it by a party who is not its owner, but no less significant in that the party has the capacity to impinge on its conveyance by virtue of proximate embeddedness in the immediate hierarchy or network of interpersonal social relationships. If one thinks of human bodies and organs as encumbered, then one is effectively thinking of the ontology of human bodies and organs–the nature of their being not in terms of some undisputed autonomy, discreteness or exclusivity but how purportedly pure or undisputed materiality emerges as the site of ideational, material and semiotic contestations in general (see Butler, 1993; Grosz, 1994; Haraway, 1988; Kirby, 1997), and disputes, contestations and controversies in particular situations. A critical look at the empirical context of organ failure, donation and transplantation demonstrates how such contexts are not merely biological or biomedical, and human bodies or organs are no mere unmediated biological materialities (see Das, 2010), but are rather deeply invested and implicated in the complex weave of institutional structures and social interrelationships, and the hierarchies and ideologies within which they are located and acquire meaning or significance. It is through disputes in immediate interpersonal relations in everyday contexts of life that one empirically encounters the encumbered ontology of bodies and organs. Engaging this encumbered ontology requires incursion into territories of experience which may appear distasteful and morally objectionable to the sophisticated English-educated, metropolitan or urban upper-middle or middle class or caste social scientist, yet such incursions, intentional or not, offer unprecedented insight into the social life or societal trajectory of human bodies and organs by throwing light on the relational disputes centering bodies and organs, which subvert the presumption of immunity of these materialities from the contaminating forces of society and culture (see Figure 6.1 Situational Map).

Such knowledge about the encumbered social life of human bodies and organs not only involves an incursion into the intimate domain of experience of others, gaining of such knowledge could also be an intimate experience for the self of the researcher not only by disconcerting exposure to the personal quarters of others but also through unexpected encounter with disconcerting information and public discussion about one’s own immediate inter-personal kin relations. This constitutes the sub-text of this chapter which revolves around organ failure, how the family and immediate kin relations, and care-givers of the ailing person gets involved in seeking remedy and how such contexts are rife with relational contestations or disputes over issues which flow beyond the ailing body and failing organ empirically located within, yet deeply connected to and centering on it.

Such endeavour is deeply experiential and reflexive (Bourdieu & Wacquant, 1992; Gouldner, 1970), and calls for serious engagement with the humanness of the researcher–a methodological and ethical issue that I shall take up in the next section before proceeding to the experiential dynamics of the self–the personal and immediate on the one hand and the unknown, unfamiliar, and unthought-of on the other hand, in the attempt to throw light on the encumbered nature of human organs, and how they are or may be get embroiled in disputes to the extent that they begin to embody features of encumbered property.

Ethnographic research and the human researcher

Ethnographic research necessitates recognizing the humanness of the researcher as much as the humanness of others–the so-called subjects of research. A research which chooses to engage experiences of life and death, the struggle for life through the search for a donor organ, has to particularly begin by recognizing the non-negotiability of humanness of the researcher. This has nothing to do with discounting the subjects of research. Protocols of research require the researcher to take a measured stance with regard to the field and the collaborators therein but the course of events, when one begins to engage the field, may not allow the researcher to conform to the accepted textbook protocols of doing research. This slippage from conformity to the accepted protocols requires to be understood with regard to the humanness of both the researcher and the field thus constructed for research.

When I use the term human, I deploy it essentially via Ricoeur's (1965/1986) concept of fallibility. Institutional scientism and incumbent protocols of academic activity, sees research as a time-bound, systematic, goal-oriented effort. Doing research not only involves grabbing a berth at the university, having satisfied the gate-keepers about the relevance and feasibility of the research and the skills of the researcher, it also involves providing a blue-print for conducting the research on time. The timeline proposed in the proposal ought to determine not only the research but also the researcher's concept of present and future–life-course in short (Gouldner, 1970; Srinivas, 2002). The most instrumental and professional approach to research and to life during research cannot contain the excesses research engenders and the conversation that entails between the research and the researcher's life-course. Accepted protocols demand linear transition from one stage of research to another but life, constituted of structured role-performances and responses to emergent situations, rules out all possibility of bracketing the portion of life–when an individual is a researcher attempting to obtain a research degree–from all functions, obligations and tangible worries life in general contains from the time-frame stipulated for conducting research. Institutionally funded and guided research cannot suspend the course of life, its biological and social course, and their inherent dynamics. Conversations between the two are bound to occur (Gouldner, 1970). Any research that seeks to retain humanness and not give in to the instrumentalism of science, scientific method and protocols of scientific presentation and interpretation of data, ought to take this conversation seriously.

To recognize the humanness of the researcher and to humanize the research is a move towards establishing the impossibility of a humane research that does not take into account the life-trajectory of the researcher. Human fallibility, invoked in Ricoeur's (1965/1986) sense, of the researcher–the impossibility of bracketing life does not pose an obstacle to research; rather offers materials that render research more close to mundane experiences of life (Gouldner, 1970; Mills, 1959/2000). Research does not espouse life of the researcher to its detriment. For an ethnographer of life, imminent death and the struggle for survival, and the humane experiences of crises, personal life-trajectory provides groundedness and situatedness to the engagement with the problem at hand.

My tryst with the problem began in mid 2015 as a research student and in the March of 2017 my father's eldest brother (*boro jethu* in Bengali) passed away after months of struggling with end-stage-kidney-failure[101]. The encounter with my uncle's suffering and his immediate family's struggle to ensure his survival brought me closer to the set of experiences I was trying to ethnograph and narrativize through my research. The encounter was accidental and obviously unfortunate but shaped my perception of the field in fundamental ways.

A personal tragedy and accidental exposure to the field

In an early winter morning of February 2017, my uncle was admitted to the S.S.K.M. hospital in south Kolkata with severe breathing issues and excessive fluid retention in his body. He was suffering from kidney ailment for last seven, eight years. The situation became critical towards the end of 2015. A nephrologist[102] told my cousin brothers that his kidneys are severely damaged and would soon be requiring dialysis. The kidney ailment, according to doctors, was aggravated by alcoholism and diabetes. My aunt and brothers were extremely worried as a consequence.

My uncle worked with a well-known private firm. But he was financially vulnerable in the post-retirement phase. There was no financial support available that could take care of his hospitalization expenses in case of emergency. The recurrent, monthly medical expenses were already huge. Much of the money he had received at retirement got exhausted in last seven, eight years due to recurrent medical expenses. His initial treatment began at the OPD[103] of a private hospital, which was financially manageable at that point of time. Towards the end of 2015 the doctor said that total kidney failure[104] was imminent and dialysis was the only resort. Worries aggravated within the family. The issue was two-pronged: money and time. They were worried that they would not be able to continue treatment in the private facility because dialysis there is too expensive. They could not

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[101] A condition when Chronic Kidney Disease or gradual, long term loss of kidney function reaches advance stage.

[102] A medical practitioner who specializes in the treatment of kidney diseases.

[103] Out-Patient Department.

[104] Same as end-stage-kidney-failure.

finalize on a government hospital, where dialysis is offered for free or at highly subsidized rates but there is a huge waiting list, and patients are asked to come to the dialysis centre at odd hours. My brothers are employed in the private sector. They were confirmed about not getting recurrent leaves for accompanying my uncle for dialysis.

The sense of crisis continued for another year and towards the end of 2016, averting dialysis became impossible. My aunt and brothers decided to get my uncle enrolled for dialysis at the M. R. Bangur hospital in south Kolkata, which is also close to their residence. In this government facility, patients were not required to get admitted for dialysis. Patients were informed about their turn ahead of time and were required to arrive at the dialysis centre on time to get the procedure done and wait until the procedure is completed. Initially I had no idea about the odd timing of dialysis appointments at the government hospitals. Once I asked my aunt about a forthcoming appointment to consider whether I could substitute my brothers who were already alternatively accompanying my uncle to the dialysis centre. I was shocked to learn that the next dialysis session was scheduled at 3.00 a.m. the day after. Sometimes my brothers went to office the next morning after attending my uncle during a mid-night dialysis session. A connected problem was that of arranging a vehicle every time my uncle went for dialysis. A vehicle and a driver had to be arranged for always, ready to respond to their call, as there was no fixed schedule. Whether the slot was allotted in the morning or at night, in the absence of privately owned car, a pre-arranged vehicle was necessary.

The first round of dialysis consisted of sessions with two day gap in-between for four weeks. This was an immensely draining period for them. I wanted to help by substituting one of my brothers for at least a couple of sessions but could not owing to my work obligation. I however made attempt to help them in ways that would take care of associated crises at home. My aunt, who was already a senior citizen by then, always accompanied my uncle for the dialysis sessions which sometimes lasted for four hours or more, with a resting period before he is discharged. However she could not accompany my uncle if the session was scheduled at mid-night, as she had to attend my elder cousin brother’s sons, of whom the elder one was then seven years of age and the younger was barely five, who were left at the disposal of my aunt after their parents separated. We, I and my mother, offered to take care of the children when my aunt accompanied my uncle for the day-time dialysis sessions. She eagerly accepted our proposal, as she wanted to substitute, at least partially, one of her sons, who had decided to accompany my uncle as the main attendant for that particular day. We volunteered to take care of the children during the night, in case my aunt had to accompany my uncle for the night-time sessions. But she chose not to bother us. This continued for one month and after the first round of dialysis at this hospital, they were informed that my uncle was comparatively better than the past. The gap between two sessions could be increased to four days. By appearance however, there was clear indication that his health had deteriorated, and looked exhausted and emaciated.

Dialysis is no easy an experience or process, especially if the patient has resorted to a government facility for the procedure. There is not only a challenge of collectively working out the logistics for receiving dialysis at a government hospital, a whole lot of caution and care is required at home owing to restrictions on food and fluid intake. Where employing a twenty-hour attendant is not possible, there are tangible pressures of managing pre and post-dialysis care. My aunt was worst hit in this respect. My uncle had become too feeble to go the toilet himself. She had to attend to his calls, dispose his urine, wipe his lower body and clean the fecal stains on his cloths. Dialysis in general improves the quality of life. In his case, there were clear signs of dis-ease, may be due to the age factor because he was already mid-70s by then.

In the winter of 2017, towards the end of January, a week more than a month after the completion of the first round of dialysis, complications began to reappear. He had severe breathing issues, his hemoglobin levels dropped drastically, protein and albumin levels too, and there was abnormal fluid retention in the lower limbs. Hospitalization was unavoidable. Admitting him in a private hospital was no option; therefore they landed up at the S.S.K.M. hospital.

I was not present on the day of admission. Next day when I called my aunt after reaching the main gate of S.S.K.M. hospital during the evening visiting hour, she asked me to inquire the direction of the male cardiac ward from the guard at the main entrance. As I approached the main entrance of the building housing the male cardiac ward, I saw a crowd of visitors in front of it. I had to push myself through the crowd to get in. Patients were lying on the floor, literally all over the place. I was speaking to my aunt on the phone asking her the specific location of my uncle's bed. I was yet to reach the main door of the male cardiac ward; when I mistakenly thought I was already in, but was inside the long corridor in front of the ward with patients on stretchers lined up by the walls of the corridor near the main door. Attendants and visitors were standing beside the stretchers, speaking to their ailing relatives or staring at the resting ones. I had never seen so many ailing people at the same time in a dimly lit, over-crowded, vividly brick-coloured colonial building. My aunt kept on instructing that I should walk straight, and continue doing so until I reach the other end of the long ward.

In the meanwhile I had crossed a corpse shrouded in a vividly green sheet. I noticed it when I was well inside the ward. I walked past the corpse placed at the centre of the narrow aisle along which beds were placed at ninety-degree angle. The hiatus between life and death suddenly seemed too imprecise for a while. Following my aunt's instruction when I reached the other end of the big hall room, through the door at the rear end of the ward, I entered an old circular colonial verandah, and found my aunt leaning against the stretcher on which my uncle was resting. Similar stretchers were lined up with some gap in between along the wall of the veranda. There was a cacophony of sounds–patients groaning and matrons yelling and chastising acts of misdemeanour by visitors. There was no concrete wall around. Old iron grills were renovated with new-age, sliding aluminium window panes. Mosquitoes kept buzzing and cats strolled around. Seeing my aunt and uncle, I kept silent for some time, not knowing exactly how to react–what exactly to ask and say. My aunt asked many questions, which is characteristic. I really could not speak much. When my uncle opened his eyes, he said in a faint voice: “Take me home”. Soon a nurse came with a green, rectangular plastic tray full of labeled injections, and moved from the corner of one stretcher to another, adjusted the drip and inoculated patients with their intra-venous injections. Many relatives gathered gradually. I remained quiet.

After the visiting hour was over, I walked down the stretch of road from S.S.K.M. hospital to Rabindra Sadan metro railway station with my sister who was to return to her in-laws’s house while I returned home. We had asked our aunt to return with us. She said she would return after someone arrives as the attendant for the night.

During hospitalization at the S.S.K.M. hospital, my uncle was taken to the dialysis centre once in two days. Since he was admitted in the cardiac ward the situation was comparatively better in terms of manageability but like M. R. Bangur hospital there too he had to be taken for dialysis at odd hours. The hospital personnel informed about the slot for dialysis whosoever was present with my uncle as the attendant. If the slot was during the visiting hours the challenge was less. Visitors helped transporting my uncle from the cardiac ward to the Nephrology building. If none was available, and summoned at an odd hour in middle of the night, it was difficult to get hold of someone to help transport my uncle to the dialysis centre. Help did not come from hospital personnel unless asked for. Attendants of other patients eagerly came to rescue. My elder cousin told me that it is an uphill task to push the old, heavy iron stretcher across the long stretch of newly laid cemented pathway from the cardiac ward to the newly established Nephrology department. He not only had to push the iron stretcher but also had to carry the heavy packet of reports to be produced every time at the dialysis unit.

En route suffering

On the next visit to the S.S.K.M. hospital I found that none was present at the place where my uncle's stretcher was stationed the other day. Unable to see a familiar face, I called up my younger cousin brother, who I knew was there that day, to find out what had happened. He told me that my uncle has been taken to the dialysis centre and they are waiting in front of it. He gave me the direction to the dialysis centre but I was confused. He arrived at the rear exit of the cardiac ward to accompany me to the dialysis centre. When I reached the waiting area, my aunt informed me that my younger cousin has arranged for an attendant, who would substitute them in case of logistical failure. This young man in his late twenties named *Tapas* (name changed), a ruling party worker, lived in the vicinity and had recently joined the hospital as an attendant in the Nephrology department. Tapas had shown interest (on the basis of an informal agreement with my cousin) to help whosoever was present as the family attendant during the dialysis session. My younger cousin had developed a friendly relation with him, and would offer him cigarettes during their casual exchanges while waiting for the dialysis to get over. Not in the waiting area or in my aunt's presence.

When I asked my aunt when the dialysis session had begun, she said that my uncle was brought there around three in the afternoon and already close to four hours have elapsed. He would probably be discharged within an hour, as that is the general duration for the entire procedure. The waiting area in front of the dialysis centre did not have seating arrangement. In the absence of seats the relatives or attendants sat on the wheel chairs and stretchers that they have used to bring their patients to the dialysis centre. There was a black collapsible gate which separated the waiting area from the passage leading to the dialysis unit. On both side of the passage were the rooms of the doctors of the Nephrology[105] department of the hospital. Through the intersecting iron rods of the closed collapsible gate the aluminium door of the dialysis unit was visible. The door had a small square glass window through which I could have a glimpse of the interior. It was a brightly lit up air-conditioned room, with patients lying on the beds covered in green sheets. The waiting area was less illuminated, with patient parties waiting in small groups for their turn to receive their patients. That day I had reached the hospital towards the end of the visiting hour, but did not anticipate that I would not be able to have a glimpse of my uncle. Since I could not meet him in the ward, I decided to wait until the procedure is over. At the waiting area, I had nothing to do but speak to my aunt, younger cousin brother and his wife, and listen to them. We sat on a long stretcher, while my younger cousin brother stood in front of the elevator, resting his back on the newly tiled wall close to the paneled operating system of the elevator.

There were about five people in the waiting area that day. From the nature of interaction that unfolded, I deduced that there were two groups related to two patients. In one group, there was a man and two young women. In the other, there was a middle-aged man and his son, probably in his twenties. Since we did not have much to do, we were exchanging glances and speculating who their patient was. Seeing me look at the man who stood beside the two young women squatting on the floor close to the staircase, my aunt told me that they are the relatives of a young man who is undergoing dialysis for chronic kidney ailment. Early in the afternoon when my cousin and his wife went for a cup of tea, seeing my aunt–an aged woman, one of the woman relatives tried to strike a conversation inquiring what had happened to my uncle and shared information about the young man who was her brother–a married man in his late twenties and father of two, living in Bhangar in South 24 Parganas.

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[105] A branch of medicine concerned with kidney diseases.

The dialysis sessions of my uncle and the young man had coincided for the last two or three times. Consequently my aunt and the young man's relatives had become familiar. But the women relatives interacted more with my aunt in our absence than in the presence of other visitors from our side. When my aunt asked the woman from when her brother was detected having kidney ailment, she seemed a little unclear about the diagnosis but said that he developed multiple health issues over time until a doctor asked them to go the hospital for a comprehensive check-up which indicated that his kidneys were failing. She lamented the fact that at such a tender age her brother was going through such an ordeal, more so because he had a wife and children, and ailing parents to look after, to which my aunt sympathized. She introduced the man accompanying them as her husband, who has been extremely dutiful towards her by taking care of her brother in crisis. The other woman was the younger sister of the woman but older to the young man. She interacted less, according to my aunt, unlike her elder sister.

On that particular day, although we expected the session to get over by seven in the evening, it spilled over for technical fault. The young man was discharged. He along with his family members returned to the ward. My cousin's wife asked him to get back home as he had compulsory reporting at office next day, trying to assure him that she will call up *Tapas* when my uncle is released. I had college to attend the next morning but decided to wait for another half an hour. When it was getting delayed, I requested the security guard to let me in order to inquire what exactly had happened. We were getting anxious waiting for more than five hours. We were informed that the procedure had begun late due to some technical fault. Responding to my aunt's insistent request, I returned home. Before going to bed, I made a phone call to my aunt who told me that the session ended soon after I had left. She had returned home after my elder cousin substituted her as the night's attendant.

A week had elapsed in between, when owing to a couple of holidays I was free and called up my aunt to know if I could be of some help. My uncle was hospitalized for nearly a month and was undergoing dialysis after every two days then. The main problem was that of having somebody attend him twenty-hours at the hospital. Not that an attendant was unnecessary but it was troublesome to have somebody remain present at the hospital premises all the time, given the private sector job obligation of my cousin brothers. When I offered to help, my aunt readily agreed saying that the day after a session is scheduled and both my brothers had important work at their office that day. She requested me to reach the hospital by seven in the morning, to remain present when my elder cousin brother would leave so that I can accompany my uncle to the dialysis centre where his turn was scheduled at 8.00 a.m. She also gave me the phone number of *Debu* (name changed), an aide of Tapas, who was on leave for a few days, in case I needed help.

At the vicinity of crisis

I reached the hospital about an hour earlier that day. Seeing me reach early, my elder cousin brother was glad that he would be able to get back home early, freshen up and report to office. I had met my uncle after many days. He was awake and I inquired whether he could sleep properly last night. He replied in affirmative. I inquired whether there were mosquitoes. He replied that the hospital personnel made sure that mosquito nets are used. He added that my elder cousin brother could not sleep the whole night. There is a spare wooden bench on which attendants sleep by turn. He could not sleep last night. The next person in queue woke him up within two hours.

I was waiting beside my uncle’s bed when two men arrived with an over-sized trolley containing stainless steel plates with bread slices, bananas, boiled eggs and milk. The food was not meant for my uncle. He had a dialysis session scheduled and had already taken his breakfast. No outside food was allowed inside the ward. Patients fed on the food provided by the hospital. Initially the dialysis was carried out through an incision in his hand. Doctors had informed that a fistula would be done if dialysis became necessary beyond two weeks. People on prolonged dialysis learn to live with the fistula[106], which bears the tactile mark of the trauma.

When the breakfast of the patients was about to come to an end, a man came towards us with a file in his hand, and asked whether my uncle has completed his breakfast. When I in affirmative, he asked me to take him to the dialysis centre. He also told me to seek help of the hospital personnel when I told him that it would be difficult for me to take him to the dialysis centre alone. I knew I could always call Debu, as told to me by my aunt but thought of asking for help from them–after all it is their responsibility. However Debu arrived without calling. Debu was far more jovial than Tapas, who looked more instrumental in his approach. Seeing my anxious face, Debu said in an assuring voice: “Don’t worry. Patients on dialysis too have a long life. Only that people around have to be more patient”. I told him, as my aunt and cousins were not around, and my uncle was too feeble, I would not feel relieved until he reaches the dialysis centre.

Debu helped me take my uncle to the dialysis centre. In the meanwhile, Debu’s phone started ringing. From the conversation that ensued I understood it was a call from either of my brothers. After the phone call ended, Debu confirmed that it was my elder cousin brother, He told me he would take my leave, and in case I need any, I can call him right away, and hurriedly disappeared. By 8.35 a.m., my uncle was already inside the dialysis unit. I made a quick call to my aunt informing her that the procedure had begun. She told me that my younger cousin’s wife will reach the hospital soon to relieve me. She also told me I could stay back in case I want or leave if I have some other work.

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[106] Also known as ateriovenous fistula or AV graft is a surgical connection made between an artery and a vein.

I was browsing my phone leaning against the handrail of the broad staircase leading to the fifth floor–the kidney transplantation ward. Many care-givers arrived in between with their patients. Not all patients looked emaciated but there were definite marks of wear-and-tear in the words and visages of people who appeared and disappeared to reappear soon at the scene, and some lingered with anxious faces, sometimes looking curiously at others, trying to strike a conversation or a casual chat, faced with anxiety and boredom. I understood that I was an object of attention since I was not a familiar face to the shifting public that appeared at the waiting area everyday for dialysis of their relatives. I tried feigning ignorance–as if I was not aware that others were looking at me, trying to give a look that I am too engrossed in my phone. I knew I had become an object of attention, ever since I came out of the elevator with Debu and my uncle reclining on the stretcher. The family members and relatives looked at me inquisitively as my familiarity with Debu, a hospital employee, evoked curiosity. Some recognized my uncle immediately but I understood from their speculating gaze that they were wondering who I was, because they had not seen me before as my uncle's attendant. The last time I was a mere visitor. Those who entered the scene after my uncle was already inside the dialysis unit, thought of me as the attendant of some new patient they were yet to know. A lean man in his late fifties, wearing a pale yellow shirt and a pair of black trousers, soon came towards me, asking why I was waiting there. I told him that my uncle was inside. When I told him that my cousin's wife would soon arrive he understood who my uncle was, and referred to him as the "fair, old man". He acknowledged his familiarity with my extended family. At one point, it appeared he knew more about my uncle and his condition than I did, which turned me feel awkward. When I asked him about his patient as a gesture of reciprocation, he told me that his wife, who is in late forties in undergoing three dialysis sessions every week. He has now become a regular at the hospital and has been doing so for the last six months. Initially his wife was admitted in the hospital, later on, unable to manage the pressure he decided to continue the treatment from home, and visit the hospital for dialysis. His family members and relatives substituted him during the three weekly visits to the dialysis centre. He added in a faintly smiling face: “Your aunt knows everything. I often speak to her and your sister-in-law. We share our problems. We know a lot about each other”.

He appeared to be a good man but his insistence that he knows my extended family and their crises better, perhaps as an innocent way of foregrounding familiarity and as a way of seeking companionship, made me feel an outsider to the experience and increased my dis-ease and made me feel as if I have not been enough dutiful towards my boro jethu.

Serendipitous encounters

Around 10.30 a.m. my younger cousin’s wife arrived. Although she told me that I could leave but she had a lot to share about how she was managing her household work, her responsibilities as a mother of a seven year old child, as a wife and daughter-in-law. I assured her that she was doing a commendable work. She started sharing her grievances about my uncle and aunt, and especially my elder cousin brother. I felt awkward because she was speaking loudly and every word she uttered was audible to the others. They looked at us with curiosity. My sister-in-law however did not bother, and continued narrating how difficult it has become for her husband to manage everything. Not only did he not have enough money for buying medicines and continuing the treatment, for which they had to take the difficult decision about availing free dialysis at a government hospital, he was also finding it difficult to be present every alternate day to function as the attendant. Spending a sleepless night and going to the office next morning was taking a toll on his health and performance, she worryingly said. That is why she was putting as much effort as possible to share his part of the responsibility.

The point of contention was my elder cousin brother who has a “problematic” life-history. He got married against the wish of his family. Soon there were compatibility issues irrupting between them and his parents, as result of which my elder cousin brother left the paternal house and resorted to his in-laws with his wife. He lost his job, and it was not the first time this happened. What exactly had happened between the two is not known but his wife left him soon after for another man, leaving behind two children. He then returned to his parents. He was jobless then too, rendering an ailing private company pensioner and an over-worked householder responsible for him and his two kids. Within the extended family, this is more of a narrative of irresponsibility and its aftermath. The complaint my younger cousin brother’s wife had was that, my uncle and aunt did not take strict stance when my elder cousin brother returned home. If they had not allowed him in on grounds of sympathy, they could have saved money which could be used for his treatment. Despite being the reason behind such unnecessary drain of funds, “he too will get a share of the parental property”, she said after some time. During this period, when my uncle was undergoing dialysis, my elder cousin brother was employed in a petty private firm. There is no point demonizing the daughter-in-law. She had rational arguments to place. I did not have any overt sympathy for my elder cousin brother. But what appeared to me as more pertinent at that point of time that both were struggling hard to ensure that my uncle survives. After some time, I somehow escaped the scene, assuring my sister-in-law that we would meet and speak very soon.

When I looked at my phone’s clock after reaching downstairs, it was close to twelve noon. Suddenly I saw one woman struggling with a wheel chair with a young emaciated man, trying to push the vehicle towards the elevator. I recognized the woman as one of the two I encountered the last time I went to the dialysis center. Although, she was not the one who spoke to my aunt often. She was the other woman, who appeared exhausted and disengaged, squatting haplessly on the floor in the waiting area. Having recognized her, and seeing her struggle with the wheel chair, I offered her help. She hesitated at first, and then accepted my proposal, and requested to help her station the wheelchair on the elevator, after which she will manage. I did my bit and returned. When I was about to reach the main exit of the Nephrology building, I noticed the husband of the other woman, the elder sister, speaking on the phone. I could not immediately sense any dis-junction in what was happening but I was trying to figure out why the woman was trying to manage everything alone when she had her elder sister's husband around. I instantly became curious overhearing the content of his speech. I heard him saying to the person on the other side:

> I reached the ward a bit late today. I found *Kartik* (name changed, I noticed the real name of the young man on the packet of reports the woman was carrying) was missing. They (possibly indicating the other patients and their attendants) told me that she (probably pointing to the woman I had encountered moments back) has taken him for dialysis.... (There was a brief pause) I don't know what *Saraswati* (name changed) is up to. She has been abandoned by her husband. Now she is interfering in her paternal family. She knows Kartik will die today or tomorrow. We can't afford transplantation. From where will the kidney come? Who will fund the surgery? If you ask her for a kidney she won't donate. But she is after the paternal property. What about my wife's right? Isn't she the elder sister?[107]

Overhearing this, I realized I have unintentionally become witness to a disturbing fragment of a larger disturbing narrative, and hurriedly walked past the main exit of the Nephrology building towards my way back home. This unanticipated disturbing moment however led to intense critical introspection about the problem at hand.

Merton (1968) has talked about serendipitous or accidental encounters in scientific inquiry and how it is overlooked to conform to the canonical stylistics of scientific research. Serendipitous encounters loom large in sociological and social anthropological research. Recognition and incorporation of serendipitous information unravels infinite unfamiliar and unanticipated dimensions of humane experiences of the so-called Subject and subjects of

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[107] This is a fragment of conversation overheard. Here it has been reconstructed on the basis of information culled out from memory. Names have been changed to ensure privacy of the people involved.

research, offering philosophically grounded and anthropologically situated scope for engagement with the problem at hand.

Human organs as encumbered property

I began this chapter alluding that human organs are deeply embedded in the complex web of interpersonal and social relationships (see Figure 6.2 Positional Map). I attempted to elaborate the allusion through an intimate foray into the experiences of organ failure and its familial management within the government hospital setting, with special reference to my extended family, and unknown or unfamiliar people–the family of the young man I met at the waiting area of the dialysis centre at S.S.K.M. hospital. My contention has been, however disturbing it may appear from an ethical point of view, if one takes the project of depicting social trajectory of human organs seriously, one way in which this sociality can be traced, is by foregrounding that human organs among many other features, exhibit characteristics of encumbered property under certain circumstances. Such encumbrance derives from social embeddedness of human organs, even though they may appear to have no independent sociality or semiotic existence apart from the material bodies in which they are empirically located. Human organs are not visible or tactile like the material body is, and empirical evidentiality depends on biomedical technologies of imaging. Beyond the mediated visibility facilitated by modern biomedical technology and finer imaging technologies in the contemporary times, there is a possibility of grappling the materiality of human organs by recourse to the complex material and semiotic topography organs, human or otherwise, traverse. The recognition of material-linguistic hybridity (Haraway, 1988) or biosociality (Rabinow, 2005) of human organs is not a gesture of denying their natural materiality. Rather it involves recognizing that human organs are as much natural or biological as they are historical, social, cultural and political. The study of human organs therefore ought to take into account the social ontology of human organs that is obscured by biomedical discourses in particular and universalistic discourses of life sciences in general which reifies the human body as essentially non-social.

This chapter is personal in that it ruminates at length about the intimate yet critical trajectory of research as an institutionalized journey. This is reflected in the crisis and discomfort I navigate and negotiate, thrown by circumstances of life in a condition where the institutional apparatus of research in humanities and social sciences, and the paraphernalia of obtaining a research degree intersects with my personal life in completely unanticipated ways, resulting in experiences which I later thought could well constitute the founding material or vantage point for my engagement with self and subjectivity with reference to organ failure and transplantation. In this intimate trajectory, two moments count as important in concretizing my conception of social ontology of human organs. One moment is profoundly intimate in that it relates to the immediate, interpersonal and familial experiences associated with kidney failure of my boro jethu. The other moment is not intimate *per se*, but has implications for what I see as intimate in that it is associated with unintended exposure to unfamiliar information, yet by way of combination of many factors, two being, individual and situational, I end up bearing accidental witness to a fragment of a conversation that disturbs my preconceived notions about organ failure and it impact on the ailing person, and the family members and care-givers. This bearing of witness does not happen only via exposure to experiences of the others but also through my cousin sister-in-law while waiting in front of the dialysis unit, when she began sharing her grievances about my elder cousin brother.

How I became witness to these fragments, and what implications they have for my study on social life of organs does not only work by way of revelation. Anyone embedded in family, neighbourhood, community and social life at large will immediately acknowledge that ailing people requiring individual or group attention and care, and physical involvement and financial expenditure related to treatment and its management of disease, often become subjects of dispute over issues of care, responsibility and support. Such discourses reaffirm the social–the responsibility or duty of the family members, kin group or immediate care-givers toward the ill and feeble, as much as they confirm contention and dispute over issues such as who is responsible for taking care, both physically and financially, of the ill and the dependent? How such responsibility is to be shared within the family or amongst kinsmen immediately responsible for taking care? And if the responsibility is not to be shared equally, what are the plausible or legitimate grounds for justifying why one is discounted and whose lesser contribution is seen as legitimate and whose is not?

These are just a few from an infinite range of issues. Contextual specificity and situational reference can add more dynamics to the ones stated above. Beyond all these, what draws attention as an ethnographer of the social is how the property question figures in these discourses. The property question is not merely associated with who owns or inherits the property of the ailing beyond death. It is a question of how the failing organ becomes the locus for discourses and disputes pertaining to proprietorship. This becomes evident in this chapter in both instances of kidney failure. The second instance is more subtle and intricate, and calls for greater attention, whereas the first instance generates solid conceptual-empirical ground–the intimate edifice for further engagement. It is not that substantial information could be gathered from what Saraswati's brother-in-law was communicating over phone, a fragment of which I overheard. But the fact that the fragment alludes to a larger narrative of dispute over corporeal proprietorship, the fragment has great significance in the project of conceiving of human organs as encumbered property. Towards this end, I will proceed by pointing out two key insights that I derive from the utterances of Saraswati's elder brother-in-law.

Firstly, from the nature of the conversation that I overheard, I could deduce that there was a dispute between the elder sister and her husband on the one hand and the young sister on the other, who have different personality traits as is evident in the ways in which they interacted with or refrained from interacting with others at the waiting area of the dialysis centre. But the way they presented themselves as a group at the site where their brother is undergoing treatment, the dispute does not become overtly manifest. The dispute unfolds in the "back" side to invoke Goffman (1956), to which I became an unintended witness. Even when I saw the younger sister taking her brother to the dialysis centre all alone with much difficulty, the act did not appear as pointing to any contention over the right to take care and responsibility of the ailing brother. But only when I overheard the elder brother-in-law accusing Saraswati for her wrong attitude towards life and paternal property, for having been deserted by her husband, and by extension, for not having a child or family of her own and needlessly interfering in a domain where he thinks he and his wife legitimately have greater prerogative to act and function, I realized that the right to act legitimately–the right to partake in decision-making and executing necessary responsibilities for taking care of the ill or dependent does have some concrete connection in popular perception with the character traits particular individuals have–how they have managed the trajectory of their own life and how such (mis)management has put them in troubled conditions in which they find themselves. This is also true of my elder cousin brother's instance. One does not have legitimate reasons to partake in decision-making or getting involved in the life of an already endangered person, if he or she has endangered his or her own life. And because, Saraswati, despite having failed, from the point of view of her elder brother-in-law, to secure her life according to the demands of the society, was trying to make a significant claim to decide and act, and was in fact trying to execute the claim dutifully, she immediately entered into a contentious relationship with her elder sister and her husband. Therefore, the elder brother-in-law's late arrival at the ward to transport Kartick to the dialysis centre, and Saraswati's proactive response, in the absence of the former, to perform her duty towards her ailing brother, becomes the focal point of the utterances I overheard. But, whatever maybe the personal and social antecedents of Saraswati as a human person, she nonetheless makes a serious claim to the body of the ailing brother, which is not acceptable to her brother-in-law, and conceives of such claim as illegitimate.

Secondly, the dispute is apparently between the elder sister or elder sister's husband and the sister-in-law, i.e., Saraswati–a contention over whether the latter has legitimate claim to the failing body of the ailing brother. Beyond the apparent, there are deeper issues relating to the legitimate claim to control property, of which Kartick has the socially ascribed and immediate right to ownership (not necessarily legal), but due to his severe illness he is not unable to assert the claim, which renders paternal property a site open to contestation. The elder sister's purportedly legitimate claim to the property by virtue of her age or seniority is communicated through her husband viz-a-viz the illegitimacy of Saraswati's claim. One does not have enough reason to believe what Saraswati does necessarily enact a claim to paternal property, of which the younger brother is the social heir. It is nonetheless a serious claim to the failing body of the ailing brother–a person rendered incapable by the severity of kidney disease at a very young age. Her brother-in-law however smells foul in such involvement of Saraswati. He says that she knows her brother will perish but will not consider donating her kidney to save his life. He thinks, by overdoing herself Saraswati is trying to make a strong claim to own and control the paternal property of which her brother is the undisputed heir but due to ill-health has this prerogative compromised. Saraswati's claim to the right to own and control property in the utterances of her elder brother-in-law is cast in a language that frames such claim as legitimate and acceptable only if the claimant is willing to part away with a part of her body. In this case her kidney. The inalienability of a woman's right to control or own paternal property is called into question by asking her to prove how worthy and deserving she is of the right by promising to donate or by actually donating her kidney to her ailing brother. A sort of equivalence is thus assumed between Saraswati's right to own or control paternal property and corporeal self-alienation by her by giving away an inalienable part of her body–a kidney–in donation to her brother. Saraswati's elder brother-in-law does not think of women's right to paternal property as dispensable, for he is emphatic about his wife's right to paternal property. But the wife's claim is communicated in a manner which posits her age-related seniority and impeccable character *viz-a-viz* Saraswati, who is younger and has a disputed life-trajectory, which serves for him as the legitimate ground for discounting her claim to the right to control paternal property.

But how do the above demonstrate that human organs exhibit features of encumbered property? In the above analysis, kidneys of two individuals begin to make marked material-semiotic appearance, the first is that of Kartick, whose kidneys have failed and are dialysis-dependent for rest of life and the second is of Saraswati, whose healthy kidneys are invoked in the disturbing fragment by her elder brother-in-law, who sees in Saraswati a potential kidney donor for Kartick, but presumes that she is not good enough a person to donate a kidney to her ailing brother. The kidneys belonging to Kartick and Saraswati, which are dual centers of the contentious discourse at hand, display properties of encumbrance in that, although they are empirically located in three-dimensional corporeal sites (Das, 2010) of distinct and discrete citizens, and therefore legitimately belonging to them both empirically and ethically in non-negotiable terms, but it is derivable from the fragment under study that their non-negotiable belongingness to discrete right-bearing citizen bodies is compromised by encumbrances by external agents which call for critical attention. In Kartick's case, there is a claim to his ailing body and associated care-function towards the failing kidney by both of his sisters, where the claim of elder sister is manifest in what her husband has to say, while the younger sister remains silent, unlike the elder sister on whose behalf her husband speaks, yet she makes her presence felt by reaching the hospital ward on time to execute the disputed care-function. Kartick’s failing kidneys therefore get encumbered by conflicting claims to control and care by sisters, who are his immediate siblings, yet distinct from his own right-bearing citizen body. The encumbrance is particularly felt in Kartick’s case because he is ill, feeble, wheel-chair bound and dependent on others for care. In short, devoid of agency, both literally and by material implication. In Saraswati’s case, although her organs are not failing, her kidneys are inserted into the disputed discourse by her elder brother-in-law who presumes that Saraswati will not donate her kidney to her brother but is needlessly interfering in how they are managing his illness. Saraswati’s kidneys here get implicated in acts of encumbrance via her elder brother-in-law who imposes an external restriction on her kidneys premised on the presumption that she will not donate her kidneys even if required–she is assumed to be only interested in controlling paternal property, for which she will lay claim the moment Kartik succumbs to kidney failure. Kartick’s and Saraswati’s kidneys, begin to, ontologically speaking, exhibit features of encumbered property in that there are conflicting claims to and about them, and there are restrictions imposed upon them by tangible empirical individuals and transcendental societal conceptions, symbolic and semiotic with definite material or concrete implications.

Chapter Six

Of Debt in Organ Donation: Ethnographic Ruminations on Moral Life of Human Organs

Beyond economistic valuation of human organs

Studies of kidney transplantation in developed countries have suggested that transplantation in case of end-stage-kidney-failure is a cost-effective[108] alternative to long-term dialysis (see Garcia et al., 2012). While developed countries are in an economic position to engage in cost-benefit analysis[109] of kidney transplantation over long-term dialysis (see Axelrod et al., 2018; Held et al., 2016; Senanayake et al., 2020), for most people suffering from end-stage-kidney-failure in the developing world, transplantation is no option. Transplantation is not only not offered for free through the public health delivery infrastructure, donor organs are also scarce in most developing countries owing to poor ODR[110], misconceptions relating cadaveric organ donation and weak infrastructural facilities available to retrieve brain-stem death related organs (Epistalie & Saha, 2014). This is particularly true of India, where organ and body donation rates have improved only recently in a few states through higher brain-stem death declarations and greater promptitude on the part of health personnel (Kute et al., 2020). The lower rate of supply of donor organs in India has been attributed to socio-psychological, socio-cultural and medical-infrastructural barriers as much as to illegal organ trade or trafficking–as result of which many donor organs make their way into the transnational black market (Espitalie & Saha, 2014), with less or no compensation to the vulnerable donor (see Scheper-Hughes, 2000, 2001, 2004, 2007). Real or manufactured–the scarcity of donor organs has a decisive impact on transplantation practices worldwide. In countries like India, only a minor fraction of total population suffering from end-stage-organ-failure is able to

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[108] The extent to which a business venture is effective in relation to the cost incurred.
[109] Weighing of estimated costs and projected outcomes of a business venture to decide whether it is lucrative.
[110] Organ Donation Rate.

contemplate transplantation as a remedy (Espitalie & Saha, 2014), for the majority it is a matter of perennially negotiating the fear of impending death and financial insolvency–a continuous struggle for survival against manifold odds.

Economistic analysis of organ scarcity has emphasized incentivizing organ donation (Held et al., 2016). This kind of analysis involves determining the incentive for the donor based on the costs incurred when the latter donates an organ–which is proposed as the basis of determining a "regulated" market value of human organs (Crooker et al., 2008; Matas, 2015). Not that those advocating incentivization of organ donation do not take ethical issues into account while determining the market value of human organs and incentives for the donor. However, policy recommendations derived from such analysis tends to conceive of human organs through the lens of market mechanisms, thereby inadvertently prioritizing their market value over moral value (see Figure 7.1 Situational Map).

Human organs are imbued with moral value owing to their bodily origin and location. Moral valuation of human bodies and organs is attributable to socio-religious, broadly, cultural conceptions of bodily sanctity. Legal rationality also partakes in moralizing human bodies and organs through legal statutes pertaining to the regulation of organ donation and transplantation practices in various societies. This has been demonstrated in the first research chapter of the thesis with special reference to the Indian case. Valuation of human organs unfolds along two moral routes: religious and legal. The justification for the moral valuation in these two cases however unfolds in two separate registers. In case of religious morals, acts of valuation draw directly from religious principles whereas in case of legal morals, valuation derives from legal-rational principles (Weber, 1978) wherein bodily integrity is conceived of as matter of individual proprietorship. Despite their differences, religious and legal valuation of human bodies and organs emphasize control over the body, denial of which amounts to blasphemy in the first case and crime in the second. In the first case, the religious order apparently working at the behest of God exercises control over the body, whereas in the second case, legally and rationally (Weber, 1978) endowed rights of the individual sanctions the latter's control over the body. The state is the sanctioning authority or provider of the rights. The citizen's right over the body is significant only within liberal dispensations of power where the individual is the unit of corporeal actualization of rights and duties. While in liberal dispensations the individual becomes self-controlling at the behest of the state and its techniques of governmentality (Foucault, 1991), in non-liberal dispensations, conceptually speaking, the state authority has complete control or authority over the body.

What demarcates this moral valuation of human organs from the determination of their market value is the loosening of control over the body. The increasing rationalization of society weakens the control of religious order over the body (Weber, 1978). Rationalization processes the shift of control of the body from the collective force of religious order to the order of individual proprietorship–a right sanctioned by the liberal state to be actualized by the individual in and through power. But the moment human body and organs are evaluated via market mechanisms; the state control over body is loosened. Like other commodities on the market, human organs become part of the endless circuit of conversion through the medium of money (Marx, 1867/1995; Simmel, 1900/2004). Not that market mechanisms divest human body and organs of all religious connotations and mechanisms of biopolitical statization and individualization of empirical bodies (Foucault, 1991), what it essentially does is renders the non-convertibility of human body in the religious and legal discourses into a discourse of open-ended possibilities.

Between religious and legal discourses on the moralization of body and market discourses premised on de-moralization and monetization of body, lies the biomedical discourse on human body that initiates the process of de-moralization and creates possibilities for monetization. The "opening up of … corpses" (Foucault, 1978/2012)–the practice of autopsy heralds the medical de-moralization of human body and its consequent monetization. The monetization of human body and organs in the face of universal monetization has generated critiques from sociologists and anthropologists of body and human rights' activists who have interrogated the ethical problems related to monetization of biological materials and the specific targeting of marginalized individuals and groups for biological materials (Cohen, 1999, 2005; Scheper-Hughes, 2000, 2001). They argue that even when the market seems to be engulfing the domain of biological materials holding hands of technoscientific practice, the presumption of universal monetization should not obscure the fact that all bodies are not targets of market forces–the marginalized are likely to be targeted first and more violently (Cohen, 1999, 2005; Scheper-Hughes, 2000, 2001, 2004, 2007; see also Sunder Rajan, 2006), as shown in the first research chapter. The existing social hierarchies get reinforced in new ways with advent of newer technoscientific innovations and technomedical practices. Concepts like "bioavailability" point to this aspect of contemporary biomedical reality (Cohen, 2005). Whether social hierarchies and asymmetries appropriate a market-driven technoscience and technomedicine or the latter appropriates the former in order to normalize their prevalence cannot be known in decidable terms but there is a constant and dynamic interaction between the two.

When hard practitioners of social sciences advocate incentivizing organ donation and in doing so, convert the socially embedded discourse of organ donation into a de-socialized and de-moralized market discourse, they disavow the fact that human bodies and organs can never be divested of their moral meanings, for they are deeply embedded in structural, symbolic and semiotic systems. To oppose the market valuation of human organs, legal discourses step in to remoralize the body as a safeguard against the deviant forces of market. The THOA 1994 in India is a good instance of this. But when one enters the field (not necessarily physically), one realizes that this conceptualization is too simplistic. Monetization definitely opens up the field of body to newer possibilities–morally reprehensible or not. But complacent reliance on any grand formulation about the indomitable powers of the market undermines necessary engagement with the parallel, counter-forces of moral valuation of human bodies. Legal moralization of bodies as safeguard against market forces offers an excessively neat conceptualization which underplays the power of the market. When one engages individual narratives of end-stage-kidney-failure experiences, one confronts that forces of moral and market valuation of bodies and organs are always in conversation. These are specific but not exclusive and exhaustive registers. For instance, organized organ trade and trafficking by white-collar professionals–the doctors and hospital personnel–widely reported in print and digital media is an instance of how authorities and agencies involved in legal moralization of human bodies exceed their discursive limits to transact with market forces. Myriad possibilities of overflows and interactions can be traced by recourse to the experiential narratives of individuals who have been exposed to experiences characteristic of organ failure and transplantation. Such narratives are replete with meanings which offer alternative possibilities of tracing the parallel co-existence and inter-implication of forces of moral and market valuation of human bodies and organs in the context of organ donation and transplantation.

This chapter centers around experiential narratives of individuals who have been exposed to organ failure and transplantation through their ailing relatives, and attempts to read these narratives as a way of engaging how human bodies and organs continue to have pressing moral value despite their biomedical disenchantment ((Foucault, 1973/2012; Weber, 1978)–legal moralization being one way in the face of weakening of religious discourses about human body, and how moral valuation co-exists in distinct specificity and mutual inter-implication with other registers of valuation, such as the market primarily, and law.

Before resorting to the experiential narratives in order is a short detour to a few anthropological ruminations which problematize the mutual exclusivity of social structure and economic action or behaviour (Granovetter, 1985; Granovetter & Swedberg, 1992) and the tenuous nature of oppositions which pits morality against monetary exchange (Parry & Bloch, 1989), which enables conceptually posit the problem at hand.

Morality or market? Revisiting anthropological ruminations

The discussion on market valuation of human bodies and organs takes us to the disciplines of economics and economic anthropology where there are significant discourses on social-structural embeddedness of economic actions (Granovetter, 1985; Granovetter & Swedberg, 1992). Granovetter (1985) argues that the structural embeddedness of the economy has been broached in two ways: The first involves a group of thinkers who believe that economic action was embedded in the preindustrial societies but with modernization, the economy has become an autonomous sphere of experience, with economic action being determined by rational calculation of the economic man of classical and neoclassical economics. This is the substantive ramification of economic anthropology. The second involves a group of scholars who argue that the autonomy of economic sphere is not unique to the modern industrial society. Economic action was often independent of the social structure in the pre-industrial societies. The is the formalist ramification whose ideas have been appropriated by a cohort of economists and social scientists to develop a position called the "new institutional economics" which talks about how economic actions conventionally conceived as embedded or socially instituted can be understood only by recourse to rational, self-interested pursuits of more or less autonomous economic subjects (pp. 481-482). Granovetter (1985) exempts himself from the substantive-formalist dichotomy by arguing that preindustrial economies are less embedded than substantivists think and modern industrial economies are more embedded than the formalists and institutionalists even imagine (pp. 482-483).

The approach of economic anthropology has since long been to work by way of binary oppositions of the kind presented above, which Granovetter (1985), among many others, attempts to destabilize. Economic anthropologists Parry and Bloch (1989) have sought to investigate moral valuation in money economies. They not only problematize the exhaustiveness of what Granovetter (1985) calls the excessively "socialized" conception of economy of the substantive *viz-a-viz* the poorly "socialized" conception of economy of the formalist ramification, but also interrogate how morality has always been juxtaposed against monetary exchange in classical sociology and anthropology, thereby creating obstacles for grappling the morality of monetary exchanges. They argue that traditional, non-monetary and gift economy has always been posed against modern, money and commodity economy, with money attributed features which undermine the moral order of traditional societies. They show using various ethnographic instances that such binaries and presuppositions do not hold any empirical validity. Money rather acquires variable moral meanings with varying societal circumstances.

Graeber (2001) argues that anthropologists have mostly been interested in the study of values, rather than value *as such*, which is generally typified as the domain of economics or Marxian economics. The notion of the desirable embodied in values is posited against the objectivity of exchange value in modern, capitalist regimes where money is the standardized medium of exchange. He calls for an anthropologically-sensitive theory of value that does away with a singular conception of value as the measure of all things. Neoliberalism glorifies the possibility of a singular conception of value. Whereas, anthropological forays into the study of value rules out the possibility of any overarching system of valuation, be it market or culture, as the determinant of human action. Neoliberal conception of value seeks to impose a generalized system of valuation based on the imperatives of global market economy. The problem with such approach to the study of social values is that it has the inherent tendency to reduce essentially value-based social relationships into objects, which has the implication of conceptually reducing the pursuit of values in everyday life into self-interested pursuit of the so-called rational man, one who prioritizes calculative rationality in his dealings with others. Such extrapolation of classical and neoliberal economic theories into the domain of human experiences converts human society into mere assemblage of autonomous individuals and objects, devoid of ideas, emotions, ideologies and counter-ideologies, lacking in what Durkheim (1893/1984) identifies as common consciousness. In Graeber's understanding, economic anthropology also risks falling into the trap of conceiving of sociological categories such as power and esteem as values reducible to rational pursuit of autonomous individuals towards realization of specific goals with the larger implication that society disappears from the frame of reference, ruled by the individual and the object of pursuit, without any moral or value context or moral evaluation whatsoever (p. 9).

This chapter looks at the dual processes of moral valuation and monetization of human bodies and organs. The detour to the anthropology of moral valuation in monetary exchange confirms this duality. Bodies and organs, although predominantly made sense of via disciplines of life and biomedical sciences, have strong cognitive and empirical presence in religious and legal discourses. While the body within the territory of biomedical and legal discourses is taken-for-granted, and that it inhabits the religious discourses is acknowledged, its trespassing into the territory of market is frowned upon. This is where the problematic of the present chapter begins because it asks: is it tenable to assume that body discourses could be safely contained by morality or kept immune from market forces? Is it possible to conceive of an autonomous domain of critique of marketization of human bodies by moral forces? Ethnographic encounter with the everyday struggles and suffering of individuals with organ failure and their care-givers, the search for a donor organ and the painful quest for remedy through transplantation, foregrounds the impossibility of thinking empirical instances of subjective and bodily experiences of suffering irrespective of market discourses on bodies and organs. Taking into account of market forces does not amount to a devaluation of the moral force of pain and suffering. Rather such gesture points to the dynamic presence of human body across multiple registers of valuation–the market and the moral-ethical, the economic and the non-economic, the utilitarian and the experiential. The category of debt (*riin*) as it pervasively emanates from the ethnographic context of organ failure and donation renders this dynamism more prominent and is the situated conceptual lynchpin of the chapter.

Since the method of ethnography and the gesture of engaging experiences of suffering are fraught with complexities, next in order is a list of caveats to rule out misconceptions about the treatment of the ethnographic and experiential material at hand.

Methodological itineraries of engaging organ failure

This chapter primarily engages end-stage-kidney-failure experiences. However it is not a meta-narrative of micro-narratives of individual experiences. It is rather a palimpsest–a re-written or probably over-written documentation of varying conceptions of and negotiations with perceptions of debt (*riin*) that are afloat in ethnographic contexts of organ failure and donation. The units of analyses are not individuals suffering from end-stage-kidney-failure *per se*, but the social relationships around the ailing person. The search for a donor organ, and the legal and financial challenges related to it cannot be understood in atomistic terms. The ailing person who requires the donor organ can hardly participate in the search in most cases. The familial, kin and social relationships that surround the ailing person play a pivotal role in this respect. The challenge is collectively lived and negotiated. Negotiating end-stage-organ-failure is a long physically, emotionally and financially draining experience. Not only the ailing person gets decimated in the process, often the near-and-dear ones who initially participate proactively in supporting the ailing relative or friend through the crisis, feel overburdened and gradually disappear from the scene. Time, money and psycho-physical expenditures are crucial factors for the ailing person as much as for individuals immediately responsible for taking care.

Such realization emanates not so much from any pre-given position but from direct exposure to the field constructed for research and to the experiences intrinsic to it. Even if someone is inclined to prioritize social relationships around the ailing person, *viz-a-viz* the ailing person, medico-ethical barriers puts the ailing person at a distance from others, making it impossible for the ethnographer to explore the experiences of the ailing person through immediate communication. Individuals who have undergone organ transplantation are immunesuppressed, and according to biomedical protocols, are required to quarantine for a long period of time. Clinical-physical barriers thus render impossible conceiving of the ailing person as an autonomous subject of experience.

Another related issue is the question of authenticity of voices. One way of engaging experiences intrinsic to a context is to attribute authenticity to the voices of the individuals embedded in that context. This is derived from the assumption that the particular set of experiences being talked about are structured in such a manner that individuals exposed to those experiences or living them in their everyday lives will narrate them in a particular manner, thereby attributing certain authenticity to the narrative. But one needs to be aware of the fact that not all that is uttered is an authentic representation of what the reality is (if there is any reality as such)–unuttered absences and erasures constitute the narrative as much as uttered presences and reiterations do. Analyses therefore have to trace the authentic through an idea of beyond. Engaging authentic voices in the context of organ failure, donation and transplantation ought to go beyond uttered iterations of biomedico-legal practice, and locate what nuances lie beyond legality–the liminal and the illegal. This also confronts us with the ambiguity of subjectivities. Recognizing this ambiguity complicates ethnography as a gesture of seeking clarity. Ambiguous subjectivities render the ethnographic field rife with unanticipated contestations, which the ethnographer ought to acknowledge and engage, rather than erase.

Further, doing ethnography presumes a notion of travel to a particular place (Clifford, 1996). This has been the concept of anthropological research as a colonial practice. The opposition between sociology and anthropology is premised on this distinction that while sociology is the study of one's own society, anthropology is the study of other societies (Beteille, 2002)–requiring journey to other unknown social worlds. The concept of travel is inherent to ethnography as a method and an epistemological gesture of knowing the unknown or unfamiliar. Travel reaffirms or dismantles conceptions of what it means to be human in one's own or a particular society *viz-a-viz* another. Anthropological travel to another society or to the unfamiliar recesses of one's own society culminates in multiple possibilities of reimagining of self of the ethnographer (Thapan, 1998). The celebration of travel points to mobility as the lynchpin of anthropological method. The general assumption that the anthropologist has to constantly move or be mobile in order to track the complex nuances of the field requires careful interrogation. Sometimes it becomes necessary to station oneself as an ethnographer at a particular site or locate. Such stationing, limited and unimpressive, in comparison to the wondrous travel adventures of skilled ethnographers, is crucial in gaining knowledge. When both the observer and the observed are in constant movement across an intimidating space with huge spread, many nuances are bound to escape the observer. Stationing helps locate recurrences of action over a particular spatial-physical area, as much as it helps locating unique actions and unexpected interventions.

Before resorting to the experiences of suffering of others, a long narrative excursus into the cognitive and corporeal anxieties of the self of the ethnographer in the attempt to grapple with the field of organ failure, donation and transplantation is in order.

Negotiating the field

Encountering the space anew

In October 2017, I went back to S.S.K.M. hospital. In the previous visit to the hospital there was a sense of purpose. Visiting S.S.K.M. hospital back then–on and off–was more of an inner compulsion–an emotional obligation. Now that I was there for collecting data for my research–the instrumental-utilitarian reason behind the visit made me feel uncomfortable. I had the strange feeling that I was being observed by the people within the hospital space–of which I had no concrete evidence though. Precisely because I did not share any common concern, I felt of myself as an outsider–an object of suspicious gaze. I had suddenly intruded into a space with characteristic experiences for visiting which I had no immediate legit purpose others had, and therefore the initial attempts at wandering that is so crucial to such ethnographic foray, did no good in my case. People there were too steeped in their existential worries that I was rendered invisible. The dynamic between the perception of being observed with suspicion and being rendered invisible–that my physical presence went unnoticed, made me ponder over multiple questions. At the ethical front, I thought that the very fact that I did not share the same concern or compulsion behind inhabiting that space, I should rethink my reasons behind doing ethnographic fieldwork there. At the personal front, I thought of myself as completely lacking the basic skills of an ethnographer of making my presence felt in the ethnographic site much necessary for sparking conversations with people. After days of wandering here and there in the known-unknown sites within the hospital space, I realized that this directionless wandering would probably help me gradually overcome the discomfort and hesitation of being in an alien space, ethically speaking, but it would yield no concrete data for my research. I thought of photographing the hospital premises and the movements of people therein but that too emerged as a great challenge. Photographically capturing people unawares seemed dangerous for many reasons. Convincing them to be part of my study appeared an equally uphill task.

I soon decided that I have to station myself somewhere to observe people. A government hospital is a populous space with some people trying to do what they are meant to do or economize in terms of what is expected of them and others trying to get their work done somehow. I realized that describing the ethnographic scene would require me to fix my gaze, limit my frame, and observe who and what enters the scene, how, when, with whom, under what conditions, in what capacities, and what and how interactions and conversations unfold. I adopted therefore a dramaturgic perspective, not completely in Goffmanian (1956) sense, but understood that I cannot simply be an observer or an interviewer, capturing the subtleties of the ethnographic scene would require falling back upon subtle visual and sonic cues. In my previous encounter with the hospital space, I was a participant-cum-observer with my participatory role being primary and observatory role being emergent. Now I was a full observer. But I could not garner the canonical confidence of an objective social scientist– a paralyzing self-awareness of my fallibility (Ricoeur, 1965/1986) crept in.

Soon I decided, drawing upon my experience from the previous encounter with the hospital space: I have to just move one floor above, in front of the kidney transplantation ward, if not inside. Though the objective was less ambitious, it appeared as a more humane and practical for the meanwhile. Personal-mental barriers in ethnography are huge, and an act as simple and uncomplicated as climbing twice a dozen of stairs to go up and fix the gaze at a particular site, see and listen to what unfolds there, involved negotiating the challenge of my personal sense of vulnerability and inertia. The perception of threat derived not so much from the so-called patient parties but from the personnel who manned the hospital space in sentinel roles. This is not to say that patient parties did not enact surveillance roles or appeared intimidating or overtly curious, but it seemed to be a more workable strategy to station myself in the least disputed position *viz-a-viz* the patient parties and other non-experts within the hospital space–the hospital personnel, in order to ease the hierarchical barrier to the flow of information, which would have been a concern had I received support and help from the medical practitioners and bureaucrats. Not that I did not repeatedly seek help, but the effort did not work in my favour. The conditions set did not match the mood of the research. As my aim was to engage experiences related to end-stage-kidney-failure, my strategy was to locate myself at the bottom of the hierarchy *viz-a-viz* those at the helm of affairs–to station myself at the waiting area or the staircase rather than at the HOD's[111] chamber, however difficult, awkward and uncertain it may be in terms of tangible consequence.

At the fifth floor finally

The space in front of the kidney transplantation ward in the fifth floor of the Nephrology building is in sharp contrast to the dialysis centre in the floor below. It is brightly lit up, cleaner and well maintained compared to the waiting area in front of the dialysis unit. Sanitation and hygiene issues are taken care of properly, as transplant recipients are at risk of infection. When I first saw the kidney transplantation ward it was new compared to the dialysis centre and did not have a waiting area, as gathering in front of the opaque door of the ward was prohibited, apart from the single visiting hour from five to six in the evening with strict restriction on entry of more than one visitor per day, that too at a distance. Visitors in small numbers appeared in front of the transplantation ward every evening, which houses the recovery rooms in which recipients are kept for observation in the post-transplantation phase.

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[111] Head of the Department.

Since recipients are under heavy immunesuppression, they are at the risk of infections in the vulnerable post-operative phase.

Hospital staff is careful about frequently cleaning the space. The ward personnel are strict about maintaining silence and preventing gathering. During my earlier visit to the Nephrology building, I had seen nurses and ward boys behaving strictly with outlaws who attempt to have a desperate glance of their relatives or friends. The Nephrology building is a newly set up facility with a marked blue and white finish. This was built with the objective of providing subsidized renal care and kidney transplantation to the lower and middle income groups in the state who cannot afford to spend lakhs of rupees for transplantation required in private hospitals.

In the fifth floor of Nephrology building, the biggest challenge was to get a chance to speak to people exposed to organ failure. I was inclined to rely on the narratives of family members, relatives and friends–in short, the immediate care-givers. The family members and friends were available only for an hour every day, making the field strictly time-bound. On top of that, compared to the dialysis centre below, where there was a marked relaxation in code of conduct, as attendants accompanied the patients all the time, and there were more than one sometimes and nobody bothered. The space in front of the kidney transplantation ward was subject to massive control and surveillance.

In front of the kidney transplantation ward, patient parties did not even dare to appear in front of the outer collapsible gate, before or after the visiting hour. I however noticed that a few anxious family members hid themselves sitting on the staircase leading to the dialysis center. Since doctors and hospital personnel used elevators to move up and down, sitting or standing on the staircase appeared to be a safer option. I was initially scared of presenting myself in person in front of the main door of the transplantation ward. Only a few visitors, mostly family members and close friends showed up every day. I thought of it as pointless to show the hospital personnel my research scholar's identity card and request letter written by my supervisor to all concerned who could help me by providing information. Not that I did not do it. Through my personal exposure to ailment and suffering I had realized that there is never enough justification for asking an ailing person or the care-givers around to respond to a set of structured questions to gain access to their characteristic experience. Asking for information had begun appearing morally objectionable, particularly because the experiences under scrutiny were related to life, death and fear of disease and death-induced separation. Structured interview appeared too close a method to grapple with sensitive experiences of the kind I am trying to engage. I therefore chose to rely on free-floating conversations and observation coupled with sonic dimensions of interaction for constructing my rendering of the ethnographic scene.

Stationing one-self

With these anxieties and tentative resolutions I decided to station myself on the staircase–a strategy I derived from people intrinsic to the milieu to observe and listen to what unfolds in the scene. I thought that the strategy would fail to yield "thick" (Geertz, 1973) data to enable me write an ethnographic monograph based on detailed description. Given that I was uncomfortable encroaching into a space to which I did not belong experientially, I chose to station myself as an observer-cum-listener on the staircase–a markedly "liminal" (Turner, 1964) space–a bridge which connected the dialysis and transplantation divisions of the Nephrology building–spaces where activities unfolded in diametrically opposite ways. Most patients who undergo dialysis in the floor below, their family members and relatives rarely hope to move to the floor above, for it represents the zone of impossibility even though it stands for the hopeful positivity of cure and healing through transplantation. Only a few, according to the priority considerations of the waiting list, are fortunate enough to reach the floor above, and contemplate a life beyond kidney failure, unless rejection upsets everything.

When days had elapsed but I was not able to strike conversation with anybody, I thought of seeking help from Debu. When I started looking for Debu's name in my contact list, there was a sudden anxiousness that I would not be able to find his number on my phone. When I started searching his name, I found his phone number saved as "Debu-Tapas PG"[112]. This was how my younger cousin brother had saved the number on his phone and had sent me the number day when I went to S.S.K.M. hospital during my uncle's dialysis. I knew of Debu as a cordial man–approachable and helpful, and did not think much before calling him up but I tensed about how to make him recollect who I was. His reply, whether he exactly remembered me or not I do not know, was very positive. When I told him about my research and what I intended to do, he was comfortable with the idea that he would introduce me to his co-workers at the Nephrology department. As I was in hurry and wanted to get started with the exercise as early as possible, I requested him that I would reach the hospital the very next day, at any time of his convenience. It would be kind of him if he could introduce me to someone who could help me proceed with the research.

Next day, after reaching the hospital premise I gave a call to Debu. He asked me to come in front of the Nephrology building within half an hour. Since I had already reached the hospital premise, I waited in front of the main gate until Debu arrived. It was the visiting hour, and there were few people around when Debu accompanied me to the transplantation ward. He gave a call to a man he referred to as *Sudeb Da* (name changed), a man in early fifties probably, who worked in the kidney transplantation ward. Debu vaguely introduced me to Sudeb Da. When I realized that there was a possibility of misrepresentation I intervened to tell him what I intended to do. This is because Sudeb Da too seemed to be in a hurry. He appeared unsure about the ways in which he could help a person trying to study people who have undergone kidney transplantation. I added that it would be enough if I am able to speak

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[112] PG is Presidency General. The S.S.K.M hospital was built in 1770 by the Europeans. Then it was called the Presidency General Hospital. In West Bengal, S.S.K.M hospital is also popularly known as PG.

to the family members and relatives. “Beggars cannot be choosers” I thought, and the workable strategy was to speak to anyone exposed to the set of characteristic experiences I was trying to engage or at least be allowed without suspicion or threat to be present in front of the ward. Later on I found that this strategy yielded much more in terms of “thick” narratives (Geertz, 1973) compared to the scenario where I would have spoken to the recipients directly, which would have been potentially life-threatening for them and therefore morally objectionable.

When this entire persuasion session was going on, with my aide or informant from the field, Debu and the potential interlocutor, Sudeb Da, at one corner of the landing between the fourth and fifth floor, I noticed a man having a fair, round face, looking inquisitively at us and trying to listen to our conversation with rapt attention. When we suddenly exchanged a glance, I noticed that he was giving me a faint smile to which I responded immediately but bit awkwardly, as I was desperate that day to have developed at least some contact. The smile, though faint, was a positive cue and I thought the opportunity could not be wasted.

Conversations begin, but how?

Seeing me smile in reciprocation, he came forward and asked me: “Are you a researcher?” Upon finding someone who understood who I was, I replied that I am working on organ transplantation for my PhD and was there for collecting data. I had used the Bengali word “gobeshona” (research) a few times in my effort to make Sudeb Da understand, why I had gone there. Sudeb Da was not unfamiliar with the term but looked at me with surprise when I first uttered it. I realized that he thought of research as the medic’s pursuit when he asked me, in a slightly rude tone: “Are you a doctor that you are doing research? Speak to the HOD, he can help you, I cannot do anything about this”. When the round faced, fair complexioned man came to my rescue, Sudeb Da disappeared from the scene, saying he had some important work to do, giving a look that he cannot waste time in such frivolous conversation. Seeing my face turn pale at such reaction, Debu looked at me reassuringly and requested the man approaching us, if he could help me. The man seemed interested to interact. He introduced himself as *Rajesh Ganguli* (name changed), a businessman, who runs a locally popular catering service in Birati in North 24 Parganas.

From that evening onwards to the next four-five days, not in succession though, Rajesh Ganguli was constantly around, (un)knowingly helping me cope with the sense of dis-ease and aloneness that had gripped when I started my fieldwork at the Nephrology building of S.S.K.M. hospital. Personality factor in ethnographic studies is very crucial. Not being the kind of person who is very confident in striking conversation with unknown people in unfamiliar places, even when I was acutely aware of the fact that I somehow needed to do this for my research, to make things work one way or the other, I needed someone to depend upon, conversations with whom would help me coalesce with the unfamiliar context I was trying to investigate and overcome the overbearing feeling of foreignness. Such conversation was crucial speaking from the method point of view for it helped me combat my outsider status, and engage in conversations as if I were one of the attendants waiting outside the transplantation ward, having no distinct mark or impact on the context of interaction as an ethnographer, while retaining an empathetic attitude towards the suffering of others therein, yet remaining critical, and acutely aware of the fact, that unless the same misfortune befalls me, I am a researcher and this entire experience would amount to the writing of a thesis for the award of a degree.

This chapter therefore can speak only spectrally of the experiences of suffering of the others–ailing persons, and their family members and care-givers, and represent them only by way of mere approximation. The arguments that I derive from the individual empirical cases or fragments presented below only tentatively represent the dynamic presence of human body across contending registers of valuation. These cases or fragments about characteristic experiences related to organ failure, donation and transplantation help ruminate on the moral burden or weight of debt involved in receiving a donor organ–leading to an ethnographically grounded rethinking of exclusivity and exhaustiveness of morality and money in the context of organ donation and transplantation.

Trajectories of debt in organ donation

During my fieldwork, I had the opportunity to converse with people about their encounter with kidney failure and the struggle for finding a donor kidney or waiting for one to be provided by the government hospital while undergoing dialysis.[113] A common theme that inscribes all the experiential narratives is the issue of indebtedness in the context of kidney donation. Debt (*riin*) is an objective economic category but indebtedness is a subjective experience which is sociologically embedded. Therefore in each of the experiential narratives the perception of indebtedness acquires various dimensions and trajectories depending upon the context and nature of debt incurred or to be potentially incurred in the context of kidney donation. All appear in one way or the other to resist the moral weight of accepting a donor kidney, for it binds the recipient and immediate care-givers in a relationship of perpetual indebtedness to the donor. Even when there are organ donors available within the immediate network of kin relations and acquaintances, purportedly willing to donate a kidney as a way of repaying a previous debt for instance, recipients and care-givers conceive of it as a new debt–a new burden, with the implication of a perpetual moral obligation. Receiving a purportedly free kidney from the government hospital or a kidney from an individual immediately responsible for the ailing person appears as the predominantly accepted mode of negotiation, as against organ donation as bodily repayment of a previous debt. In extreme circumstances, monetary compensation for a donor kidney with its baggage of illegality,

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[113] The ethnographic material presented here for analysis is mainly derived from field notes and memories of conversations with people in the field. Anonymity of the respondents has been maintained throughout the presentation of the data.

rather than a new debt, appears as a more acceptable mode of negotiation even when from the legal parlance it involves exceeding the limits of the legal. Socially formulated and legally determined moral value of a donor organ generates the spectral effect of a perpetual debt on the recipient and care-givers which can never be repaid. The experiential narratives presented below depict trajectories of indebtedness from varied subject-positions–the paralyzing sense of perpetual obligation even a potential organ donation generates–the spectral effect they have and many negotiations they bring forth with reference to organ failure and donation and of course, organ transplantation.

Donor organs as free good, as entitlement

Rajesh Ganguli's elder brother, *Dinesh Ganguli* (name changed), who was sixty when I was doing my fieldwork, had his kidneys damaged due to hypertension and diabetes, and was undergoing dialysis at the government hospital for the last two years. While not many people see transplantation as an alternative even when counseled by doctors, Rajesh Ganguli and Dinesh Ganguli's only son, *Akash* (name changed), who was then in his early twenties, said that they were from the beginning prepared for kidney transplantation, and had therefore got Dinesh Ganguli enrolled in the waiting list. But they knew that getting a kidney officially would be difficult if they depended only on formal procedures. Arranging for a kidney donor all by themselves would be an equally challenging task they acknowledged.

During my conversations with Rajesh Ganguli and his nephew, Akash, the issue of scarcity of donor kidneys came up recurrently. Rajesh Ganguli was a highly opinionated person and had substantial exposure to the field, and had a lot of information to share. Although in his conversations with me he harped mostly on the complexity of getting a kidney transplant and their conviction that they would have to somehow get it done, thinking that I was primarily researching that particular dimension of the problem. I chose not to intervene much, thinking of not to impose any external structure on his mode of narrating his experience.

Rajesh Ganguli told me that they knew from the very beginning that they have to find a donor for they cannot perpetually wait for their turn to come. But he added that they did not want anybody from the family to donate a kidney. Since they could afford to pay for the donor kidney, they collectively decided, Rajesh Ganguli confessed, that the best option would be to find a willing donor, compensate the person well, if such a person is at all found, rather than push somebody on filial grounds into the brink of perpetual illness–of living with one kidney until death. He told me in a rather disgusted tone, “ ... but it is not at all easy to find a donor and above all finding one is illegal according to the laws of this country, even if a near one dies ....” From whatever I could gather from the thoughts of Rajesh Ganguli on the matter, I could deduce that the decision to opt for a government hospital for dialysis and transplantation was to economize on the expenses, because kidney failure, dialysis and transplantation, if at all the option is available, is lengthy and expensive, which could exhaust all finances and create problems of continuing the treatment later on. So there was a combination of rational decision to economize and constraints induced by huge treatment expenditure, which made Rajesh Ganguli to take the decision to get the treatment done at the government facility, although they had the capacity to avail treatment at any private hospital in the city. But he was not satisfied with the orientation of the doctors at the government hospital, whom he found not taking enough initiative or risk to carry out transplantations. There is an inherent complacency in them in his view, which gets further concretized because of legal constraints. Rajesh Ganguli believed that legal constraints results in an ethical orientation where doctors counseled the patient parties by saying that the organ was for free or not to be paid for, which for him is a contradiction because donor organs are not easily available. Critiquing this farcical emphasis on the free organ[114] at the government hospitals like other free goods, Rajesh Ganguli said:

> In the government hospitals, the doctors say that the organ is free and the patient party would only have to pay nominally for the transplantation cost or the cost may even be waived. In reality, no organ is available in these hospitals. Only a few transplantations are done, that too, when brain-death is declared in some private hospital, or when one or two organs come here for transplantation. They are even jittery about declaring brain-death. You have to wait for years and see your dear one gradually perish. Transplantation cost is nominal or waived in the government hospitals, which is why we are here. The doctors are good and qualified too but they never help you find an organ. The transplantation cost here is far less compared to the private hospitals but you do not know when your patient will finally get the organ. Doctors in private hospitals earn a lot when they carry out transplantation, both money and fame. They are willing to take the risk. Private hospitals have everything arranged in advance if you are able to pay for it. Paper work is not a major hurdle. Here doctors claim they have the best resources but are unable to deliver. Their practice is bound by law. But you tell me; don't you think it is a contradiction to say that organs are free but unavailable?

Moreover what came across very powerfully in his thoughts is the purported nonchalance of the doctors towards the suffering of the ailing persons and the struggle of their care-givers. In some sense, Rajesh Ganguli was of the view that doctors appropriated the strict laws to justify their lack of involvement and initiative insofar as finding an organ is concerned. From my exposure to the field, I noticed that many people who are exposed the characteristic experiences of the field; find a fundamental difference in the ways in which government hospitals and private facilities orient themselves to the problem of finding an organ. None actually undermine the laws of the land, unless they are involved in organized crime with middlemen targeting vulnerable organ donors. While the government hospitals conceive of law as defining the limit or boundary of their practice, those in private hospitals devise varied means of cushioning the adverse effects of the problem on the patient and their

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[114] Goods which are useful and abundant in supply such as air.

families. In short, the latter goes a few steps ahead, whereas the former chooses not to even inch closer to the limits of law or experiment with the possibilities in the legal provisions. This is probably the reason why Rajesh Ganguli was dissatisfied with the state of affairs at the government hospital and attributed lack of initiative to them. Rajesh Ganguli himself is not a kind of person who takes the condition in which life has thrown him for-granted and is always more than actively oriented to find a solution, but when he finds himself in critical situations where there are constraints on initiative, he is led to desperation. Describing how his desperation began turning into hopelessness Rajesh Ganguli told me:

> Frankly speaking, we never imagined that *dada* (refers to his elder brother in Bengali) would finally get an organ. We had given up all hope and had come to terms with the fact that he will live the rest of life like this, moving to and fro from home to the hospital for dialysis and back, and all resources would get exhausted in the process. Our business too suffered due to dada’s illness. But we had to balance everything to ensure the flow of money necessary for treatment. For years we two have struggled to make our catering business what it is today. Now everyone in Birati knows us. For the last few years dada could not contribute much to maintain the business. Since Akash has finished his twelfth, he has been helping me sincerely. Earlier I used to tell him not to worry about the business at all. It is important to be a graduate at least. Now he is doing B.Com. and helps me in the business during the wedding season. These days I don’t refrain from taking his help. I too am getting old and can’t manage everything alone. He is young and more energetic than me. But I have asked him not to compromise his studies. Dada was well into the catering business when we were young. He never allowed us to feel the absence of our father who died at a young age. I have tried my best to support my nephew in this crisis. To save dada we fight together. All we want to ensure is that he survives.

This long passage introduces us to Rajesh Ganguli’s indebtedness to his elder brother, who took care of him in their father’s absence. It also shows how he attempts to replicate the element of responsibility or duty his elder brother showed towards him and other siblings in the relationship he has with his nephew. Like his elder brother, he too tries to shield his nephew from the adversities of life. And at the same time, thinks of him as a comrade in the struggles of life and acknowledges that he needs him as a support system now that he too is getting old and cannot manage everything alone. The interaction with Rajesh Ganguli was revealing because there was a double-bind of indebtedness and duty, and a trenchant critique of structural and legal conditions which hindered the realization of his dutifulness towards his dada. He kept on referring to what the doctors told them during the counseling session and is particularly intrigued by the contradictory claim that the organ is for free or not to be paid for. I do not know whether this is the general perception that is generated or it is the discrete perception of a particular doctor, but the expression, “the organ is for free” became the locus of Rajesh Ganguli’s critical discourse. At one point he and Akash had started considering the option of moving to a private hospital, because they do not claim that the organ or the service is for free, rather attempt to make things work in favour of the patient and have no qualms in asking for money for the service they provide. They had even started thinking of a probable donor who would be willing to donate a kidney, in case the private hospital is able to make all other arrangements. Rajesh Ganguli told me:

> When we were counseled before the transplantation, we were told by the doctors that the organ is for free. But it is not free. We have incurred financial loss for years waiting for dada to get a kidney. We even thought of shifting him to a private hospital. We even planned to arrange for a kidney. A distant relative even volunteered. He is our grandson and his family too like me is indebted to my dada. They volunteered on their own. There was no compulsion. According to law, we cannot compensate the donor. But he is our grandson. We decided we will take care that he is compensated well. He has his entire life ahead. We can’t be selfish. We were ready to spend the money also, however risky it maybe for us. But finally dada got a kidney from the hospital, which was really unexpected.

Rajesh Ganguli thought that his elder brother would perish if they wait for their legitimate turn to receive a donor kidney. He told that at the government hospital they knew the situation was not under their control. Therefore they thought that if they arrange for a donor and resort to a private hospital then probably things would get sorted fast, unlike the government hospital where the transplantation got delayed. But who the distant relative was, the potential kidney donor who Rajesh Ganguli had is his mind, he did not divulge. I did not even cajole him much for I realized that the conversation was gradually being pushed to the limits of the legal, to a point where any further intervention will frustrate the project of gaining knowledge. Spontaneity is what I focused on as an ethnographer. The invocation of the "distant", unidentified relative and the history of indebtedness of the family of the young relative to Rajesh Ganguli's elder brother however generated interest. Not that I was sure that there was some illegality involved for they did not have to ultimately proceed that way. The stated indebtedness of the potential donor and his family however lingered, making a perturbed appearance in my face towards the end of the conversation that day, when the question of shifting to a private hospital came up. Rajesh Ganguli gauged my doubts and on another occasion, in an attempt to justify his contemplating of arranging for a donor–who is a "distant" relative and indebted to them–and could easily be shown through documentation by the private hospital that the potential donor is Dinesh Ganguli's grandson and is willing to donate out of pity, he told me:

> You can tell me that this is illegal. Even law says that. If you follow newspapers, you will find advertisements urging prospective donors to contact immediate care-givers of persons with failing kidneys and livers. If buying and selling of kidney is illegal, and then by the same logic, advertising for them should also be illegal, isn't it? Why should popular daily newspapers even allow such illegal advertisements? And if there are allowing, this means the law of the land is not same for all. Those who respect the law of the land are bound to die then. And those disregard it, will survive. Is that what you will call equality? (Pauses for a while)
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> …When we pay for the electricity we use, when we pay tax for the water we use or the land we buy, then why cannot we buy a kidney faced with death? Not only that, people die of hunger, by selling a kidney they can earn money and survival!

I interacted with Rajesh Ganguli for some four to five days. I met him on several occasions but could interact with him only a few days when someone else came to meet Dinesh Ganguli and Rajesh Ganguli waited outside to speak to the doctor about his recovery. Unless Dinesh Ganguli's wife came to see him or Akash went inside, I could not manage to speak to him. He would always appear absent-minded if he had to speak to the doctor or get some information from the nurse. I found it perturbing to speak to him when he had other worries. I could speak to him on three occasions and each time he would reveal and conceal a lot at the same time, saying: “There are too many stories. Will share them with you later”, which he never returned to the next day. I too lacked the finesse of a skilled ethnographer who could push for further information and remained content with whatever came my way.

Maintaining chronology of the experiential narrative is not the informants’ concern. Chronology is constructed by the ethnographer. Through the conversations that happened at the vicinity of the kidney transplantation ward, I had come to realize one thing–when informants communicate with ethnographers they do not necessarily conform to any linearity. Narratives unfold through interweaving of longitudinal and cross-sectional insights. Asking informants to share their experiences in the form of linear narratives, asking them to go back where they had left the other day, not only disturbs the spontaneity of flow of information but also frustrates the possibility of access to unanticipated intersecting materials–the moments of repetition and emphasis, and those of concealment. What bothers me as an ethnographer of experience is the intended and unintended juxtaposition of ideas and arguments. What I have presented above bears no chronology, rather speaks of how Rajesh Ganguli narrated his encounter with kidney failure and transplantation when I asked him a question as simple as: “How did you come here?”

I do not know whether he understood my research project. I did not try to explain to him the conceptual issues I intended to deal with, but it seemed that his perception that I was an educated man and the research will help me progress in my career, pushed him to maintain an amiable attitude towards me and help me gather information from others with the same experience of having to anxiously see their near ones gradually recover inside the kidney transplantation ward or plunge into darkness at the dialysis center. With hindsight I also realized that he spoke vociferously about legal constraints, because he probably thought of me as a probable medium of communication with the larger public through my research. Not that it was an intended or well thought out plan, but it seemed that in trying to convince me about the validity of his decision to arrange for a donor kidney, he was also communicating with other stakeholders in the field about what it means to conform and see a near one suffer at the brink of death.

Donor organ as medium of redemption

Rajesh Ganguli had introduced me to *Prabir Samanta* (name changed), whose thirty-eight year old wife, *Karabi* (name changed) too was recovering inside the kidney transplantation ward. This was her second transplantation since rejection in the first attempt. They had to resort to dialysis after the doctors detected an impending failure of the donor kidney. Prabir Samanta was a life science teacher at a government sponsored school in Sonarpur and had his residence close to his place of work, although they were originally from Ichapur in North 24 Parganas. He had a daughter who studied in the sixth standard. When Prabir Samanta got married, he said he was unaware that his wife has a chronic condition–an autoimmune disease[115] by the name lupus[116], for which she was under treatment since a very young age. But this medical history was not known to him when the proposal for marital alliance came from his maternal uncle's side.

Few days after their marriage, Prabir Samanta noticed Karabi secretly consuming medicines. When he asked her about the medicines, she replied, "Father has sent!" When Prabir Samanta persisted and somehow wanted to know from where she got the medicines and why she was consuming them, Karabi annoyingly replied: "Father has sent them through brother; I have been consuming these for a long time". Feeling cheated, Prabir Samanta wanted divorce but Prabir's father intervened and asked Karabi's father to see them and explain why they had been kept in darkness about Karabi's chronic ailment. Karabi's father and brother arrived and confessed that she has lupus, for which she has been under treatment

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[115] A condition in which the immune system works against the body and destroys it.

[116] An autoimmune inflammatory disease where the human immune system attacks its own cells and tissues, affecting joints, skin, kidney, heart and lungs.

since diagnosis in her early teens. As it was becoming impossible for them to find a suitable groom for Karabi they decided not to divulge about this to Prabir's family, when they started showing interest in getting Prabir married to their daughter. Upon seeing his son-in-law disgruntled, Karabi's father pleaded for forgiveness while his brother lay prostrate at Prabir's feet. Being considerate about their helplessness, Prabir decided to forgive them and accept Karabi as his wife.

According to Prabir Samanta, "Karabi has been ailing for a long time but has been a dutiful wife and daughter-in-law, and a caring mother". Although there was an undesirable start to their relationship, Prabir Samanta acknowledged how he gradually developed love and respect for Karabi when he realized that she is a good human being. He said:

> When I decided to continue the relationship with Karabi and her family, even after knowing that I have been cheated, I did only because they appeared utterly helpless. Had I turned them down that day, all of them would have died. In the countryside, when a married daughter returns to her paternal household within a few weeks after marriage, she is bound to live a cursed life. People treat her as an outcaste. The family gets asked harsh questions …. (Pauses for a while)
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> Over the years I have come to see from their perspective. I too have a girl child. Although I would have never hidden my daughter's ailment in order to get her married without hindrance. But I understand what it means to be a girl's father in our society. Karabi is a kind human being. She is caring and loving. Not that everybody has to show love and care by physical work. Even a simple gesture is enough to show how loving and caring someone could be. She has been ailing for a long time. My daughter has been deprived of a mother who could stand by her actively in all crises. But even when she is worst ill, she partakes in her life: worries about her, inquires about food, whether she has completed her assignments? Isn't that enough?

Prabir Samanta appeared to be a kind man, who had developed a good relationship with Rajesh Ganguli. When I started interacting with him, I realized that while there was a predominant feeling of having been cheated in the earlier phase of his marriage, he gradually realized the helplessness of Karabi's family and began to appreciate the goodness of Karabi as a human person. Although he lamented that his teenage daughter is deprived of strong maternal support when she needs it most, he never falls short of words to appreciate Karabi's psychological involvement in their daughter's life and her whereabouts.

According to Prabir Samanta, Karabi's health condition became excessively critical after she conceived. The nephrologist had warned that pregnancy would complicate her ailment. When she became pregnant she had kidney issues but it was not that "serious", according to Prabir Samanta. Karabi's nephrologist was worried that pregnancy would aggravate risk of kidney failure and the gynaecologist[117] was worried that Karabi's frail health would pose risk for the child. Just after the birth of their daughter, Karabi's conditioned worsened. Doctors diagnosed the condition to be one of lupus-induced nephritis[118] and warned that kidney failure is imminent. Prabir Samanta expressed profound gratefulness towards Karabi, for he recognized that he would not have become a father had Karabi not taken the risk of conceiving even though her nephrologist had warned unequivocally that pregnancy could pose life risk. He was evidently thankful to her for securing him progeny. Although there was a melancholy in Prabir Samanta's voice, and he kept on repeating that his daughter has been deprived of maternal support, especially because she is in an age where "she is experiencing bodily changes", and cannot share those details with her father, he did not blame Karabi and her family for his daughter's misfortune. Rather he seemed to have internalized that he was destined to marry Karabi and have a daughter with her. When his daughter was only eight months old, Karabi's complications aggravated. Prabir Samanta was driven to hopelessness seeing Karabi in that condition. He shared:

> Initially I had no hope. But my brother-in-law persisted that we should go for kidney transplantation. I rejected the idea. I neither had the money nor the physical and mental courage. But he persisted that we will find a donor for her. He insisted that in case no donor is available he will donate his kidney but I rejected the idea altogether.

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[117] A medical practitioner with specialization in the treatment of women's diseases.

[118] A medical condition where the kidneys are inflamed and unable to filter bodily wastes.

Soon Karabi's kidney transplantation took place at the government hospital. They were hopeful that Karabi would soon be safe. But the cadaveric kidney[119] transplanted in her body was rejected. She developed high fever with other complications. Not even two weeks had elapsed after she had received her first kidney transplantation, when she was again sent to the dialysis unit. Rigorous antibiotic regimes began. According to Prabir Samanta, his family physician told him that the kidney was probably rejected because of its cadaveric origin. But Karabi's transplantation team did not cite any reason for the rejection.

For about one year after the rejection, they had to undertake the challenge of taking Karabi for dialysis thrice a week until she moves up in the waiting list[120] and receives a kidney. When they were finally frustrated at not getting a kidney, Prabir Samanta accepted *Prasanta's* (name changed) proposal and Karabi underwent her second transplantation with her brother's kidney. She was recovering in the recovery room of the kidney transplantation ward of the hospital when I met Prabir Samanta. Regarding his decision to accept Prasanta's proposal, Prabir Samanta told me:

> I never wanted to Prasanta to donate his kidney. He has a wife and son. After this I cannot look at their eyes. It is a permanent damage. Karabi is my wife. She is my responsibility. Her blood and tissues type matched with her brother. From the beginning Prasanta wanted to donate his kidney. I never wanted this to happen. I knew he was trying to undo the wrong done to me. I had forgiven them long back. I thought if I accept his proposal that that would mean I have still not forgotten what had happened, and that would prove my love for my wife is not true. But destiny has it that Karabi would survive on her brother's kidney. I hope she recovers and is able to lead a normal life after this. I want Prasanta to be fit and fine. I want both to recover fast and come back to normal life.

Gaining access to personal details to which one is not a party is emotionally troubling. I found it very difficult to maintain composure faced with intense cathartic moments during my conversation with Prabir Samanta, who appeared calm and forgiving. Rajesh Ganguli had

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[119] Kidney retrieved for transplantation from a person who has suffered brain-stem death.

[120] A ranked list of potential organ transplantation recipients, based on determination of priority, to ensure fair allocation of donor organs.

introduced me to Prabir Samanta, who started sharing his experiences with great ease. While Rajesh Ganguli had many troubling arguments and questions to pose, the encounter with Prabir Samanta was filled with intimate details and emotional moments. There were moments when faced with dis-ease I began thinking that the research has intruded into a sensitive space. I had the motivation of writing a detailed hospital-centric ethnography, when I proposed to work on organ donation and transplantation but with my entry into the field of characteristic experiences I realized how ethically challenging it was and decided to work with whatever material came my way like Levi-Strauss's "bricoleur" (1962/1966), without pushing much for information. Conversations with Rajesh Ganguli, Akash, Prabir Samanta and his friend, *Shantanu Das* (name changed), continued until both Dinesh Ganguly and Karabi Samanta were released within fifteen days after their recovery. These conversations informed my perception of organ failure and its aftermath in unanticipated ways. However here I have produced only fragments from those encounters keeping in mind what is necessary to address the question at hand. Neither it was possible nor did I try to develop full narratives out of these fragments. These fragments constitute the weave of the representation and I have tried to remain true to them as far as possible, neither compromising "thickness" (Geertz, 1973) for conceptual clarity nor indulging in romanticism at the cost of conceptual treatment. If anything I have prioritized here is how I conceive the narratives and what impact they had on my psyche as an individual and my thinking mind as an ethnographer of life, death, body and corporeality.

Donor organ as collective responsibility, as acknowledgement of greatness

While I was conversing with Prabir Samanta, I developed rapport with *Hasibul Sk* (name changed), whose younger brother had also undergone kidney transplantation for the second time. Hasibul (then in his early thirties probably) was an employee in a post office in the Basirhat subdivision of North 24 Parganas. They were originally inhabitants of Basirhat but had temporarily shifted to a rented accommodation in Baruipur in South 24 Parganas, close to a relative's residence, to carry out the treatment of his nineteen year of old brother, *Rajibul* (name changed), who had CKD.

According to Hasibul, Rajibul had been a bright student throughout and after passing the Higher Secondary Examination in first division he got admission in Basirhat College to pursue an honours degree in Bengali. He even completed the first year with good marks and aimed to pursue a Master degree. But towards the end of the first year he was on the verge of kidney failure. A local physician advised Hasibul to take Rajibul to Kolkata to continue his treatment. Dialysis was the only solution the doctors at the government hospital suggested, unless a donor kidney is found for transplantation, which Hasibul thought was "impractical to even think of".

In Hasibul's words, "Rajibul was terribly depressed when he came to know that he needed to be on dialysis throughout his life unless transplantation is done". Hasibul told me that like him Rajibul too did not think of transplantation as a possibility. All he wanted was to be able to continue his studies amidst the ongoing treatment. When they came to Kolkata for treatment and began staying at the rented accommodation to continue the treatment, Rajibul still had plans to pursue higher studies. Hasibul told me that, "Rajib always wanted to come to Kolkata and pursue his Masters at Calcutta University. But you tell me wanted kind of a journey is this to the city he has always aspired to come?" He added in despair:

> It has been one year that he has not been able to go to college, but in between dialysis sessions he continues his reading and has firm conviction that he will be able to appear for the second year examination. He is already lagging behind by a year; his class has progressed ahead. This makes him sad. But he is not hopeless.

Hasibul's father was an ardent CPI(M)[121] worker and was loved by all in Basirhat. Even under changed political circumstances and despite his father's demise, their family

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[121] Communist Party of India (Marxist).

received support from the people around. Hasibul, who is also an honours graduate in Bengali from Basirhat College, told me, people loved them for their academic achievements and decent behaviour. Many people visited them when they came to know about his brother's ailment. Many offered monetary help, brought fruits and health drink. Hasibul constantly requested people not to bring food items since there were restrictions on food and fluid intake. According to Hasibul, this was all because of his father's good will. Even children of people who were no longer alive but were in good terms with his late father, met and offered them help. Some had even changed their political affiliations but did not hesitate to come to their rescue. Hasibul emphatically said that although media represents small towns as fraught with political turmoil, good relations override politics, and people reciprocate in crisis. When people heard that without transplantation Rajib would have to survive on dialysis throughout his life, few who had been his father's long time associates during the CPI(M) regime, even volunteered to donate a kidney to save Rajibul. This appeared too idyllic a representation of his hometown. Researching on organ donation and transplantation, I had learnt that organs are scarce, but in Hasibul's narrative I was confronted with a contrary information when he said there were many visitors (previously his father's associates) who wanted to donate a kidney because they had a good relation with their father and thought of this proposal as a way of acknowledging the greatness of his late father through the act of donation. Hasibul's father however had taught his sons "not to take advantage of people". Hasibul was strict about solving the problem all by him. Even when his immediate social milieu and network of social interpersonal relations took upon itself the collective responsibility of offering a donor kidney to Rajibul, Hasibul thought of sticking to his father's teachings. He said:

> This is our father's upbringing. He told us to face crisis with a brave-heart. Solve our problems all by ourselves, unless impossible. Seek help only when all our capacities and resources are exhausted. I think I can fight alone. They loved my father that is why they were willing to help us. But I respect my father too; he has never encouraged us to take advantage of anybody's goodness.

When Hasibul and his mother underwent blood tests to check whether they could donate a kidney to Rajib, it was found that his forty-eight year old mother's blood and tissue type matched with Rajib's. They decided to proceed with transplantation after some serious discussion within the extended family, especially with the maternal uncle. Although Hasibul was desperate to save his brother's life, a deep anguish befell him when he learnt that his blood type did not match with his brother, but his mother's did. He felt, as he narrated to me, "the life of my most precious one's are endangered and I am not in a position to do anything". Hasibul deeply wished he could donate a kidney to his brother, which would have not only saved his brother's life and spare his mother, but also made his late father happy, because he always wanted his elder son to outshine him in acts of selflessness. But for Hasibul this was not an act of selflessness or an altruistic act of any kind. For him it was like saving his own life by saving his most precious ones–his brother and mother. But "unfortunately" he could not, he lamented.

"The biggest blow was however yet to come", Hasibul told me. The transplantation procedure was successful, according to the doctors at the hospital. But within a few days Rajib developed high fever and graft infection. Hasibul said, "… the world came crashing down around us." The dreadful process of dialysis began once again. "We were back to square one", Hasibul said. Great despair descended upon Hasibul's family as a consequence. On the one hand, Rajib did not recover even after a serious transplantation surgery. On the other hand, Hasibul's mother's life was endangered as she would have to live with one kidney for the rest of her life. To enable the first transplantation happen they had withdrawn whatever money they had earlier deposited in the bank and even sold the gold they had. They received financial help from the local party organization and from a few extended family members–helps which Hasibul could not avoid. The accumulated amount enabled him get Rajib undergo the transplantation. From the accumulated amount Hasibul had retained some for Rajib's and their mother's post-operative care. With the money that he got from the post-office as salary he thought he would somehow meet the monthly expenses. But when his mother's kidney was rejected, Hasibul was completely broken and did not know what to do. He could not even think that a second transplantation would ever be possible.

The second transplantation however happened when Rajib received a kidney from the hospital through organ swapping, from which Rajib was recuperating when I met Hasibul at the fifth floor of the Nephrology building. The case was also treated with great urgency by the hospital authorities. The doctors said that he was recovering well, and until then showed no signs of rejection. Rajib's transplant surgeon assured him, Hasibul told me, that since the kidney donor was of a younger person compared to his mother, if there is no acute rejection[122], the transplanted kidney will suffice for at least next ten, fifteen years or more, provided Rajibul is under proper care and medication.

Toward moral economies of debt

In the first case, from the beginning of the narrative it is discernible that Rajesh Ganguli and Akash, did not consider kidney transplantation as impossible. Despite their awareness of the many hurdles involved in organ transplantation, for instance, the limiting nature of official procedures of medico-legal documentation, which Rajesh Ganguli views as one prime reason why people requiring organ transplantation are unable to resort to it. He thinks that suffering of the people has the urgency towards which transplantation technology and the institutional biomedico-legal procedures surrounding it must be experientially predisposed–they must be responsive to the lived crises of people suffering from organ failure and the people around them. He posits a binary opposition between the legal limits of transplantation technology

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[122] Non-acceptance of the transplanted donor organ by the recipient body within few days or weeks of transplantation.

and the urgency of people suffering and struggling to survive at the brink of death, where the urgency that suffering embodies is compromised at the pedestal of law. In his view, the institutional and procedural aspects of transplantation laws conceive of this lived urgency as deferrable. Rajesh Ganguli time and again talks about the problem of waiting for the official organ allotment by the government hospital. Such waiting is detrimental to the mental, emotional and physical health of the ailing person as well as the immediate family.

Although the overall frame of reference from within which Rajesh Ganguli speaks is that of legal restrictions versus urgency of human suffering, the narrative however revolves around the theme of indebtedness to his elder brother, Dinesh Ganguli. This is how the narrative acquires a personalized turn *viz-a-viz* the critique of structural restrictions. The overpowering sense of indebtedness of Rajesh Ganguli to his elder brother propels him to posit the binary between law and suffering. He comes across as seriously involved in trying to get his elder brother’s transplantation done. But he feels constricted by legal obstacles to transplantation at the government hospital. The sense of duty his indebtedness generates comes to confront the legal hurdles, attempting to contend with which he even contemplates engaging in actions which could push his sense of personal duty to a particular individual to the brink of a public wrong of purchasing or buying an organ. The attribution of complacency to the government hospitals–not willing to take risk or make use of the facilitating provisions of law, in comparison to the inventiveness of the private hospitals, shows Rajesh Ganguli’s firm belief in the capacity of money to make things work somehow–money as the trigger of initiative. Thus at one point he even contemplates arranging for a donor kidney and resorting to a private hospital to get the procedure done.

But why did he not actually purchase an organ and shift a private hospital? The reason could be his attempt to economize treatment expenditure. He was obviously not being miserly but thinking effectively in terms of long-term financial consequences of getting the procedure done at a private facility. This could be read as a contradiction in that on the one hand he glorifies the private health sector for its entrepreneurial approach to organ failure and transplantation, and contemplates shifting to a private facility. On the other hand, he himself acts in a calculative manner, calculating potential loss and gain, given that transplantation is a risky venture–haunted by the specter of rejection–hence risk of death and financial loss. Therefore he does not actually shift to a private facility even when he contemplates such a possibility. This contradiction is constantly voiced when Rajesh Ganguli with a sense of disgust, talks about how transplant surgeons told them that the organ received following official procedure of wait-listing is free or not to be paid for. He complicates this notion of free provision by arguing that how things which are unavailable or scarce could be conceived as free? This is a valid question, logically speaking. But the conditions under which this is raised indicates that Rajesh Ganguli wanted to get the procedure done at the government hospital, because the organ there is supposedly free as told to him during counseling session, but the perpetual wait for the organ to achieve that potential free-dom, by being actually available, becomes a frustrating fact for him. This deadlock becomes unbearable as it works against his intended attempt at performing his duty towards his elder brother to whom he is indebted.

The human organ is a contested entity. The *in-vivo*[123] encounter with the organ is a prerogative of the medic or the surgeon. But here we can experience a situation where an *ex-vivo*[124] life-trajectory of organs is realized in and through ordinary, experiential discourses of pain and suffering. When Rajesh Ganguli problematizes the purported free-dom of the organ officially provided by the government hospital, and says that a “distant” relative, who is a grandson in relation to him and his elder brother, has shown willingness to donate a kidney, for his family is indebted to Dinesh Ganguli, there is a clear hint that organs have a life ex

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[123] Taking place within the organism.

[124] Anything that takes place outside the body of an organism.

vivo, and are implicated in complex moral and monetary economies of debt, involving real or potential financial or symbolic transactions centering them. The invocation of an indebted relative as a potential willing donor and the vehement argument in favour of organ sale as panacea for poverty makes him line up not necessarily with criminals *per se* but with health economists and jurists who talk about incentivizing organ donation towards the larger bioethical goal of saving life.

The idea therefore of getting the transplantation done by a donor kidney of a "distant," indebted relative draws attention. During our conversation, Rajesh Ganguli told me that he does not want any family member to donate. Does this mean that this young indebted relative is more susceptible to a legit claim to his body compared to his own nephew? In order to realize his dutifulness towards his elder brother, to whom he is indebted, he resorts to a willing donor within the extended kin network, who in turn is indebted to his elder brother. Although the ground and nature of indebtedness is not clear or specifically divulged, that particular family's indebtedness renders them a target of a supposedly legit claim to their bodies by comparatively powerful ones, whereas, Rajesh Ganguli is able to render immune their own bodies against corporeal intervention. This varyingly hierarchal trajectory of indebtedness of Rajesh Ganguli and the "distant", indebted relative and his family brings out the significance of the concept of body as a field of material differences alluded to in the first chapter and the chapter immediately preceding. Under what circumstances can an individual claim an organ from another–actual or potential–possibly weaker or lower in social hierarchy in terms of class or status, in the form of bodily repayment of a previous debt, for the realization of own dutifulness towards another individual, confront us with the body as a field of semiotic as well as material differences.

If we look at our own culture, the concept of indebtedness has economic and non-economic or moral dimensions. In our everyday discourses we often talk about or recognize how indebted we are to particular individuals, who may have helped us financially or not but in tangible or intangible ways which helped us overcome crisis or vulnerability. In Rajesh Ganguli's narrative, indebtedness to Dinesh Ganguli has both dimensions. In case of the invisible "distant" relative, the potential kidney donor, the ground and nature of indebtedness is not explicit. Therefore it cannot be concluded firmly that the donor was under compulsion to donate or the potential claim that I am talking about was a coercive one, but it is posited as legitimate against the backdrop of indebtedness. The fact that indebtedness is invoked as the ground of legitimacy of a claim or the willingness to donate, the subtext of a compulsion to donate however cannot be overruled. A way in which Rajesh Ganguli attempts to neutralize the supposedly willing donor's burden of previous debt is by planning to offer him a good compensation. The assumption is that compensation will suspend the circle of indebtedness and absolve him of the responsibility of having taken advantage of a relative's vulnerability. But when an individual repays his debt through an organ, even when monetary compensation is involved, the moral obligation of the recipient to the donor remains intact, and continues to haunt spectrally. Organ donation as repayment of some old debt does not result in suspension of indebtedness, rather generates a new debt, which is hugely value-laden, even when attempts are made to minimize its humbling effects by way of money. Moreover, although Rajesh Ganguli glorifies the aggressive transplantation initiatives of private hospitals, he is actually unwilling to incur any further debt–by getting someone donate a kidney to Dinesh Ganguli, unless that is the last resort, which is why he is frustrated with the purported claim that organs provided at the government hospital are free and gets overly manifested in his narrative of his troubled circumstances.

What draws attention to Prabir Samanta's narrative is that, even under trying circumstances when Karabi was on dialysis, Prabir Samanta never thought of her as burden or blamed her for his misfortune. He rather thought of Karabi as his own responsibility. He is grateful to Karabi for she guaranteed his progeny by giving birth to their daughter even at the cost of risking her own life. But this gratefulness was also followed by a sense of anguish that their only daughter is deprived of maternal support when necessary, especially in her teens, when the mother is the major support system for coping with biological and psychological changes. However this lamentation should not be taken as an indication of Prabir Samanta's non-recognition of Karabi's dutifulness towards his family and daughter. In fact he says that physical contribution is not necessary always, mental involvement is enough sometimes, which is the case with Karabi.

When the first donor kidney was rejected, Prabir Samanta agreed to his brother-in-law's proposal to donate a kidney to his sister. The proposal was made earlier too, but then Prabir Samanta had summarily rejected the idea for he thought his wife is his responsibility and he should not take advantage of his brother-in-law, because kidney donation will harm him irrevocably. Since he was helpless after the first rejection, and there are no legal hurdles to donation by a blood relative, they collectively decided to go ahead with the transplantation with Prasanta's kidney. This donation however became a source of discomfort for Prabir Samanta and he confessed that he failed to look into the eyes of Prasanta, his wife and children. Unlike the previous case, where the potential donor, the "distant", indebted relative remains in darkness, in Karabi's narrative, her brother, Prasanta–the kidney donor of the second transplantation, is not erased from the narrative. Rather Prabir Samanta harps on how eagerly he wanted them to recover, and was equally concerned about both of them.

Amidst the two interlocutors in the narrative, Karabi's silence draws attention. Not that she is absent in the narrative–she is actually everywhere but as a hapless entity, although Prabir Samanta firmly recognizes her contribution as a mother; wife and daughter-in-law, despite her prolong illness. This narrative replicates the condition of exchange of wife as suggested by Levi-Strauss (1963/1974), between men, where the wife becomes a symbolic good of exchange. Here Prabir Samanta and Prasanta are in agential positions, whereas Karabi, a woman with failing kidneys, is rendered devoid of agency. Whether Karabi wants her brother's kidney or not does not arise. The owning or receiving (Prabir Samanta is the owner) and giving (the giver is Karabi's father and brother) of a wife brings in its wake various moral obligations, especially when the giver has engaged previously in an act of immorality–cheating by not divulging that the bride given away in marriage is not physically fit and has a chronic medical condition, which later resulted in kidney failure. Since Prasanta is an accomplice in the cheating, therefore from the very beginning he attempts to undo the moral wrong by proposing to donate his kidney, to save his sister and mend her husband's devastated life. From Prasanta's point of view, this gesture appears as morally binding, whereas Prabir Samanta resists any such act of undoing the moral wrong inflicted upon him for he thinks he has forgiven Karabi's family, recognizing the difficulties of being the father of a daughter in a patriarchal society. Moreover by summarily rejecting Prasanta's proposal he seeks to reclaim his ownership of his wife, in the guise of responsibility and moral duty, by seeking to manage everything by himself as Karabi's husband, and not getting his brother-in-law embroiled in the trouble.

What draws attention to Rajibul's narrative, as detailed by his elder brother, is the involvement of fellow residents of their home town in their crisis. Hasibul attributes this to his late father, who was a dedicated worker of a political party and was respected by all in the town. His own good behaviour and that of his brother, and their serious involvement in academics made them popular among the people in town. Many people came to see Rajibul when they heard about his frail health, offered monetary help too, which Hasibul sometimes accepted, though with hesitation. Even unknown people who had good relationship with their late father offered money and promises of other help. According to Hasibul, some even went to the extent of promising a kidney to save Rajibul's life in required. Hasibul's insistence on this idyllic dimension of his home town, where sociality overrides political feuds, to the extent that people enunciate the possibility of organ donation, shows how organ donation to save the life of a good son of a good man becomes a collective moral responsibility. Here there is recognition not of a debt *per se* but of a person who led an exemplary life of honesty, goodness and social service, which calls for collective acknowledgement through the promise of or actual bodily contribution or corporeal reciprocation in crisis.

But Hasibul decides, following his father's teachings, not to take advantage of people's moral obligation. He thought of donating his own kidney to his brother but the clear match was with his mother. Despite his reservation, he had to helplessly provide consent to his mother's decision to donate. When the maternal kidney is rejected by Rajibul's body, Hasibul's grief accentuates as his loved ones have been impaired for life. Finally Rajibul receives a second donor kidney through swapping at the hospital and was recuperating well when Hasibul shared his experiences with me (see Figure 7.2 Positional Map).

Moral debt and spectrality of donor organ

Indebtedness is the dominant theme in these narratives. Because this chapter focuses on the moral dimensions of organ donation, real or potential, indebtedness becomes an ethnographically emergent category of interest. Indebtedness, as already reiterated above, has both economic/monetary and moral/non-monetary dimensions, although one dominant way of conceiving indebtedness derives from a typically economistic viewpoint. In such thinking, indebtedness derives from an empirical act of incurring a debt, such as borrowing money. Incurring of a debt may not always or necessarily result in or amount to a sense or feeling of indebtedness. Moreover perception of indebtedness could vary in nature and magnitude. For example, when one borrows from any institutional source like a bank, against some collateral security or mortgage or on the basis of occupational credentials, involving a contract between the lender and the borrower, the nature and magnitude of indebtedness of the borrower to lender is bound to vary in comparison to a situation where a relative or friend has lend money on request and the promise that the amount will be returned soon or at a particular time. The former is institutional, based on a formal agreement between the lender and the borrower, where the lender is not a person but a monetary institution, involving formal procedures and legal contracts elaborating rules and conditions of loan sanction, repayment and penalties in case of failure. The latter is more of a verbal agreement based on the inter-personal relationship between friends or relatives, with rules and conditions of repayment more flexible and open-ended, sometimes working in favour of the borrower. The latter has greater force to generate a sense of indebtedness because it is less conditional and non-contractual, but driven by a sense of moral responsibility from the point of view of the lender, and therefore the moral impact of such debt from the point of view of the borrower is more pressing. Because moral judgment or evaluation, despite being socially compelling, may have individual interpretations and idiosyncrasies, such lending could be more risky for the lender, for morality is not enforcing (and there are deviant possibilities which are not punishable judicially), whereas law is.

Indebtedness is an explicit concern in one narrative of this chapter, whereas the other two narratives voice issues of indebtedness in more subtle ways. These narratives point to the wariness of individuals to incur debt that may have moral implications–the debt involved in unconditionally receiving a donor organ, especially from a known person or acquaintance. Society tends moralize all debts, even when they are typically monetary and based on legal contracts. For example, even when a contract-based, legally binding debt is incurred by a borrower, if the borrower declares himself bankrupt or unable to repay the loan in a condition of financial crisis, under no circumstances can the institutional funder compel the borrower to repay the debt in ways that may risk the life and mental-health of the borrower. Debts of all kinds bind the lender and the borrower in an abstract moral relationship, beyond the immediate legal contract or modes of kinship or relatedness. Thus society not only moralizes all debts, debts also bind the individual parties in an abstract moral relationship, that may have longitudinal implications, beyond the life-trajectory of particular empirical individuals, and this is best realized in debts incurred in non-contractarian and non-institutional modes, especially in immediate inter-personal realm of social relationships.

All the three narratives represent unique negotiations with the moral obligation the debt of receiving a donor organ brings in its wake. A dominant economistic explanation is that people incur debt when they do not have enough money to partake in a venture or to mitigate a crisis. Debt under such circumstances involves a rational orientation on the part of an individual towards future gains or for solving any present crisis. But what does the study of economic behaviour say about individual attempts not to incur any further debt or rule out possibilities of being trapped in moral debt or attempts to neutralize moral debts with inter-generational consequences by way of actions which suspend or circumvent indebtedness?

In case of Rajesh Ganguli, although it appears that he is on the brink of committing an illegality or immoral act, by getting a “distant” indebted relative donate a kidney in return of compensation, in actuality he is more interested in getting a free organ as entitlement from the government hospital because that would not involve incurring any moral debt to any individual or family. His idea of compensating the donor in case of donation by a “distant,” indebted relative as the last resort, if a purportedly free organ is not available, seems apparently an act of illegality but involves subtle attempts to neutralize the moral debt that would bind them perpetually to the donor, even when a handsome compensation is provided. The moral obligation of the recipient and the family or care-givers appear more pressing in its tangible and intangible spectral repercussions from the point of view of Rajesh Ganguli, and therefore he attempts to de-moralize the potential debt by bringing money into the frame of exchange, in the absence of a purportedly free organ, which does not evoke indebtedness to any particular individual or family.

In case of Prabir Samanta, there is an initial rejection of Prasanta's proposal to donate a kidney to his sister. But Prabir Samanta accepts the proposal only when that appears to be the last resort in the face of rejection of the first donor kidney. While Prasanta was persistent in his proposal, Prabir Samanta thought of not incurring any moral debt. From Prasanta's point of view, his family's indebtedness to Prabir Samanta remained constant over the years for the latter had accepted their ailing daughter as his wife. On the other hand, Prabir Samanta had long forgiven his in-laws and conceived of Prasanta's proposal to donate a kidney to sister as a potential incurring of a new moral debt. Whereas Prasanta continued to operate within the moral frame of reference of the old debt to Prabir Samanta and requital appeared to him as obligatory and morally binding for he is the "wife-giver" in the Levi-Straussian sense (1963/1974). Prabir Samanta had begun thinking of Karabi as his responsibility and was unwilling to incur any moral debt by receiving a donor organ from Karabi's family. When faced with unavoidable circumstances where he has to incur the debt, he thinks of the situation as shameful and awkward, unable to face Prasanta, his wife and children.

In case of Hasibul, unlike the first and second case, a particular town and its people are posited as inter-generationally indebted, although not explicitly, to a particular individual, who is Hasibul and Rajibul's father. In this particular narrative, more than the debt itself, what comes across prominently is the way in which people of the town acknowledge their tangible and intangible debt to a great individual and how that acknowledgement takes the form of repayment through flesh and blood, when few came forward with the proposal to donate a kidney to Rajibul. Acknowledgement or repayment through a donor kidney is not acceptable to Hasibul for that is against his father's teachings, and he takes upon himself to responsibility to save his brother, although that does not work. When he is offered money, Hasibul hesitantly accepts, but the promise of the donor organ is not acceptable, for it seems to him that the moral charge of receiving an organ–a part of an individual's body is far more burdening than receiving money. Accepting an organ from the social collectivity as a form of repayment of debt towards his father as a bodily acknowledgment of his father's greatness appears to him as morally objectionable.

All the narratives recognize the moral value of human organs and abstain or at least make failed attempts not to incur a debt involving the accepting or receiving of a donor organ–an act that has the spectral capacity to render the recipient perpetually indebted to the donor. The moral value of human organ has the capacity to spectrally haunt the recipient–real or potential, and the family members, in response to which Rajesh Ganguli resorts to the plan of offering monetary compensation to the potential donor, to minimize the humbling effects of the moral value of donor organ and suspend indebtedness, whereas Prabir Samanta accepts his brother-in-laws' proposal to donate kidney to Karabi under trying circumstances–which renders him deplorable, and Hasibul navigates the situation by overlooking promises of organ donation by the social collectivity as practical mode of negotiation, rather accepts money with hesitation–a debt which he sees as possibly less burdening and vitiating of the self of the recipient and his immediate care-givers.

It could be argued from this, though not safely, that economistic analysis or monetary valuation of human organs, overlooks their moral value and moral implications which rehearses the anthropological ruminations which posit the inseparability of money and morality (Parry and Bloch, 1989), which is more accentuated when a donor organ is involved–a valuation with spectral effect and generates greater intangible moral obligations in opposition to tangible monetary debts, which is why Rajesh Ganguli ideates monetary compensation and Hasibul accepts monetary help, rather than a donor kidney, as modes of negotiation with money as an over-arching system (Graeber, 2001). Not as resistance but varied trajectories of differential reinterpretation and reiteration. Individuals navigate situations of crises based on calculation across registers of valuation–moral and monetary, until they prioritize monetary over moral debt, unless incurring a moral debt becomes inescapable, like Prabir Samanta, who conceives of his condition as deplorable when his wife receives her brother's kidney. Their actions embody a rational orientation to debt–a moral economy of debt, which does not deny the moral value of human organs, rather decides through calculation in differential ways in favour of monetary debt or monetary resolution of debt over moral debt in organ donation, especially when the donor is a close relative or an acquaintance. Yet this rational calculation or economy has deep moral underpinnings and involves making value-judgments on the part of the recipients or their family members, which is why receiving an organ through legal-rational or bureaucratic procedures of official allotment appears safer as it is a sort of entitlement and involves incurring no personal debt to an individual or a family or a specific collectivity, for the donor in case of official allotment is diffused and dispersed in the list of cadaveric donors or is a person who has already received or about to receive an organ, in return of the one provided from the hospital through organ swapping, with no immediate, tangible moral obligations whatsoever.

This conception of rational individual partaking in making decisions regarding what is less morally burdening is not a reduction of morality to calculative rationality (Weber, 1978). Rather points to the varied biomoral trajectories of negotiation with standardized market valuation of human organs, which aims to render buying or selling of organs absolved of morality. The fact that rationality itself gets embroiled in acts of moral valuation or a biomoral economy of debt emerges weighing decision in favour of impersonal, state-sponsored and entitled free provisioning or self-provisioning over moral obligation to an immediate other–attempting to circumvent moral debt and its spectral effects in live donation (more spectral than cadaveric donation and the cadaveric organ) from relatives demonstrates that marketization of spheres of human experience and embodiment cannot completely absolve human action of moral obligation or at least moral consideration. The decision or judgment not to fall into the trap of perpetual moral indebtedness that the receipt of the donor organ brings in its wake shows how debilitating a discourse of moral valuation is in such spheres of corporeal exchange, mediated by monetary or not (see Figures 7.1 Situational Map & 7.2 Positional Map).

Conclusion

Approaching the "imbroglio"

In this thesis entitled "organs and their travels", the organ–a human kidney or liver or a cloned pig kidney is the discursive object of critical investigation in relation to the "imbroglio" of organ donation and transplantation. The social life approach to organs adopted in this thesis helps denaturalize organs, human or cloned, and locate them within larger philosophical, historical, sociological and anthropological discourses. The inspiration to pursue such analysis derives from Appadurai's (1986) "social life of things" and Lock's (2002) "social life of human organs" with special reference to the biomedical technology of organ donation and transplantation. Such analysis is sensitive not only to the complexity and convolutions of the "imbroglio" but also the crossover of domains or realms they engender. To make sense of the complexities, convolutions and crossovers, this thesis deploys two primary analytical categories: Foucault's (1978) notion of biopolitics and Rose's (2007) re-reading and recontextualization of the latter, within the general framework of "social life of things" (Appadurai, 1986) to depict how bodies in general and organs in particular are no mere natural-organic monoliths but are implicated in power and biopolitical machinations and embedded in the cultural processes–moral and experiential worlds of people. In short, this thesis works at the interstices of "assemblages" (Ong & Collier, 2004) or "lumpy" (Haraway, 1988) discourses of biology, life and technology, organic life, power and sociality in relation to organ donation and transplantation.

Approaching the "imbroglio" transpires through a multi-situational analysis of discourses and practices of organ donation and transplantation in recent times. The thesis looks at the institutions, organizational initiatives and subjective experiences associated with organ donation and transplantation as conceptual-empirical situations of analyses. In this approach, the situation is the conceptual-empirical entry-point or discursive site in the investigative process. Such an approach does not succumb to the idea of an overpowering social structure or the romanticization of individual will. Rather remains acutely aware of the fact that it is in and through the investigation of situations that conversation of the structural or institutional (overpowering or empowering) and the agential or experiential (reiterating or resisting) can be traced. Clarke's (2005) cartographic analysis facilitates locating the situations at hand: structural-institutional discourses of biomedical law and bio-technoscience in relation to organ donation and transplantation, the meso-organizational domain of donation advocacy and the subjective moral worlds of people exposed to experiences characteristic of organ failure, donation and transplantation (see Figure 8.1 Situational Map).

This thesis deploys biopolitics as an analytical trope to critically engage the macro-institutional discourses of biomedical law and biotechnoscience, the meso-organizational discursive domain, and the ethnographic contexts of the self and the others in relation to organ failure, organ donation and transplantation. Power as such invests and implicates the complex of situations under study–the institutions, the organizational initiatives or subjective experiences but the transcendental modes in which power functions or works is traced in and through the macro institutions of biomedical law and biotechnoscience, and the meso-level organizations of donation initiatives, both old and new, and the immanent articulations of power are traced in the subjective-experiential and moral worlds of people unfortunately exposed to organ failure and seeking remedy. The shaping of subjectivities through power is addressed in relation to the organizational realm of donor initiatives and how the subjects negotiate disease and power–surrender, reiterate, reinterpret or resist transcendental institutional arrangements and organizational articulations of power is addressed in relation to the experiential and moral worlds of the subjects (see Figures 8.1 Situational & 8.2 Positional Map).

Organs and their travels through macro institutional discourses

The first chapter "Organ Theft, Dispensable Bodies and the Biopolitical: The Macabre and the Limits of Law", (dis)engages the THOA in India and its subsequent amendments, after the Foucauldian formulation relating to the mutual inter-implication of ideological moorings of the state apparatus and technologies of biomedicine (Foucault, 1973/2012, p. 45). This chapter posits, via THOA, the Indian state as the moral custodian of citizen bodies and biomedico-legal machinery of state control as morally responsible to promote the deployment of the biomedical technology of organ donation and transplantation towards public good. Ground reality however demonstrates that this state-driven project is punctured by illegality.

This chapter proposes critical engagement with THOA as crucial step towards (dis)engaging the macabre domain beyond law. The THOA speaks unequivocally about the need to foster life in contexts of organ failure by recourse to donation and transplantation. It is cognizant of the fact that such biomedical technology generates a field of illegality. The state through provisions of the THOA, not only promotes organ transplantation to render life more productive, it simultaneously meticulously earmarks spaces of illegality–involving buying and selling of organs–which in essence is antithetical to the life-fostering gestures of biopolitical state, the biomedical system and related legal statutes. In this process, life is ensnared in the highly rationalized biomedical practices and strategies of biopolitical control. The juridico-legal control of life in response to biomedical and bio-technoscientific advancements is rendered more pervasive, premised on finer definition, classification and categorization of what constitutes life and death, rational decision, consent and personhood in the context of organ donation.

These definitions and determinations are not solely biomedical; they are biomedico-legal with profound normative or moral underpinnings. This alludes to the futility of positing an opposition between the normative and the juridico-institutional processes insofar as modern biopolitical dispensations are concerned (see Golder & Fitzpatrick, 2009). Normative or moral work is integral to juridico-institutional processes (see Fassin, 2015). Parallel to all-pervasive biomedical and legal rationalization are forces of ethicalization and humanization which are significant moral forces to reckon with in face of: growing incidence of end-stage-organ-failure which constrains life and illegal organ removals in the absence of a legally available pool of donor organs, which too is life threatening, albeit for a select few. While promotion of organ transplantation technology and organ donation addresses the former, stringent curbs are fundamental to control illegal organ removals widely reported in national and international media.

This chapter juxtaposes macabre reports of organ theft or illegal organ removal against the ever-evolving body of organ transplantation law in India, not to arrive at some conclusive argument about the misuse of organ transplantation technology by those meant to deploy it towards moral and public ends but to examine the very nature of power that is intrinsic to biomedical technology in general, and the techniques of organ donation, retrieval, harvesting and transplantation in particular. This chapter (dis)engages the Foucauldian juxtaposition of law (characteristic of sovereign power of the ancient times) as antithetical to the biopolitical, i.e., modern power (Foucault, 1978), deploying the macabre as a critical category to theorize how legal enactments as biopolitical texts constantly negotiate the illegal, and in the process constantly (re)moralize citizen and clinical body. The domain beyond legal is significant not only because it incites moralization of citizen and clinical bodies owing to its macabre visage–the gross corporeal harm inflicted on select bodies but also because it confronts us with: law-making as a dynamic biopolitical gesture–aiming to safeguard the body against death and violence, and the deductive dimension of biomedical technologies that seek to foster life of a privileged populace at the cost of others–whose bodies are conceived as dispensable, rendering law into a field of rational alertness.

To illuminate the space animated by dispensable bodies, which a positive biopolitical power categorically fails or lays bare to the negative forces of bodily deduction, to invoke Agamben (1998), this chapter closely reads three cases of organ theft or illegal organ removal to come to terms with the selective violent reversal of life-fostering gesture of organ donation and transplantation technologies and practices with regard to particular social collectivities or bodily subjectivities as a biopolitical process in that it involves inflicting corporeal harm on bodies that do not matter. In the first, the dispensable bodies are informal, contractual labourers from the Muslim minority community. In the second are poor fishermen and women of tribal origin, living in the backward district and collapsing agrarian economy of North Dinajpur in West Bengal. In the third is the wife of a man who sold the latter's kidney at a hospital in Kolkata on "pretext" of appendectomy.

Involvement of biomedical institutions, and formal procedures and professional expertise in the illegal removal of organs from vulnerable people comes across prominently in all the three cases. They indicate intricate involvement with active, organized transnational criminal networks of organ sale, involving actors and groups working in various capacities and performing various roles to make the removal legally seamless, purportedly based on donor consent. Such macabre cases haunt the unity or selfsameness of the legal. The macabre shows law its limits and incites negotiation with contravention of its morality. Modern biopolitical dispensations involve medical professionals and purveyors of law who valourize the life-fostering potential and imperative of biomedical technologies. Yet the same dispensations are implicated in deductive acts of transnational criminal networks in which dispensable bodies are victims of corporeal harm–acts which unfold surreptitiously and evidentially in connivance with those responsible for safeguarding the integrity of biomedical practice and sanctity of law. The macabre cases are thus a constant source of discomfort for notional life-fostering dispensations, because its own personnel exceed the moral limits of their practice.

Macabre cases are significant not only because they demonstrate the limits of law or how deduction is intrinsic to biopolitical processes but also because they compel theorization of the material-semiotic systems of knowledge and cognition that construct the body as a hierarchically marked material effect, which in turn provides the locus for defining dispensability and empirically locating dispensable bodies. To explain further, macabre cases help posit the relation that obtains between body as a material effect and the biopolitical rationality that decides which empirical citizen bodies are to be protected by biomedical law and bio-technoscience, and which are to be laid bare or dispensed with. Feminist renderings (see Butler, 1993; Grosz, 1994; Kirby, 1997) help theorize bodily materiality as the locus of biopolitics of dispensability. Such renderings help conceptualize bodily materiality as a shifting and unstable field of openness, constrained by patriarchy which conceives of woman’s bodily materiality as an inferior version of the man–*a sharp difference within the same*–one that leads to the deprave location of woman’s body within social hierarchy. Intrinsic to such inferiorization, are series of “violations” (see Butler, 1993), cognitive-intellectual and physical-material, which rules out all possibility of locating bodily materiality outside of discourse, power and ideology. “Violations” or violence is productive of the body in its naturalness and sociality, and incites thinking of bodily materiality as locus of biopolitics of dispensability. Violence marks the body in the most corporeal ways and generates a material-semiotic field out of it. The body is a material effect of series of material-semiotic violations which erase difference, imposes sameness and puts in place a differential scale of sameness–one that classifies, categorizes, hierarchizes, glorifies or degrades particular forms of bodily subjectivity *viz-a-viz* others.

Feminist renderings of bodily materiality help theorize biopolitics of dispensability by recourse to a general theory of body, which demonstrates how and explains why marginalized social collectivities and bodily subjectivities–informal or contractual, working class men belonging to minority religion, men and women of tribal background, deprived agrarian and non-agrarian informal workers like fishermen and fisherwomen, and women in general–are targeted for donor organs. Contemporary biomedical technologies of cure and healing such as organ donation and transplantation work within a frame of reference that presupposes, to deploy Butler (2004), a schism between the human and "less-than-human" or "abject" bodies–to the extent that the same biomedical technology or biomedico-legal paraphernalia that aims to safeguard the life of some, puts selective others at the brink of death or exposes them to the corporeal harm involved in organ theft or illegal organ removal, premised on theft, deception, manipulation and persuasion.

To account for this precarity or precarity culminating in dispensability, this chapter resorts to Agamben (1998) to demonstrate that contemporary biomedical technologies like organ donation and transplantation perform the sovereign function insofar as the exercise of power over bodies is concerned. This is because the sovereign function is intrinsic to modern biopolitical dispensations. This is no rejection of the Foucauldian dictum that modern biopolitical dispensations aim at normalization. Rather normalization and sovereign function of juridical-institutional structures, in this chapter, the biomedical technology of organ donation and transplantation, work in tandem to exercise control over life and bodies towards purported betterment, but such control has both productive and deductive dimensions.

Organized crime involving illegal removal of organs from bodily subjectivities with marginal socio-economic location generates moral concerns which the modern biopolitical dispensation has to answer to reaffirm the grounds of legitimacy of its control over life in the face of violation. Intrinsic to power–sovereign or biopolitical–is the dimension of violence.

The “violation” or violence involved in the macabre cases demonstrates that power over life is exercised differentially (see Butler, 1993, 2004), premised on an intimacy between biopolitics and dispensability. This chapter does not merely demonstrate the involvement of the purveyors of law in a biopolitics of dispensability. It foregrounds on a general plane how conceptions of dispensability are built into the biopolitical weave of life-fostering biomedical technologies which renders the biomedico-legal framework circumscribing them into a dynamic field of rational alertness–perpetually reconfiguring its moral premises in face of new challenges or threat, endogenous or exogenous.

The second chapter “Xenotransplantation, Chimeras and the Biopolitical: Troubling Animal Futures” revolves around bioengineering and genetic engineering in general, and xenograft engineering initiatives and xenotransplantation in particular, which has put life in its microcosmic form under unprecedented “control” oriented towards pursuit of hope for a better life through rehabilitative animal futures. Two bioengineering companies, Revivicor and eGenesis, have been analyzed as case studies (through their press releases) in this chapter, which aim to engineer transgenic alternatives to human organs as a corrective for end-stage-organ-failure and organ scarcity. Critical engagement with these cases throws light on the conviviality between biomedical research and technoscientific innovation on the one hand and financial investment and market involvement on the other. The press releases of the bioengineering companies point to the fact that biomedical and biotechnoscientific initiatives are profoundly entrepreneurial. Biotechnoscientific innovation requires financial investment and market involvement, without which such research is rather limited in scope and scale of activity. The promising commodities such research offers render it a lucrative field for speculative investment. This inspires collaboration among bioengineering companies through procuring, buying and acquiring of licenses and patents. Such organizational posturing celebrates the unprecedented “control” genetic engineering and xenograft initiatives have come to exercise on the “intractability” of biology. This control manifests in Revivicor and eGenesis enunciations in and through “gal” inactivation and “perv knock-out” towards engineering “galsafe” pigs or “perv free” piglets–the chimeras, and the introduction of protein CD64 in pig gene in order to “tolerize” human recipients to xenografts.

Biotechnoscience practitioners and financial investors are compatriots in such chimerical play seeking to achieve unprecedented “revolutionary” goals, eulogizing each other through public show of admiration and calls for concerted action. The state through its funding machinery also participates, for such research embodies nationalist aspirations and imaginations of security of the state. Study of press releases and achievement-claims of Revivicor and eGenesis reveal acts of looking beyond a given biology rooted in DNAs, genes and cells. Their discourses thrive at the level of the chimerical as much as the material, for they constantly invoke fantastic visions and spectacular images to explain what they have achieved or what could be achieved human good in terms of new rehabilitative futures. Such enunciations are full of technoscientific inflections and market allusions, and perform the function of pushing cellular materiality to the chimerical–potentially embodying promises of a better but hybrid biological futures via animal route. This chapter locates the chimerical not only in the new animal visions of the future but also in the innovative material “cuts” of the CRISPR technique and the ideational conundrum surrounding the “pervs”–which featured in the *Science* magazine’s “Breakthrough of the Year, 2015”. The promise of CRISPR to ensure precise deletion of “pervs” from pig genome as the way towards safe xenotransplantation provokes a closer look at the genetic engineering of promising chimeras through innovative manipulation techniques of xenograft initiatives.

But contributions to *Science* on CRISPR breakthrough also documents disagreement about its promises. Biotechnoscientific innovations are subject to scrutiny not only by the practitioners but beyond. Nevertheless a general climate of appreciation prevails in *Science’s* contributions to the analysis of CRISPR. Beyond appreciation and scrutiny in relation to CRISPR and genetic engineering of chimeras, what draws attention is how technoscientific innovation thrives on confusion. “Pervs” in the xenograft engineering discourses symbolize the quintessential moment of confusion or conundrum technoscience builds upon. The CRISPR technique–an eGenesis innovation–has “pervs” at the center of its discourses–one of the main obstacles to pig-to-human xenotransplantation. The deletion of “pervs” through CRISPR is a crucial moment in the genetic engineering of de-porcined, humanized pigs–the chimeras–as source of human-compatible organs. Ontological speaking, if “pervs” are integral to porcine identity and antithetical to the human, then “deletion” of “pervs” in pig genome marks the quintessential chimerical moment–the chimeras being the “perv free” piglets.

Despite eulogies and “supportive” counter-claims relating to the prowess of CRISPR technique and its onslaught on “pervs”, a close study of *Science* enunciations reveal that technoscience experts and virologists do not concur or agree on whether “pervs” at all pose hindrance to pig-to-human xenotransplantation. This raises two notable issues: firstly, even when there is no concrete evidence about “pervs” infecting humans, the pursuit of “perv” freedom is not seen as unnecessary, rather eGenesis effort in that direction receives appreciation, and secondly, the eGenesis team of biotechnoscience experts opine that the “pervs” are not the only hindrance, there are other challenges for which extra “genetic tweaks” are required. Thus the chimera would reach completion (though tentative) only when “genetic tweaks” involving modification via additions in pig gene is achieved to humanize it. The “perv free” piglet therefore is not the final chimera; rather it is a single, discrete moment in the genetic engineering of a series of chimerical moments, the final realization of which is perpetually delayed. The eGenesis, the Harvard geneticists and the CRISPR technique they devised, thrive on the uncertainty of technoscientific knowledge, which propels innovation ahead. Technoscientific initiatives do not only discover firm grounds of certainty but by flickeringly navigating the slippery ground of human knowledge carve out ways of remaining relevant by capitalizing on conundrum. The CRISPR and promise of “perv” freedom are various dimensions of this conundrum. The way zinc nuclear fingers and TALENS gave way to CRISPR as the most advanced method of gene editing. In similar manner, although “pervs” function as the locus of CRISPR revolution at a particular point in the laboratory history of biomedicine and biotechnoscience, they are always already to give way to newer confusions, generating newer grounds for innovative attempts to reach tentative certainty, to be ousted soon.

Immunesuppression as a biopolitical modality works parallel to xenograft engineering initiatives. Immunesuppression as a biopolitical intervention works by way of suppression of the immune system of the body to ensure its survival. In case of xenotransplantation, where there is lack of compatibility between the donor organ of transgenic or animal origin and the recipient human body, risk of immunological rejection is far more immediate and pressing, thereby requiring immunesuppression. Excessive immunesuppression however renders the recipient human body unguarded against severe infections and risk of xenozoonosis. Because of the limits of immunesuppression in xenotransplantation, xenograft engineering companies have come forward with the promise of producing genetically engineered pigs–the chimeras, which have the risky “perv” genes deleted and human compatible genes added through gene editing. Since immune response is more severe in xenotransplantation, the pharmaceutical sector has been trying to develop new immunesuppresives to ensure xenograft viability without rendering the human recipient body unguarded. Two trends are thus perceptible: one is the attempt to develop alternatives to immunesuppression through genetic engineering of chimeras, and the other is the development of whole new range of immunosuppressive drugs which promise to increase xenograft survival by significant number of days. While the first sustains xenograft engineering initiatives, the second supports a promising pharmaceutical market–a sub-set of larger system of biomedical governance what Sunder Rajan (2017) has called “pharmocracy”–partly dependent on the demands generated by organ transplantation.

Like genetic engineering, immunesuppression is one among the multiple modalities of biopolitical control, not only in that it controls vital bodily functions through biomedico-biotechnoscientific regimen, its limitations also function as the scientific and moral rationale behind gene editing, genetic engineering of chimeras, and the pharmaceutical research initiatives to develop new immunesuppresives and financial investment in this promising sub-set of the larger pharmaceutical market. Further, such hopeful venture which ensures survival of the patients afflicted with organ failure, brings accolades for biomedical and biotechnoscience experts, profits and market presence for bioengineering companies, deprives animals, cloned or otherwise–the targets of transgenic trials, hapless products of xenoengineering feats, from any ethical treatment. The hope that surrounds xenografts or transgenic organs for human survival has pain, harm and violence in the animal register, overlooked in the humanistic-anthropocentric-technoscientific frame of reference.

Transgenic or cloned animals in xenograft engineering initiatives have attractive names, for they are lucrative commodities to be sold on the market. Persuasion via chimeras become impactful only because they operate within a humanistic discourse of hope for better life at present and future for humans through animal route. The troubling question of the fate of cloned animals in transgenesis, from which xenografts are retrieved and harvested, is reluctantly set aside. Such hope is not only exclusive in that it envisions an animal future for humans in a register that has no place for animals, it is also illusory. Technoscientific practices like xenograft engineering thrive at the level of illusory hopes and promises, which show humans the way toward enhanced and optimized conditions of living (Rose, 2007)–which are not lies per se. Illusion rather is a positive propelling force toward fantastic visions.

What gets occluded in such spectacular narratives, where a biopolitical bio-technoscience-industry-market nexus overcomes human predicament and suffering via animal route, is the fate of the chimeras–the pigs engineered or cloned or used as means to serve human ends–the "abject" (Butler, 2004) others of the biopolitics of hope. Further occluded is how life in general, in its lower or higher form, gets entangled in the biopolitical nexus of xenograft engineering companies producing chimeras safe for xenotransplantation on the one hand, and the emerging market of new immunosuppressive drugs which can augment xenograft survival on the other hand, thereby constituting parallel biopolitical modalities of controlling and manipulating empirical bodies and the body in abstract.

Organs and their travels through organizational donation initiatives

The third chapter "New Donation Initiatives, Biomedical Power and Subjectivation: The Biopolitical beyond State and Biomedicine" looks at new organ donation initiatives, focusing on power and modes of subjectivation in relation to new donation initiatives. Organ donation initiatives, whether old or new, represent a field of power in Foucauldian sense, beyond institutions of state and biomedicine but deeply implicated in the imperatives of modern biomedical power, in that they aim to shape subjectivities through knowledge about human body towards specific goals. This involves shaping of subjectivities through regimes of truth about body, modern biomedicine and desirable biomedical subjectivities (Rose, 2007)–through the field of power these new initiatives put in place through donation advocacy.

New donation initiatives aim to generate awareness about how donation contributes to the pool of donor organs for patients with organ failure, necessitating interventions at the level of society and subjectivity. This chapter therefore looks at how new donation initiatives reconfigure human subjectivities and experiences in ways unimaginable in the past or in the prevailing modes of thought–which in turn leads to engagement with unique reconfiguration of older categories already in circulation in organ donation and transplantation discourses, and generation of new, hitherto unthought-of categories, which offer newer possibilities of thinking the pervasiveness of the biopolitical beyond institutions of state and biomedicine and how such reconfigurations and new categories engender new processes of subjectivation. This chapter contends that the effect of these reconfigurations and emerging categories is particularly manifest in the most intimate domains of human experience which throws light on the nuanced workings of the biopolitical in the production of newer subjectivities, which are products of unprecedented experiential and structural circumstances. Towards this end, this chapter engages in a critical reading of the website contents of select new initiatives, namely, Mohan Foundation, ORGAN India and Shatayu.

This chapter demonstrates that new initiatives represent an entrepreneurial orientation to donation advocacy and transplantation practice, and its consolidation as an emerging area of expertise, which does not only represent the capitalization of organ failure and processes of cure and healing through transplantation but reconfiguration of providers of transplantation services, beneficiaries or recipients of organ donation and transplantation, organ donors and agents of donation advocacy, after a new entrepreneurial ethic which lends a professional and managerial dimension to how new initiatives function, imagine subjectivities and redefine affect or emotion in relation to the experience of the disease and efforts at alleviation.

Anudaan initiative of Mohan Foundation aims is to generate a financial corpus for making organ transplantation available to the diseased needy through collaboration with Milaap. Case and content analysis of Anudaan initiative reveals that fundraisers are no unadulterated philanthropy. Rather their maneuvers are located in the bioeconomic moorings of contemporary biopolitics of hope which locates biology at the centre of discourses of capitalization and its pervasive entrepreneurial *avatar*, which in turn puts in place modes of subjectivation whereby recipients or beneficiaries of transplantation through crowdfunding are rendered entrepreneurial subjects involved in performative orchestration of affect–the tragedy of organ failure, performing affectual labour as productive ground for capitalization and concomitantly become objects of surveillance for scrutiny of the credibility of affect, authenticity of grief and tragedy related to organ failure. Production of subjects who adopt an entrepreneurial approach to affect or emotion is not only perceptible from the point of view of recipients or beneficiaries of crowdfunding, even contributors or funders get invested and involved speculatively in the generation of the fund rather than alleviation of the disease related to the publicized cause, wherein grief and tragedy are rendered mere means to an end, thereby becoming peripheral. Under such circumstance, the compassionate crowd is more psychologically invested in the production of an aggregate financial effect. This is no diminution of human compassion but rethinking of affect in the context of cure and healing where these experiential categories are entrepreneurially recasted.

Parallel to this, deploying the case of ORGAN India, the chapter demonstrates that there occurs a process of production of psychotherapeutic subjects, wherein the emphasis is on the mind–the management of interiority as way of coping with organ failure and transplantation. The psyche of the patient or recipient is posited as the site of intervention. Positing of organ failure as a problem of psyche which can be overcome through maneuvers of the self–the adoption of a therapeutic approach to psychological determinants and a positive attitude to life as an ethical imperative. Production of psychotherapeutic subjects and the call for management of interiority through agential off-shoots of a decentered pastoral biomedical regime, wherein new donation initiatives transform organ failure and organ transplantation into a psychological experience bereft of biological and societal dimensions. Through such pyschologization of trauma associated with organ failure, the foundational premises of modern biomedical regime are unsettled through the new managerial paradigm of contemporary biomedicine involving movement from hard facts of the body to soft dynamics of mind, reclaiming of agency through volition and knowledge, and a psychotherapeutic approach to one’s troubled self and body, which also unsettles the expert-oriented discourses of modern biomedical sciences to include non-experts with exposure to organ failure and transplantation as facilitators or providers of experiential knowledge.

Beyond such emerging, apparently level-playing field, premised on transformations contemporary biomedicine promises, conventional social hierarchies and class contradictions between the recipient or donee and the donor remains, indicating pervasiveness of modernist class hierarchy among others even in face of universal “responsibilization” and production of biomedical subjectivities (see Rose, 2007). This is demonstrated in this chapter through an engagement with a Shatayu awareness generation material, where Rohit, the protagonist of the comic, emerges as the “true hero” against Ramu Kaka, Rohit’s driver, who is the deceased donor in the narrative. From glorification of the donor as “super hero”, there is an obscuration of the donor in the narrative. This can be attributed to two reasons: one is the inherently hierarchical nature of the organ donation and transplantation practices, where the donor gets obscured by the hopeful narratives of survival of the recipient, there being a hierarchical opposition between the donor and the recipient, and the second is the class character of the narrative specific to the comic book, where the driver, Ramu Kaka’s posthumous contribution is superseded by the facilitating gesture and involvement of his master’s son, Rohit. This second point elaborates the inherently hierarchical relationship between the donor and the recipient, especially in the Indian context were most donors are from socio-economically vulnerable and such poor live donors continue live in darkness. Such obscuration is also noticeable in the introductory note to the comic book by the Chairman of Shatayu, where the “kindness” of the donor is acknowledged, yet disavowed at the same time through lack of identification. This is not mere legal compulsion, but the inherent schism, despite eulogies in favour of the donor, which separates the recipient from the donor, setting aside the latter in a zone of individual and legal indistinction, into abstraction, beyond the empirical act of donation, which invites temporal valourization.

The opposition between indistinction and valourization with its inherent class dynamic is characteristic of the processes of subjectivation in and through off-shoots of pastoral biomedical power, characterized by dynamics of centralization and decentralization, where non-clinical or extra-biomedical, yet extended and connected institutions, practices and agents come to wield power over individuals through donation advocacy. Not as coercion or impositions from above but as facilitators in the production of “right” kind of subjectivities which are morally disposed or inclined to exercise power towards greater biomedical good (Rose, 2007). That there is no coercion or imposition from above in the production of such subjectivities need not imply that such discursive spaces are devoid of socially generated and reproduced schisms. Responsible subjects like Rohit are perpetually haunted by hierarchies that seep into the production of purportedly selfless, altruistic subjects.

The fourth chapter “Ganadarpan, Techno-Materialist Ethic and an Ambivalent Marxism: Body-Idioms of an Old Initiative” looks at body-idioms of an old organ donation initiative, Ganadarpan. Within the Ganadarpan discursive field, the figurative enunciations pertaining to the body are posited via modern biomedical discourse but go beyond the literality of the biomedical vocabulary which locates the body in three-dimensional material space (Das, 2010), to engender other modes of meaning-making about the body. This chapter engages the excesses which escape the discursive closures of modern biomedicine thereby provoking excursus into overflowing figurations of the body. Body-idioms emanating from the extra-biomedical discursive field of Ganadarpan help conceive bodily materiality not necessarily in opposition to the body of modern biomedicine but in constant dialogue.

The body-idiom of Ganadarpan derive from a techno-materialist ethic, with profound biomedical underpinnings and left-leaning political orientation, yet the idiom is reconfigured in unthought-of ways which help trace in its discursive enunciations biopolitical moorings of the kind of liberal governmentality (Foucault, 1991). Such mooring is traced in this chapter through a close exegesis of its discursive field and enunciations–monthly journals, pamphlets and booklets, and seminar and workshop proceedings published in both English and Bengali.

For Ganadarpan, falling back upon a techno-materialist conception of human body as the basis of its claim to generate social awareness about posthumous body and organ donation is the foundational ethical and political move. Donation initiatives are intrinsically based on knowledge about the so-called truths of human body and how such truths are manifest in its material space (Das, 2010; Foucault, 1973/2012). The domain of intervention is however the posthumous body in opposition to the living body of biomedicine. Modern biomedicine has generated truths about what constitutes the living and the dead body–the other of modern biomedicine (see Das, 2010), because fostering life is intrinsic to its biopolitical project (Foucault, 1978). Drawing upon the knowledge provided by modern biomedicine about the incident of death and dead body, Ganadarpan generates awareness about cadaveric donation centering on the principle of brain death which bifurcates the clinical moment of death and demonstrates how life thrives in the vital organs of body even after the brain has ceased functioning irrevocably. Biomedical knowledge of brain death and biomedico-legal provision of its institutionalized declaration under specific clinical conditions as the basis of body and organ donation for medical research and organ transplantation for people suffering from end-stage-organ-failure, is assimilated within Ganadarpan discursive field toward rational societal ends through extrapolation of biomedical knowledge about brain death in the extra-biomedical domain–the public sphere, which is unwelcoming of the concept based on communitarian and religious conceptions of life, death and the aftermath or beyond.

The rationalist and reformist ethic of Ganadarpan derives from adherence to the modern biomedical concept of body, life and death, where ethics is premised on rendering the functional materiality of human body and constituent organs medically and socially useful in posthumous condition via technology of organ transplantation, and biomedico-legal declaration and public acceptance of brain death as basis of a successful organ transplantation programme. For the activists of Ganadarpan, both medical and non-medical, the ethics of the initiative is premised on the social desirability of public knowledge and acceptance of transferable functionality of material human organs via bio-technoscience as much as it is about actual materialization of the public use of this transferable functionality and bio-technoscientific innovation, avoiding organ waste through communitarian hindrances or lapses in institutional mechanisms.

But the univocality of Ganadarpan discourse and the stable conception of body it presupposes, this chapter suggests, are unsettled by contradictory inflections from within and without, leading to a new ethico-political and ideological imagination, resulting in an ambivalent Marxism. With the concept of body, the notion of subject–the object and subject of power–are infused with complexities. These destabilizations are productive in that they generate possibilities emerging out of co-articulation of ideas, concepts, world-views and imaginations from oppositional discourses, leading to new modes of conceiving the body, subject and power. The biomedical conception of body represents the literal, which emanates from standardized biomedical parameters, stable and obvious. The idiomatic, on the other hand, represents the domain of signification beyond the mere literality of signs.

The critical function the invocation of the idiomatic serve here is: firstly, the literal or the obvious in this context is the techno-materialist ethic of Ganadarpan but it is not the be-all and end-all of the narrative, for that involves taking for-granted the stability of the ethic emanating from modern biomedical conception of body. Secondly, taking cue from the former, invocation of the idiomatic facilitates grappling with the unthought-of turns and excesses in Ganadarpan’s discursive enunciations. The idiomatic leads to the realm of meaning beyond received and established modes of meaning-making to the co-articulation of oppositional ideologies and marginal strivings to retain or reclaim the foundational Marxist ideology compromised in the process.

At least three instances of this can be cited: Firstly, despite remaining largely within the Marxian materialist and dialectical conception of social development, the Ganadarpan initiative is ensnared in the evolutionary binaries of pre-modern versus modern, community versus civil society, tradition versus technology, Orient versus Occident and so on, coming to think of the community as atavistic–one which poses hindrance to organ donation and transplantation–to be resurrected through the welfarist voluntarism of the rational liberal subject under the encouraging pastoral guidance of the state. Here is a conception that fuses Marxian materialism and dialectics within an overarching triadic matrix constituted of the regressive community, the volitional liberal subject–the right-bearing citizen body, and the Foucauldian pastoral state (1982) as the three vertices. The second is a more specific instance of Marxist orientation of the initiative but one that resorts to the liberal subject as the way out of the mire of community. In spite of conceiving of the dead or posthumous body as public or collective property, deploying a Marxian frame of reference, and hence invoking the state's originary right to exercise proprietary control over the citizen body, Ganadarpan's discursive enunciations by and large posits the rational decision-making of the liberal subject–the citizen as the vehicle for transforming the body as an individual property into a property of collective ownership. The encouraging involvement of the state through constitutional provisions is posited as necessary precondition to attempts by responsible citizens to help reclaim the proprietary control of the state over citizen bodies. These two instances represent the unthought-of domain of co-articulation of oppositional ideologies. The third instance revolves around attempts to reclaim the foundational Marxian discourse by minimizing liberal tendencies, foregrounding how the conception of human organs as having "use-value" is not a prelude to the commodification of human organs or thinking of them as having "exchange-value" (see Marx, 1867/1995) and unproblematically thinking of liberal freedom as the vehicle for materialization of organ donation and transplantation overlooks the frailty of individual freedom in the face of atavistic powers of community for which socialism as socio-political dispensation is the only panacea.

The body-idiom of Ganadarpan predominantly resonate the biomedical concept of body which performs and enacts co-articulation of two worldviews: liberalism and Marxism. But the analyses of body-idioms hide much more than they reveal. The way Ganadarpan initiative recasts the subject and body in a liberal guise within a register of Marxism or retains Marxian concepts within the framework of liberal governmentality shows how Ganadarpan's enunciations enact a Marxism that exceeds its premises to gain a new liberal dynamic, and turn ambivalent by locating the techno-materialist conception of human body within a conceptual matrix with regressive community, liberal subject and pastoral state as three vertices. Ganadarpan's ambivalence is particularly locatable in the double bind of trust and doubt or suspicion relating to individual freedom, which renders the liberal subject a slippery ground for materialization of a successful organ donation and transplantation programme in face of the disenabling forces of community in the absence of state-enforced mechanisms of presumed consent or compulsory donation at death.

Organs and their travels through the prisms of self and other

The fifth chapter "Encumbered Ontology: An Intimate Foray into the Sociality of Human Organs" depicts how human organs are embedded in the web of societal relationships. This is demonstrated in this chapter through an intimate foray into the experiences of organ failure and its familial management within the government hospital setting, with reference to immediate and alien others of the researcher–the extended family and unknown people encountered at the Nephrology building of the S.S.K.M. hospital.

Human organs among others exhibit the characteristics of encumbered property. This encumbrance derives from societal embeddedness of human organs, even though they may appear to have no independent sociality or semiotic existence apart from the material bodies in which they are empirically located. Human organs are not visible like the whole body is, and therefore material and empirical evidentiality depends on biomedical technologies of imaging. Yet there is a possibility of grappling the materiality of human organs, which is not visible to the naked eyes or palpable to untrained touch, by recourse to complex unrecognized relational and semiotic terrains human organs traverse. Recognizing the sociality of human organs is not a gesture of denying their biological basis. This rather involves recognizing that human organs are as much natural or biological as they are social, cultural and political, and therefore a sociological study of human organs ought to take into account the social ontology of organs–which is obscured by the biomedical and technomedical discourses in particular and the universalistic discourses of life science in general which reifies human body as essentially non-social.

This chapter talks at length about the intimate trajectory of the research contained in this thesis and how it propelled the researcher to consider recourse to personal experiences as a way to trace the sociality or social life of human organs. In this intimate trajectory, two moments counted as crucial in crystallizing the social ontology of the non-social–the human organs. One moment is extremely intimate in that it relates to the immediate, interpersonal and familial experiences associated with kidney failure of my elder uncle–my boro jethu and my younger sister-in-laws' attribution of my uncle's poor finances in face of kidney failure to the unwanted burden of my elder cousin brother and his children. The other moment is not intimate *per se* but has implications for what I conceive as intimate in that it is associated with unintended exposure to unanticipated information about an unfamiliar world–about a young man undergoing dialysis at the S.S.K.M. hospital and his immediate relatives and care-givers, yet by way of a combination of various situational coordinates, I end up bearing witness to a sensitive fragment of telephonic conversation, that disturbs my taken-for-granted assumption about organ failure and how it impacts the ailing person and the support system around.

What draws my attention as a researcher or ethnographer of the social is how the property and ownership questions figure in these two instances. This is not only associated with who owns or inherits property of the ill or ailing beyond death, it is also a question of how the failing or failed organ becomes focal point for discourses and disputes pertaining to proprietorship. The second case is unfamiliar and inspires greater attention, whereas the first creates the intimate conceptual-empirical edifice for engagement with the second. It is not that I could gather enough substantial information from what Saraswati's brother-in-law was communicating over phone–a sensitive fragment of conversation I overheard. Two key insights are derivable from the fragment which has implications for the conception of human organs as encumbered property.

Firstly, the right to legitimately act, to partake in decision-making and execute necessary responsibilities or duties of taking care of the ill or dependent does have solid connection in some perceptions with the character traits of particular individuals–how they have (mis)managed the trajectory of their own life and how such (mis)management has put them in troubled conditions in which they find themselves. This is also true in case of my elder cousin brother. In short, one does not have adequate legitimate justification to partake in decision-making or getting involved in the life of an already endangered person, if he or she has endangered his or her own life. Because, Saraswati, despite having badly failed, from the point of view of her elder brother-in-law, to secure or settle her life according to societal aspirations, was trying to make a significant claim to decide and act, and execute the claim with diligence, she immediately entered into a conflictual relationship with her elder sister and brother-in-law who thought they have greater legitimate right to partake in care-function and decision-making relating to their ailing brother.

Secondly, the conflict is essentially between the elder sister and her husband, and the younger sister or sister-in-law, i.e., Saraswati–relating to whether the latter has any legitimate claim to the failing body of the ailing brother. To begin with, there are issues relating to the legitimate claim to property, of which Kartick has the socially ascribed, immediate right to ownership, for his parents are too feeble and old but owing to his indisposed condition, Kartick is not able to assert the claim. Saraswati's elder brother-in-law smells foul in her proactive involvement in her ailing brother's life. He is convinced she knows that her brother will perish soon but will not donate her kidney to save him. In his view, by overdoing herself, Saraswati is attempting to make a strong claim to control paternal property of which her brother is the undisputed heir but has this prerogative compromised. The claim to the right to control property, in the utterances of the elder brother-in-law, is cast in a language that frames such claim as legitimate only if the claimant, i.e., Saraswati, is willing to part away with a part of her body–in this case, her kidney. The inalienability of a woman's right to claim and control paternal property is called into question by asking her to prove how worthy she is of the right by donating her kidney to her ailing brother. A strange equivalence is thus assumed between Saraswati's right to claim paternal property and corporeal self-alienation by deciding to give away an inalienable part of her body–a kidney–in donation to her ailing brother. Saraswati's elder brother-in-law does not think of women's right to paternal property as dispensable in general, for he is emphatic about his wife's right to paternal property. But such claim to paternal property is communicated in a way which foregrounds her seniority and impeccable character *viz-a-viz* Saraswati, who is younger and has a purportedly disputed life-trajectory, which is the legitimate ground for disqualifying her claim to the right to claim and control property.

In this chapter, kidneys of Kartick and Saraswati make a marked material-semiotic appearance or enact a discursive performance as encumbered property in the enunciations of the elder brother-in-law. The kidneys of Kartick have failed and is dialysis-dependent for survival whereas Saraswati's kidneys are healthy but are invoked by the elder brother-in-law, who sees in Saraswati a potential kidney donor for her brother but assumes that Saraswati is not generous enough a human person to donate a healthy kidney to her ailing brother. In these enunciations, kidneys of Kartick and Saraswati display properties of encumbrance in that although they are owned by discrete bodies, empirically located in three-dimensional spatial and material site of the body, to invoke Das (2010) of distinct citizens, and belonging to them both empirically, legitimately and ethically in non-negotiable terms, but is compromised by encumbrances by external agents. In Kartick's case, there is a claim to his ailing body and associated care-function towards his failing kidneys, by both of his sisters and elder brother-in-law, where the comparatively more legitimate claim of the elder sister is voiced through the elder brother-in-law, while the younger sister, unlike her elder sister on whose behalf her husband speaks, makes her presence felt silently by reaching the hospital on time to execute the disputed care-function. Kartik's failing kidneys get encumbered by conflicting claims to control and care by his immediate relatives, yet clearly distinct from his own right-bearing body. The encumbrance is palpable in Kartick's case because he is ill, feeble and wheel-chair bound, and dependent on others for care. In Saraswati's case, although her kidneys are not ailing, are inserted into the discourse by her elder brother-in-law. Saraswati's kidneys thus are encumbered by external restrictions imposed on her kidneys by her elder brother-in-law who assumes that she will not donate a kidney to enable her brother survive and is only interested in paternal property.

Kartick’s and Saraswati’s kidneys therefore, ontologically speaking, exhibit features of encumbered property in that there are conflicting claims to and about them, and there are restrictions imposed, symbolic and semiotic, with material implications, by individual and collective or societal forces. The exegesis of how human organs exhibit material-semiotic encumbrance or enact those encumbrances, is a prelude to deeper ruminations about sociality of human organs with special focus on the societal question of morality and how it inscribes human organs both tangibly and intangibly.

The last chapter “Of Debt in Organ Donation: Ethnographic Ruminations on Moral Life of Human Organs” centers on ethnographic ruminations on moral life of human organs through the analytical trope of debt in organ donation. The ethnographic narratives in this chapter points to the wariness of individuals to incur debt that may have moral implications– the debt involved in receiving a donor organ, especially from a known person. Human society moralize all debts, even when they are monetary and based on legal contract. Debt binds the lender and borrower in an abstract moral relationship beyond the palpable legal contract or immediate modes of kinship or social relatedness. Such abstract moral relationship have longitudinal implications, beyond life-trajectory of particular empirical individuals, and is best manifest in contexts where debt is incurred in non-contractarian and non-institutional modes, particularly in immediate interpersonal realm of social relationships.

All three ethnographic narratives in this chapter represent unique negotiations with the specter of moral obligation or burden the debt involved in receiving a donor organ brings in its wake. The dominant economistic explanation is that people incur debt when they do not have money to partake in a venture or mitigate a crisis. Debt under such circumstances involves a rational orientation on the part of an individual towards future gains or solving any crisis. But what does the study of economic behaviour have to say about attempts not to incur any further moral debt or rule out possibilities of being trapped in moral debt or attempts to neutralize moral debts with inter-generational obligations, even in the face of severe crisis which have life and death implications, by way of actions which suspend the trap of moral indebtedness?

All the narratives implicitly or explicitly recognize the moral value of human organs and enact abstention or make failed attempts not to incur a debt involved in the accepting or receiving of a donor organ–an act that has the spectral effect of rendering the recipient perpetually indebted to the donor. The moral value of human organ has the capacity to spectrally haunt the recipient–real or potential, and the family members, relatives or care-givers, in response to which Rajesh Ganguli plans to offer monetary compensation to the proposed donor to minimize the humbling effects of the moral value of donor organ or suspend moral indebtedness or wait for the state-provisioned organ his elder brother is entitled to as a wait-listed kidney recipient, whereas Prabir Samanta accepts his brother-in-laws' proposal to donate a kidney to his wife under trying circumstances–which renders him deplorable, and Hasibul negotiates and navigates the situation by not considering promises of organ donation from the social collectivity, rather accepts money with hesitation–a debt he conceives as possibly less burdening and vitiating of the self of the recipient or immediate care-givers.

Human organs have an inherent moral value at the interpersonal-experiential level, which is spectrally accentuated when a donor organ is involved and generates greater tangible and intangible obligations in opposition to tangible monetary debts, which is why Rajesh Ganguli ideates monetary compensation and Hasibul hesitatingly accepts monetary help, rather than a donor kidney as modes of negotiation. This demonstrates how individuals respond to crises based on navigating rationally across registers of valuation–moral and monetary, until they prioritize monetary over moral debt, unless incurring a moral debt becomes inescapable, like Prabir Samanta, who conceives of his condition as deplorable when his wife receives her brother's kidney. Thus their actions embody a rational orientation to debt–one that is acutely aware of moral consequences of receiving a donor organ and decides through calculation in favour of monetary debt or monetary resolution of moral debt in organ donation, especially when the donor is a close relative or a known person. Yet this rational calculation and the decision that is arrived at has deep moral underpinnings, involving value-judgments on part of the actual or potential recipients or their family members or care-givers, which is why receiving a donor organ through bureaucratic allotment appears safer, as a form of entitlement from the state, as it involves incurring no personal debt to an individual, family or collectivity, for the donor is diffused in the list of cadaveric or swap donors with no immediate, tangible moral obligation whatsoever.

This conception of a rational individual partaking in making decisions regarding what is less morally burdening than receiving a donor organ is not a reduction of morality or moral considerations into pure calculation. Rather this point to the impossibility of a standardized market valuation of human organs, which would render receiving donor organs absolved of all moral consideration. The fact that rationality itself gets embroiled in moral valuation while weighing decision in favour of impersonal, state-sponsored, free provisioning or self-provisioning over moral obligation to an immediate or a known yet distant other–attempting to circumvent moral debt with longitudinal implications in case of live donation, which appears to be more spectral than donation from cadavers, demonstrates that marketization of human experience and embodiment cannot completely absolve moral consideration. Rather they compel new bio-moralities or biomoral economies. The decision or judgment not to fall into the trap of perpetual moral indebtedness that the receipt of donor organ brings in its wake shows how repulsive and psychologically debilitating a discourse of moral valuation is in such spheres of exchange. Negotiations of people exposed to the characteristic experiences of organ failure and seeking remedy reveal that beyond idea of donor organ as uncomplicated gift (*daan*) and the morally objectionable sale of organs as commodities (*panya*), there functions a biomoral economy of debt (*riin*) ethnographers of bodies ought to reckon with.

This chapter on moral life of human organs is an elaboration of the preceding chapter which contests biomedical conception of human body as natural-organic monolith or pure materiality to establish its sociality and semiotic significance, and nexus with power. The moral life of human organs substantiates the claim relating to the social ontology and travels of organs, of which the dyadic dynamics of morality and monetary exchange systems are important constituent elements.

Taming the "imbroglio"

Attempts to disengage and analyze, and offer an engaged critique of the "imbroglio" of organ donation and transplantation in this thesis, with special focus on the complex entanglement of power with philosophical and anthropological problematics of life and death, body and corporeality, has culminated in the following tentative assertions.

A conceptually and ethnographically-derived definitional explication of what the body is, in its entanglement with power, materially and symbolically speaking, has been pivotal to attempts to disengage, analyze and critique the "imbroglio", and the organs and their travels. Body is a material-semiotic hierarchical effect and the locus of a biopolitics of dispensability involves selective targeting of "abject" bodies (Butler, 2004) to be dispensed with to foster other valuable lives. The thesis demonstrates that minority community informal or contractual labourers, impoverished tribal fishing communities in collapsing agrarian economies and women, in the case of this thesis, the one whose kidney is removed by the husband on the "pretext" of an appendectomy, along with several other categories of women across social hierarchy, are easily available targets of corporeal deduction or organ sale or theft through deceit or persuasion or manipulation or organized machinations through a nexus of corporate hospitals, transplantation experts and organized organ trade racketeers. Like the body, the concept of life too, the thesis suggests, conceptually-empirically speaking, is a hierarchical construct. Biomedical law is not external to biopolitical processes of organ donation and transplantation, rather it is in itself a biopolitical text, operationalizing and rationalizing life and body in its minutiae, promoting legalized donation and curbing organ sale, constantly reconfiguring itself in relation to the macabre possibilities of organ sale or theft, organ donation and transplantation engenders as biopolitical process. Intrinsic to the life-fostering promise of biomedicine and bio-technoscience, and the biomedico-legal statutes circumscribing it, which is essentially a biopolitics of hope, there is a constant discursive production of dispensable bodies, of which minorities, informal workers, tribal people and women are the prototype–the providers of donor organs for the privileged or well or better off, a process which this thesis polemically calls biopolitics of dispensability.

The others of the biopolitics of hope of the biomedical technology of organ donation and transplantation are not only dispensable human bodies but animals, cloned or otherwise. Xenoengineering companies such as Revivicor and eGenesis promise cloned or transgenic pig kidneys as alternative to human organs–which are not only highly financially unviable for public use, the chimerical promises or futuristic visions or rhetoric of hope of a disease-free world or future through the nexus of bio-technoscience and venture capital, justifies corporeal harm and life-violation of animals, cloned or otherwise, used as means in transgenic and xenoengineering trials. To elaborate this the thesis refers to the notorious log records of the bioengineering company Nextran, divulged by an animal rights' activist group, brought to the fore the miseries of under-trial primates. While biomedical law (THOA in India for instance) seeks to protect vulnerable human lives against violent or deductive forces at least cannot outright justify the corporeal harm inflicted on “abject” human bodies, in case of animals in xeno-trials, violence is justified for serving human ends. This amounts to the reduction of animal life into a mere matter of number-of-days-of-survival, which is astonishingly the indicator of xeno-trial success of the xenoengineering companies.

Structural bioeconomic moorings of organ donation and transplantation technology as biopolitical process, reflected in organ theft or sale and xenograft engineering initiatives, is extended in the organizational domain of new initiatives through attempts to shape venture capitalist subjectivities with the biomedical domain and beyond, who reconceptualize life, body, disease, grief, pain and tragedy as sites of initiative and investment. Coterminous with the expanding global enterprise of organ transplantation, new organ donation initiatives promote the life-fostering ideology of such innovations and render seeking transplantation an ethical responsibility, that requires warding off psychological inertia and transforming ailment, disease, pain and grief into sites of financial speculation for generating a corpus for the remedial organ transplantation procedure through crowdfunding. The Anudaan initiative of Mohan Foundation in collaboration with the crowdfunding agency, Milaap, is the immediate instance.

Stiff competition from new initiatives in the donation advocacy domain, which adopt an entrepreneurial and managerial approach to health and disease on the one hand and psyche and subjectivity on the other, renders old organ donation initiatives like Ganadarpan, into a limited sphere of influence with age-old class, labour and rationality rhetoric. Ganadarpan seems to be losing the ground in donation advocacy in India, despite being a pioneer since late 1970s, the field being increasingly captured through their impactful presence of so-called not-for-profit ventures or initiatives of real estate players like Shatayu of Ganesh Housing Corporation Limited in Gujarat. Its Marxism loses its consistency and strength in the wake of the increasingly liberal moorings of the overall scenario of contemporary donation advocacy. The thesis observes that Ganadarpan begins to embrace liberal freedom (with discomfort and dis-ease) within its overwhelmingly Marxist matrix, resulting in an ambivalent Marxism. The ethical and political orientation of contemporary biomedical technologies, with the liberal subject at the centre of discourses, with its baggage rational will and conscience, begins to work as the conceptual-empirical vector within Ganadarpan discourses in the project of transforming the body from personal to collective property through donation beyond death or at the point of death. The pastoral imperatives of the contemporary biopolitical dispensations, the biomedical and bio-technoscientific possibilities and hopes they nurture and perpetuate through a decentered series of organizational and associational agencies, begin to mutate the ethico-politics of Ganadarpan's organ donation movement from a discourse of state's proprietary control of bodies and cadavers to an ambivalent Marxism that posits liberal freedom, and not civil society conscience, as the vehicle of realization of state's proprietary control of bodies and cadavers towards larger good.

Further, this thesis suggests that bodies and organs are encumbered by claims to proprietorship by emerging structural-institutional forces such as biomedicine and bio-technoscience, of which the practice of organ donation and transplantation is an instance. Embodied subjectivities are also constituted via the bioeconomic moorings and "ethopolitical" imperatives of contemporary biopolitical dispensations (Rose, 2007). Such encumbrances are also manifest in the immediate interpersonal relationships, establishing the social ontology of bodies and organs, and their embeddedness in social relationships and social order. Bodies and embodied subjectivities are discursive sites of contestation over issues of responsibility and care in the context of illness and disease. Not only the structural-institutional forces, including organizational donation advocacy initiatives, aim to control bodies, immediate interpersonal realm of subjects are also rife with contesting claims to the body of the weak, frail and ailing in the context of kidney failure and dialysis.

Intersubjective narratives and modes of negotiation of people suffering from end-stage-kidney-failure and their immediate care-givers point to the moral burden of the donor organ–the haunting specter of indebtedness to the organ donor. The ethnographic field brings to light, that beyond the purported exhaustiveness of celebration of the donor organ as an altruistic gift (*daan*) and the morally reprehensible transformation of organs into commodities (*panya*), situated negotiations of people exposed to characteristic experiences of organ failure and seeking remedy reveal that at the brink of death, desperation and the fear of losing a loved one, people invoke a biomoral economy of debt (*riin*) in their rational attempts to circumvent the tangible and intangible moral burden of debt the donor organ brings in its wake, especially if it is donated by an acquaintance or a relative.

Beyond the organic life of bodies, organs and embodied subjectivities, determined by natural causality and biological teleology, there is a social life which is a wide spectrum of possibilities, subject to biopolitical control and machinations, traceable in the complicated movements of organs across multiple natural-cultural, biological-social, material-ideational-ideological realms or situations. The wide spectrum of possibilities of sociality is manifest in the ways in which the power of organ donation and transplantation technology and practices invest and inscribe the body as the material-semiotic locus and effect of a dyadic biopolitics of hope and dispensability, which establishes the worthiness of certain bodies and embodied subjectivities viz-a-viz the dispensable ones, the latter providing organs for survival of the former, centering on a crude (masquerading as technologically sophisticated) principle of extreme, violent operationalization of life, both literally and metaphorically. The ethico-political maneuvers of new initiatives produce subjectivities which are entrepreneurial, which conceive of organ failure and transplantation technology as sites of speculative investment, rather than remedial and humanitarian. However, beyond the bioeconomic and venture capitalist restructuring of perceptions of life, body, subjectivity and the concept of human, through the various biomedical and bio-technoscience agencies of contemporary biopolitical dispensations, people at the throes of biomedical crisis in general and organ failure in particular, neither see biomedicine or bio-technoscience and organ transplantation as the ultimate resort, nor completely refrain from participating in or contemplating illegality, which is an act of contravention of law. The invocation of the state as provider of organs as free goods or as entitlement or contemplation of self-provisioning of an organ out of love and care or purchasing one under unavoidable circumstances as modes of negotiation against the haunting specter of intergenerational debt to the known or related donor demonstrates how parallel to the structural-institutional bioeconomic and venture capitalist moorings of contemporary biomedicine and bio-technoscience, there exists plural subjective-experiential realms, of which the thesis documents a few, characterized by rational recourse to new bio-moralities, such as the moral bioeconomy of debt, one which posits the moral burden of *anga-riin* (donor organ debt) in opposition the purportedly uncomplicated *angadaan* (organ donation).

This tentatively or prematurely completes the social life and travels (or travails) of organs as they tread multiple intersecting, overlapping situations and depicts how deeply and firmly bodies and organs are implicated in microcosmic maneuvers of power and contestations of meaning and interpretation at the structural-institutional, organizational and subjective-experiential societal and sociological levels.

Appendices

Sample Unstructured Interview Schedules and Maps

Sample Unstructured Interview Schedule I

(For the Care-givers of the Kidney Transplant Recipients at the S.S.K.M. Hospital)

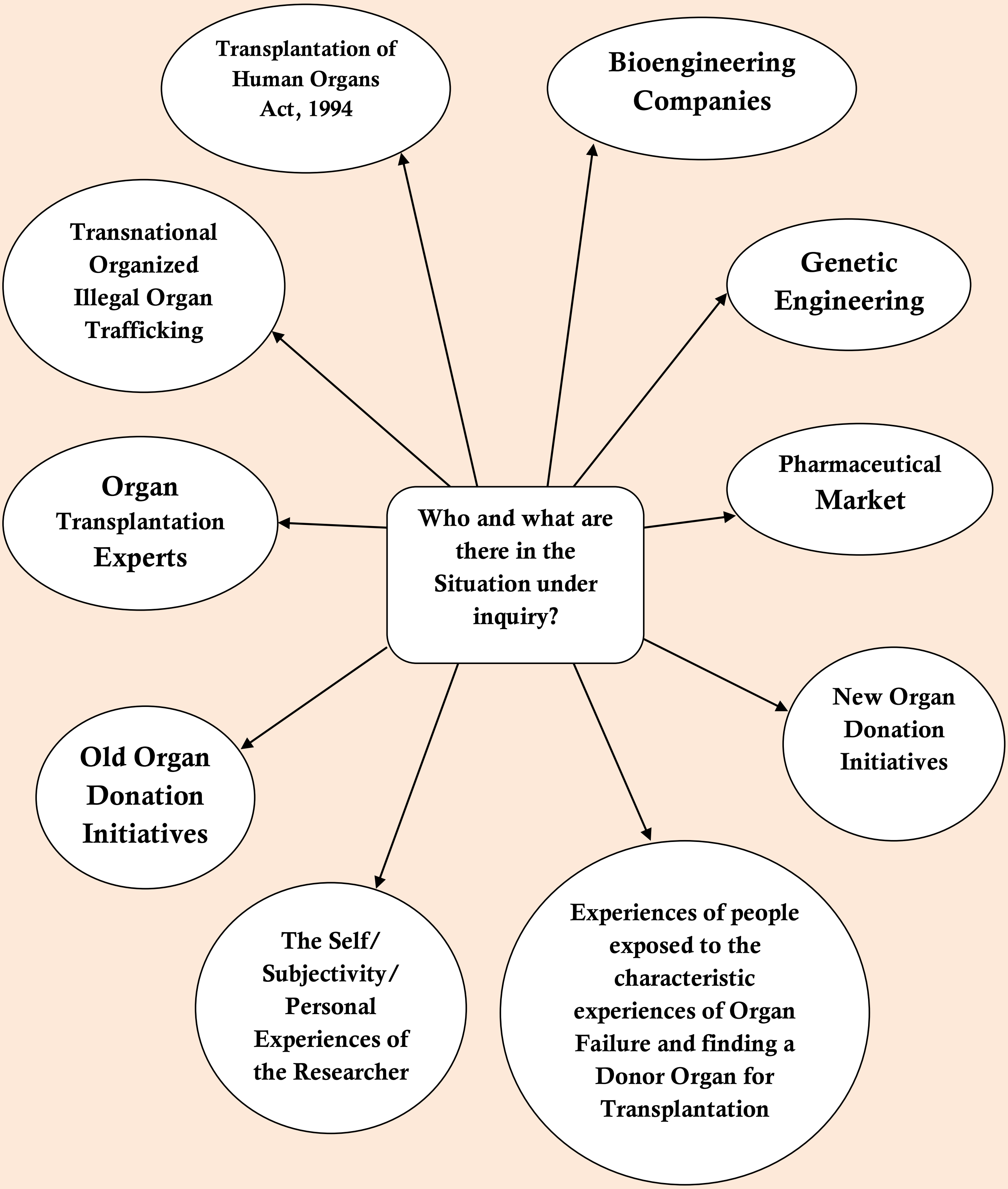
1. What is your name?
2. When did you come here?
3. From where did you come here?
4. How was the disease diagnosed?
5. How is the patient related to you?
6. What is the name of the patient?
7. What symptoms did the patient have?
8. How did the diagnosis occur?
9. What happened after the diagnosis?
10. Did you carry out the treatment elsewhere before coming to this place?
11. Do you know what treatment is being given to the patient here?
12. How is the patient responding to the treatment?
13. What is the current condition of the patient?
14. How long will the recovery take?

Sample Unstructured Interview Schedule II
(For the Activists of Ganadarpan)

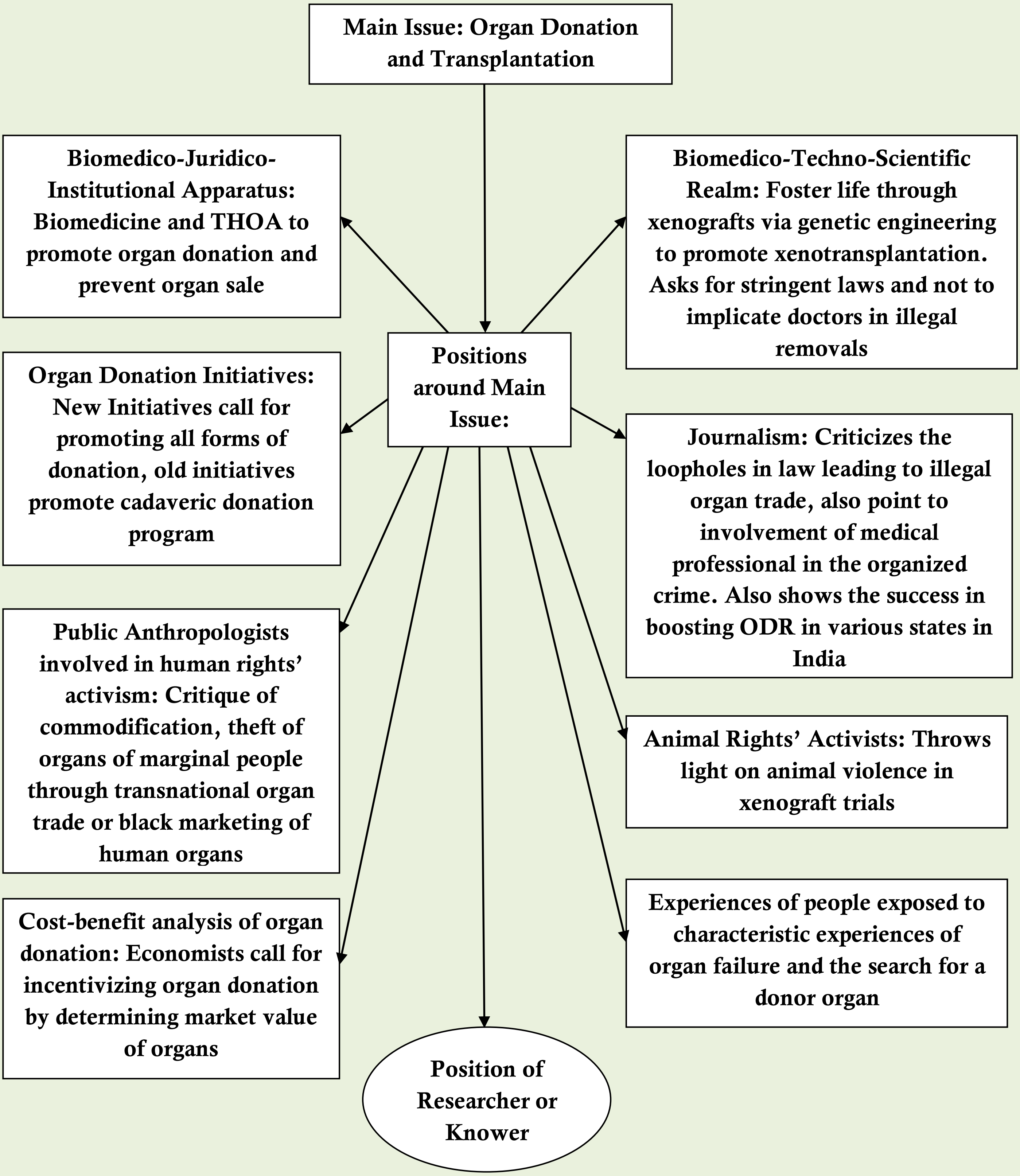
1. How long are you associated with the movement and in what capacity?
2. What drew you to the movement?
3. What is your profession? If any.
4. What are the guiding principles of the movement?
5. How frequently do you participate in the activities of movement?
6. What do you know about the history of the movement?
7. How relevant is the Ganadarpan ideology in the contemporary times?
8. How effective is the Ganadarpan mode of engagement with people in awareness generation?
9. What, according to you, is the success of the movement?
10. Where do you think the movement has failed or could not realize its objectives?
11. What reasons would you attribute to the failures, if any?
12. What, according to you, is the opinion of the contemporary public about Ganadarpan?
13. What is the response of the government to Ganadarpan's involvement in organ donation advocacy?
14. Where do you see the movement after ten years?

NB: I began the research with these schedules soon to realize that complexities of ethnographic engagement render such approach too strict and limited to capture the dynamics of the field. Field conversations always took unanticipated turns which exceeded the strictures of these schedules. The preliminary schedules have been attached here for the purpose of transparency.

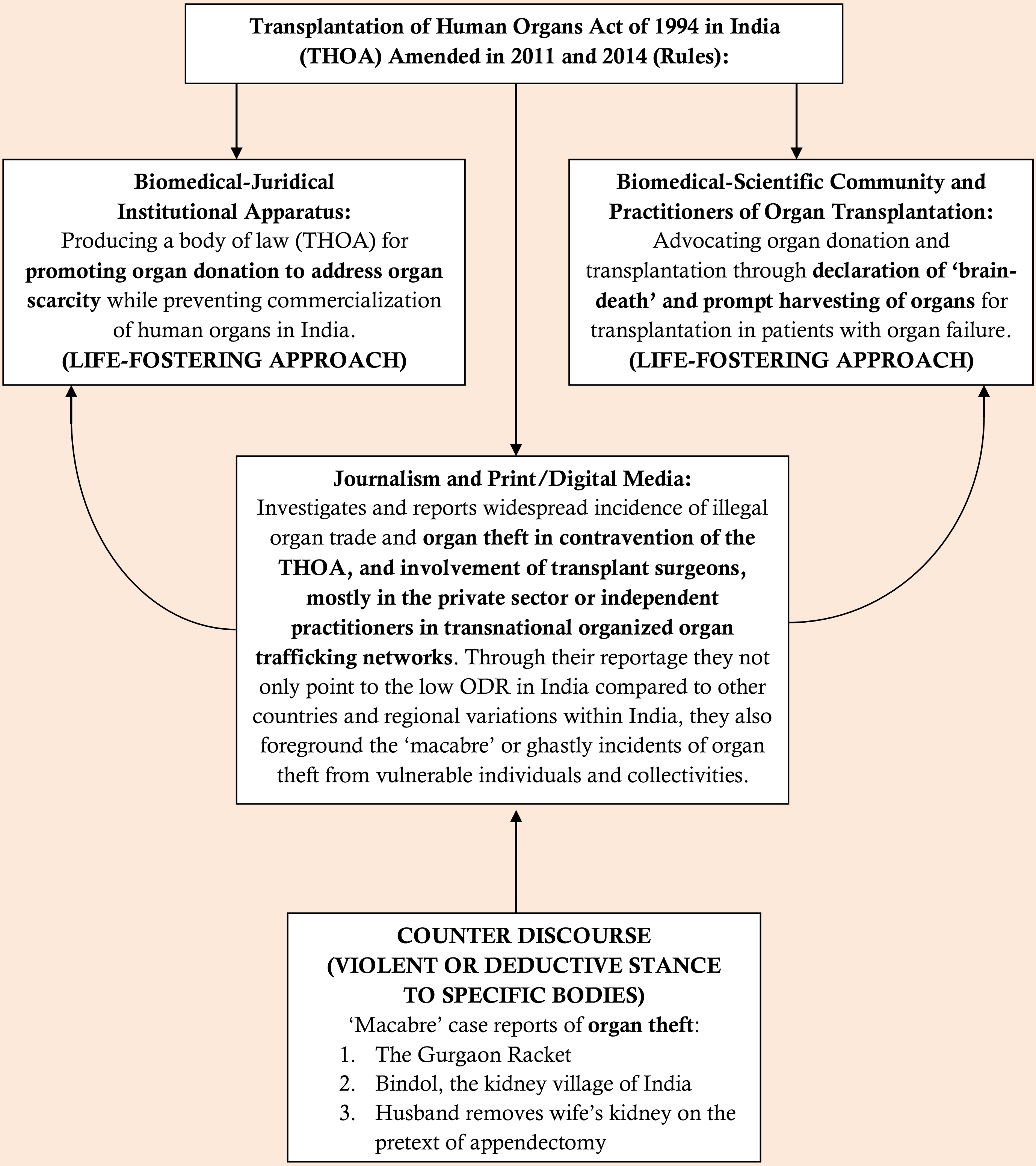
1.1 Situational Map:



1.2 Positional Map:



2.1 Situational Map:



Transplantation of Human Organs Act of 1994 in India (THOA) Amended in 2011 and 2014 (Rules):

Biomedical-Juridical Institutional Apparatus:
Producing a body of law (THOA) for **promoting organ donation to address organ scarcity** while preventing commercialization of human organs in India.
(LIFE-FOSTERING APPROACH)

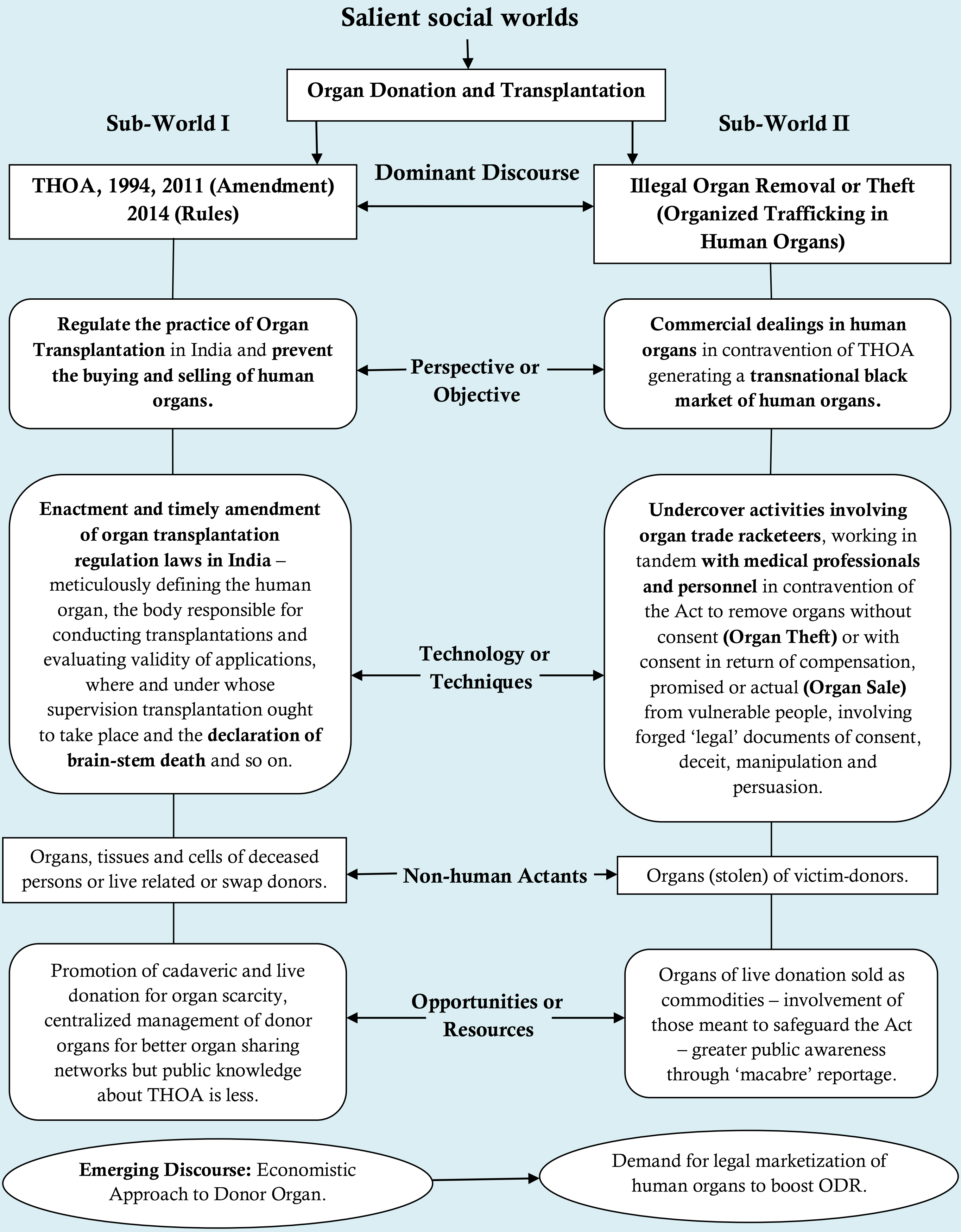
Biomedical-Scientific Community and Practitioners of Organ Transplantation:
Advocating organ donation and transplantation through **declaration of 'brain-death' and prompt harvesting of organs** for transplantation in patients with organ failure.
(LIFE-FOSTERING APPROACH)

Journalism and Print/Digital Media:
Investigates and reports widespread incidence of illegal organ trade and **organ theft in contravention of the THOA, and involvement of transplant surgeons, mostly in the private sector or independent practitioners in transnational organized organ trafficking networks**. Through their reportage they not only point to the low ODR in India compared to other countries and regional variations within India, they also foreground the 'macabre' or ghastly incidents of organ theft from vulnerable individuals and collectivities.

COUNTER DISCOURSE
(VIOLENT OR DEDUCTIVE STANCE TO SPECIFIC BODIES)
'Macabre' case reports of **organ theft**:

1. The Gurgaon Racket
2. Bindol, the kidney village of India
3. Husband removes wife's kidney on the pretext of appendectomy

2.2 Social World Map:



THOA, 1994, 2011 (Amendment) 2014 (Rules)

Illegal Organ Removal or Theft (Organized Trafficking in Human Organs)

Regulate the practice of Organ Transplantation in India and **prevent the buying and selling of human organs.**

Commercial dealings in human organs in contravention of THOA generating a **transnational black market of human organs.**

Enactment and timely amendment of organ transplantation regulation laws in India – meticulously defining the human organ, the body responsible for conducting transplantations and evaluating validity of applications, where and under whose supervision transplantation ought to take place and the **declaration of brain-stem death** and so on.

Undercover activities involving organ trade racketeers, working in tandem **with medical professionals and personnel** in contravention of the Act to remove organs without consent **(Organ Theft)** or with consent in return of compensation, promised or actual **(Organ Sale)** from vulnerable people, involving forged 'legal' documents of consent, deceit, manipulation and persuasion.

Organs, tissues and cells of deceased persons or live related or swap donors.

Organs (stolen) of victim-donors.

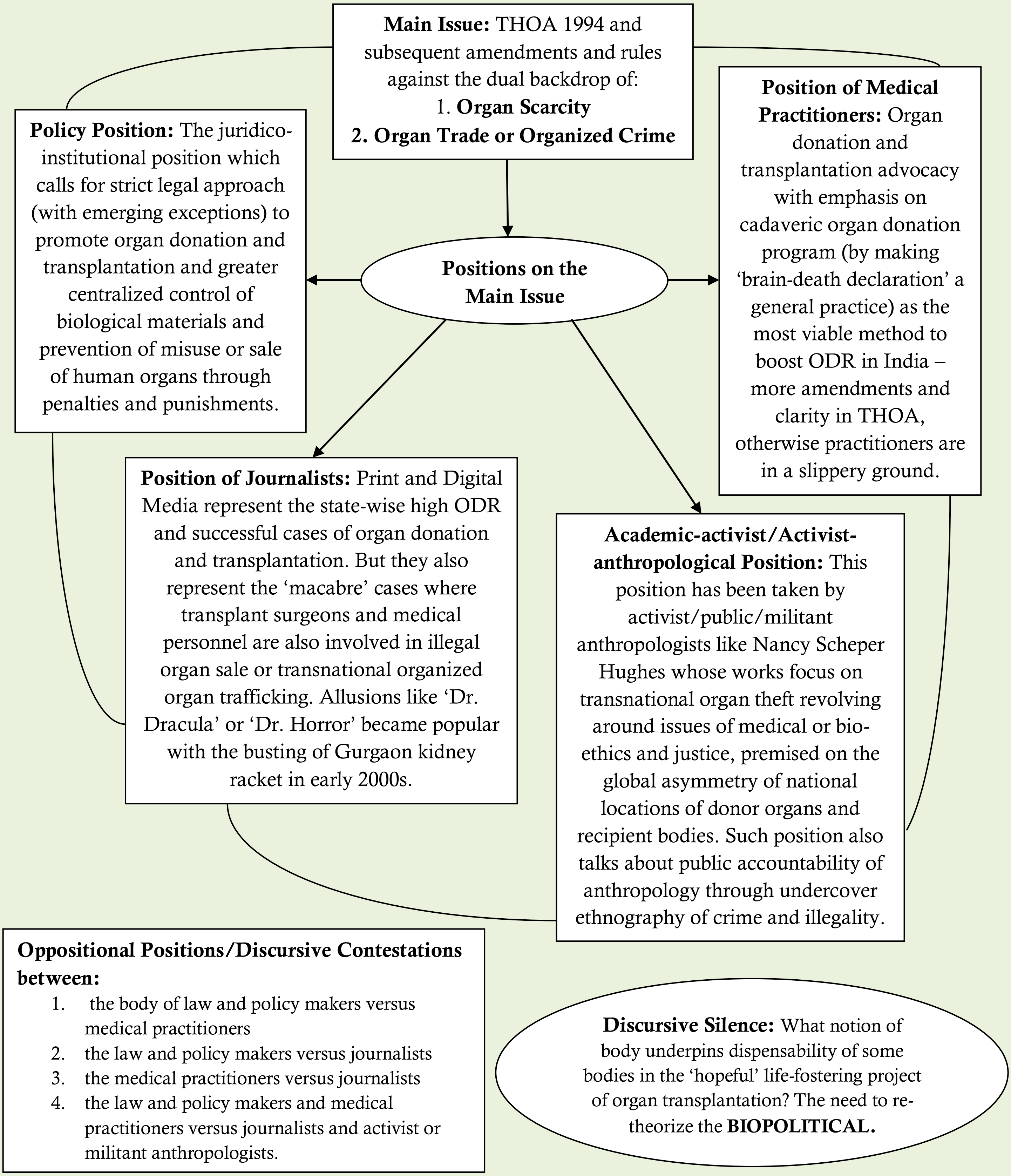
Promotion of cadaveric and live donation for organ scarcity, centralized management of donor organs for better organ sharing networks but public knowledge about THOA is less.

Organs of live donation sold as commodities – involvement of those meant to safeguard the Act – greater public awareness through 'macabre' reportage.

Emerging Discourse: Economistic Approach to Donor Organ.

Demand for legal marketization of human organs to boost ODR.

2.3 Positional Map:



Main Issue: THOA 1994 and subsequent amendments and rules against the dual backdrop of:
1. **Organ Scarcity**
2. **Organ Trade or Organized Crime**

Positions on the Main Issue

Policy Position: The juridico-institutional position which calls for strict legal approach (with emerging exceptions) to promote organ donation and transplantation and greater centralized control of biological materials and prevention of misuse or sale of human organs through penalties and punishments.

Position of Medical Practitioners: Organ donation and transplantation advocacy with emphasis on cadaveric organ donation program (by making 'brain-death declaration' a general practice) as the most viable method to boost ODR in India – more amendments and clarity in THOA, otherwise practitioners are in a slippery ground.

Position of Journalists: Print and Digital Media represent the state-wise high ODR and successful cases of organ donation and transplantation. But they also represent the 'macabre' cases where transplant surgeons and medical personnel are also involved in illegal organ sale or transnational organized organ trafficking. Allusions like 'Dr. Dracula' or 'Dr. Horror' became popular with the busting of Gurgaon kidney racket in early 2000s.

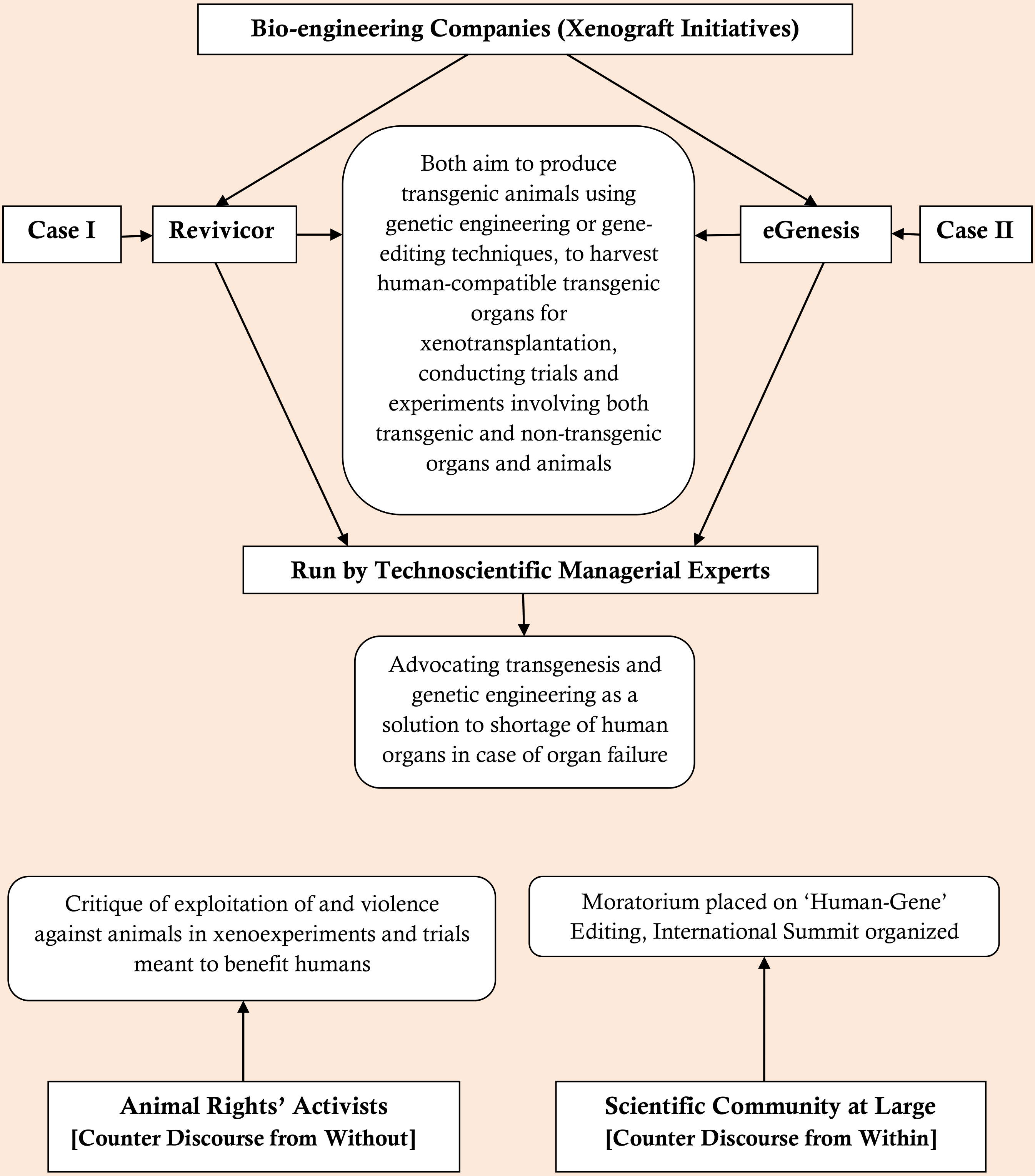
Academic-activist/Activist-anthropological Position: This position has been taken by activist/public/militant anthropologists like Nancy Scheper Hughes whose works focus on transnational organ theft revolving around issues of medical or bio-ethics and justice, premised on the global asymmetry of national locations of donor organs and recipient bodies. Such position also talks about public accountability of anthropology through undercover ethnography of crime and illegality.

Oppositional Positions/Discursive Contestations between:

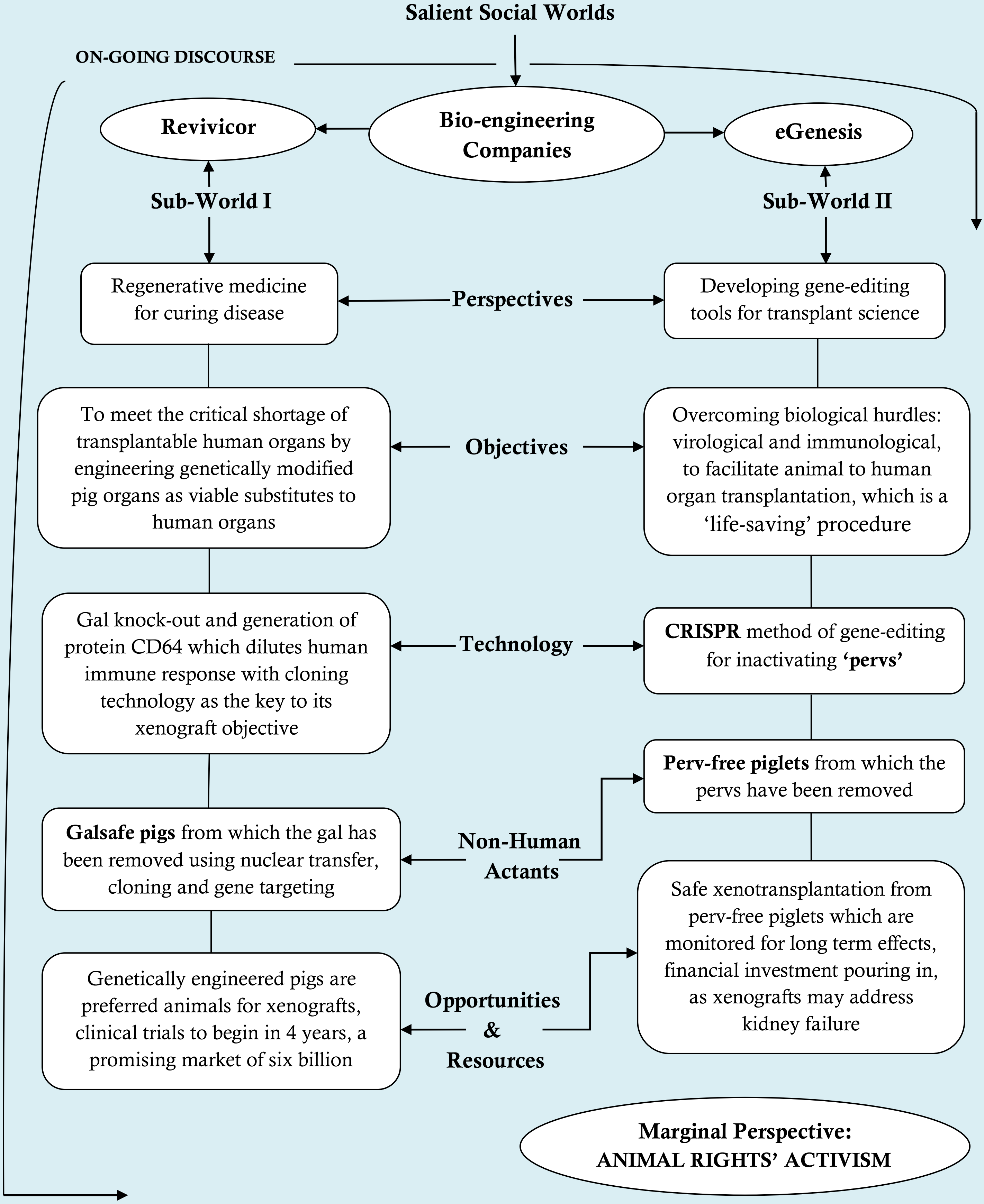
1. the body of law and policy makers versus medical practitioners
2. the law and policy makers versus journalists
3. the medical practitioners versus journalists
4. the law and policy makers and medical practitioners versus journalists and activist or militant anthropologists.

Discursive Silence: What notion of body underpins dispensability of some bodies in the 'hopeful' life-fostering project of organ transplantation? The need to re-theorize the **BIOPOLITICAL.**

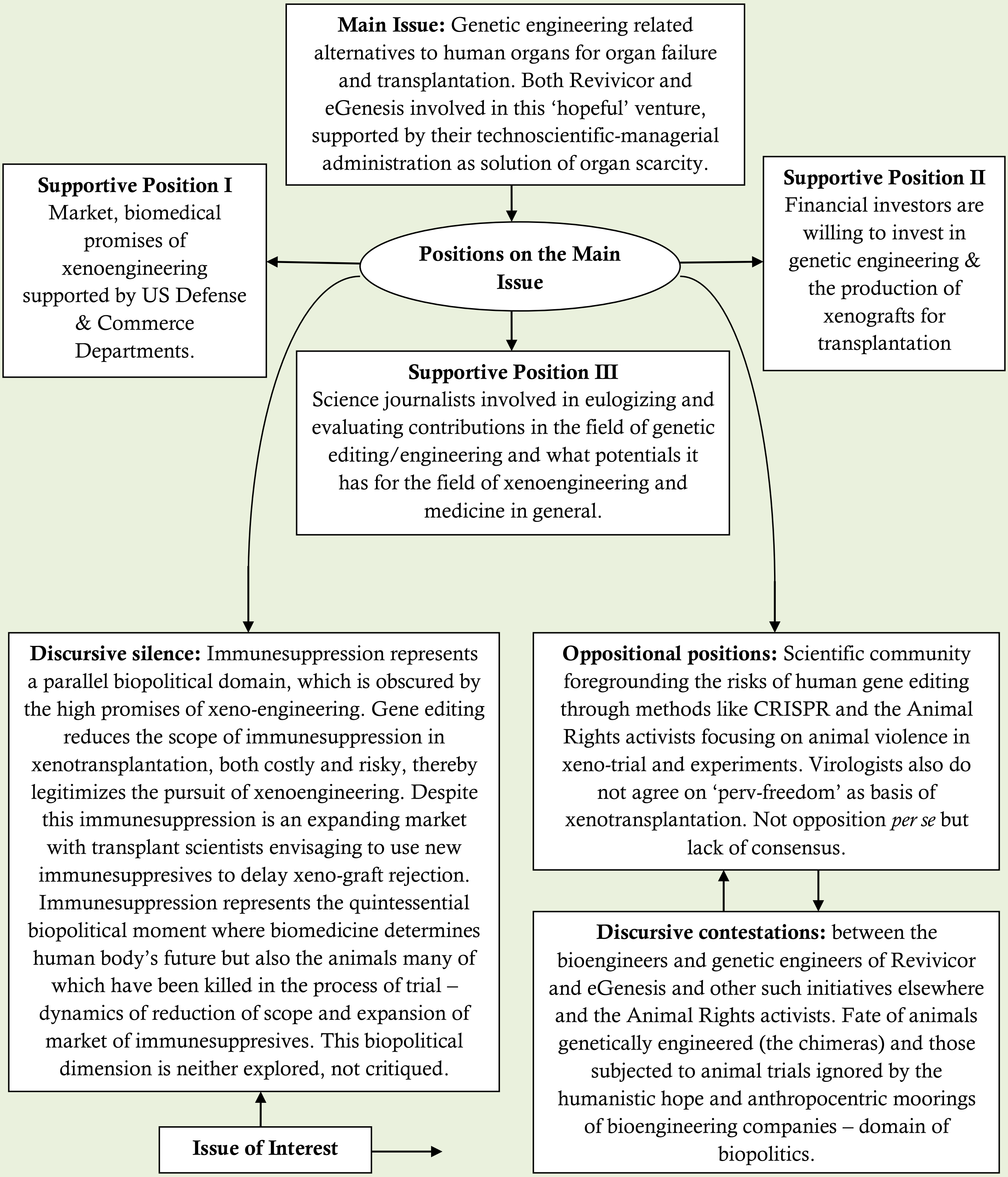
3.1 Situational Map:



3.2 Social World Map:



3.3 Positional Map:



Main Issue: Genetic engineering related alternatives to human organs for organ failure and transplantation. Both Revivicor and eGenesis involved in this ‘hopeful’ venture, supported by their technoscientific-managerial administration as solution of organ scarcity.

Positions on the Main Issue

Supportive Position I
Market, biomedical promises of xenoengineering supported by US Defense & Commerce Departments.

Supportive Position II
Financial investors are willing to invest in genetic engineering & the production of xenografts for transplantation

Supportive Position III
Science journalists involved in eulogizing and evaluating contributions in the field of genetic editing/engineering and what potentials it has for the field of xenoengineering and medicine in general.

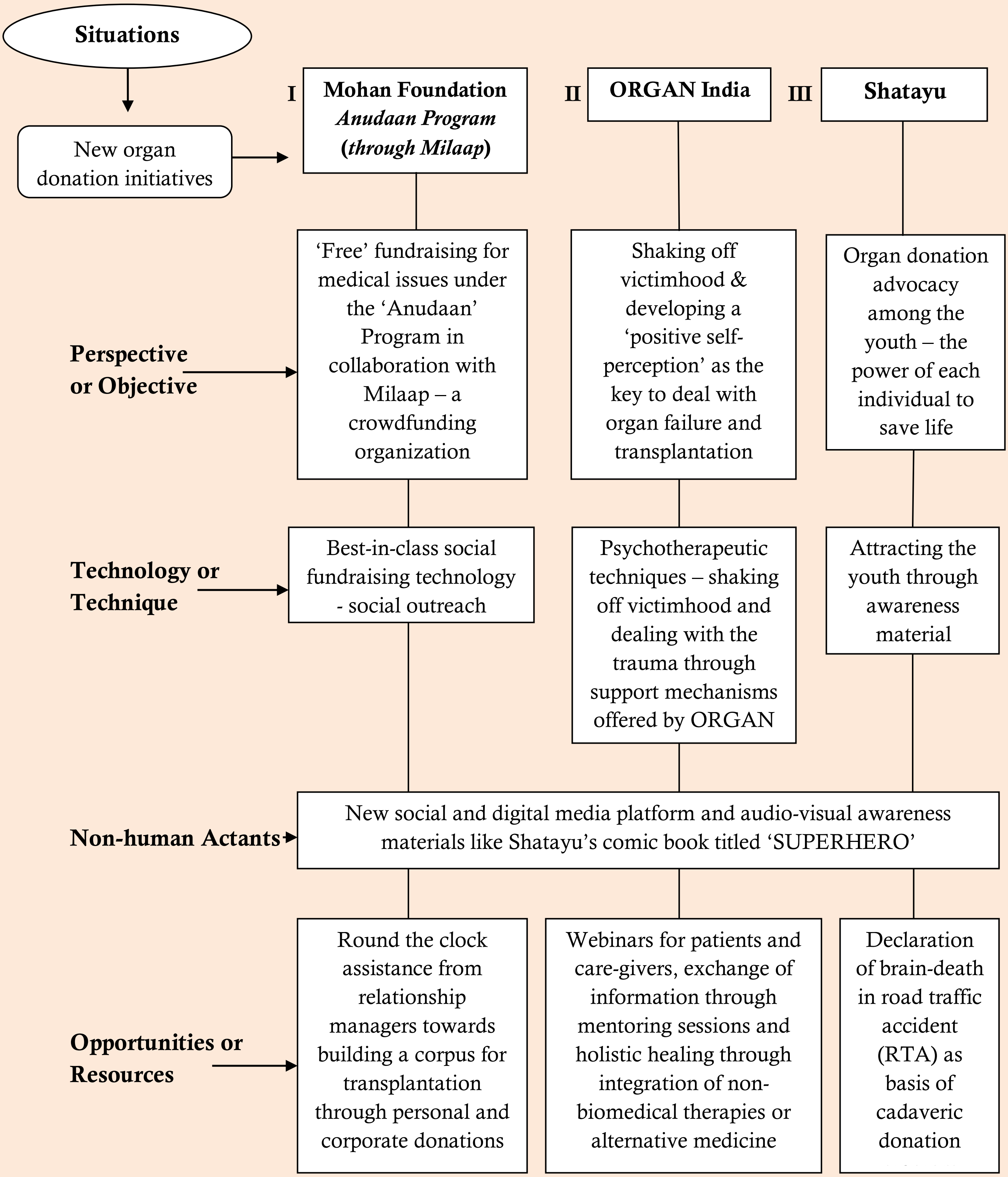
Discursive silence: Immunesuppression represents a parallel biopolitical domain, which is obscured by the high promises of xeno-engineering. Gene editing reduces the scope of immunesuppression in xenotransplantation, both costly and risky, thereby legitimizes the pursuit of xenoengineering. Despite this immunesuppression is an expanding market with transplant scientists envisaging to use new immunesuppresives to delay xeno-graft rejection. Immunesuppression represents the quintessential biopolitical moment where biomedicine determines human body’s future but also the animals many of which have been killed in the process of trial – dynamics of reduction of scope and expansion of market of immunesuppresives. This biopolitical dimension is neither explored, not critiqued.

Oppositional positions: Scientific community foregrounding the risks of human gene editing through methods like CRISPR and the Animal Rights activists focusing on animal violence in xeno-trial and experiments. Virologists also do not agree on ‘perv-freedom’ as basis of xenotransplantation. Not opposition *per se* but lack of consensus.

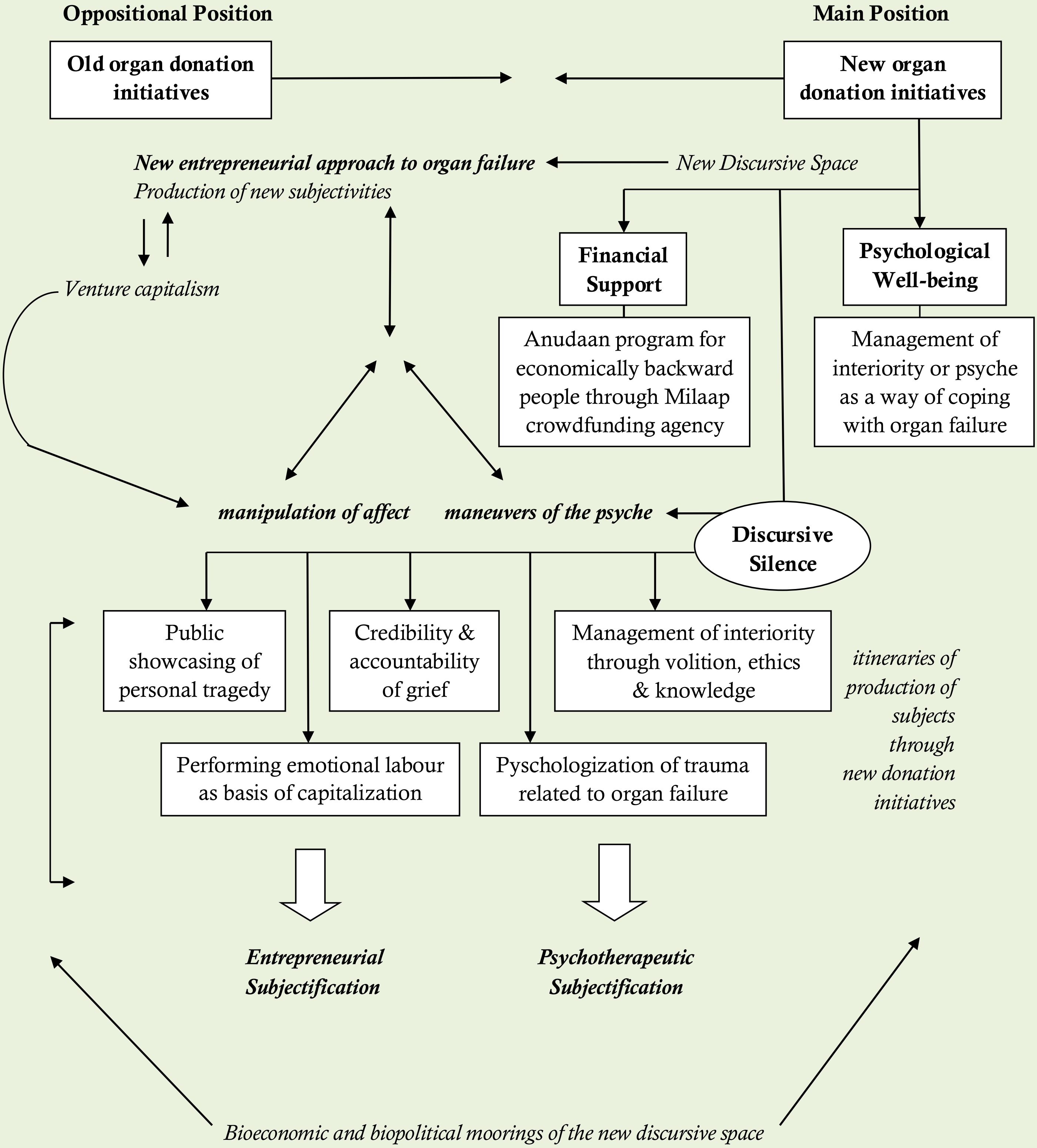
Discursive contestations: between the bioengineers and genetic engineers of Revivicor and eGenesis and other such initiatives elsewhere and the Animal Rights activists. Fate of animals genetically engineered (the chimeras) and those subjected to animal trials ignored by the humanistic hope and anthropocentric moorings of bioengineering companies – domain of biopolitics.

Issue of Interest

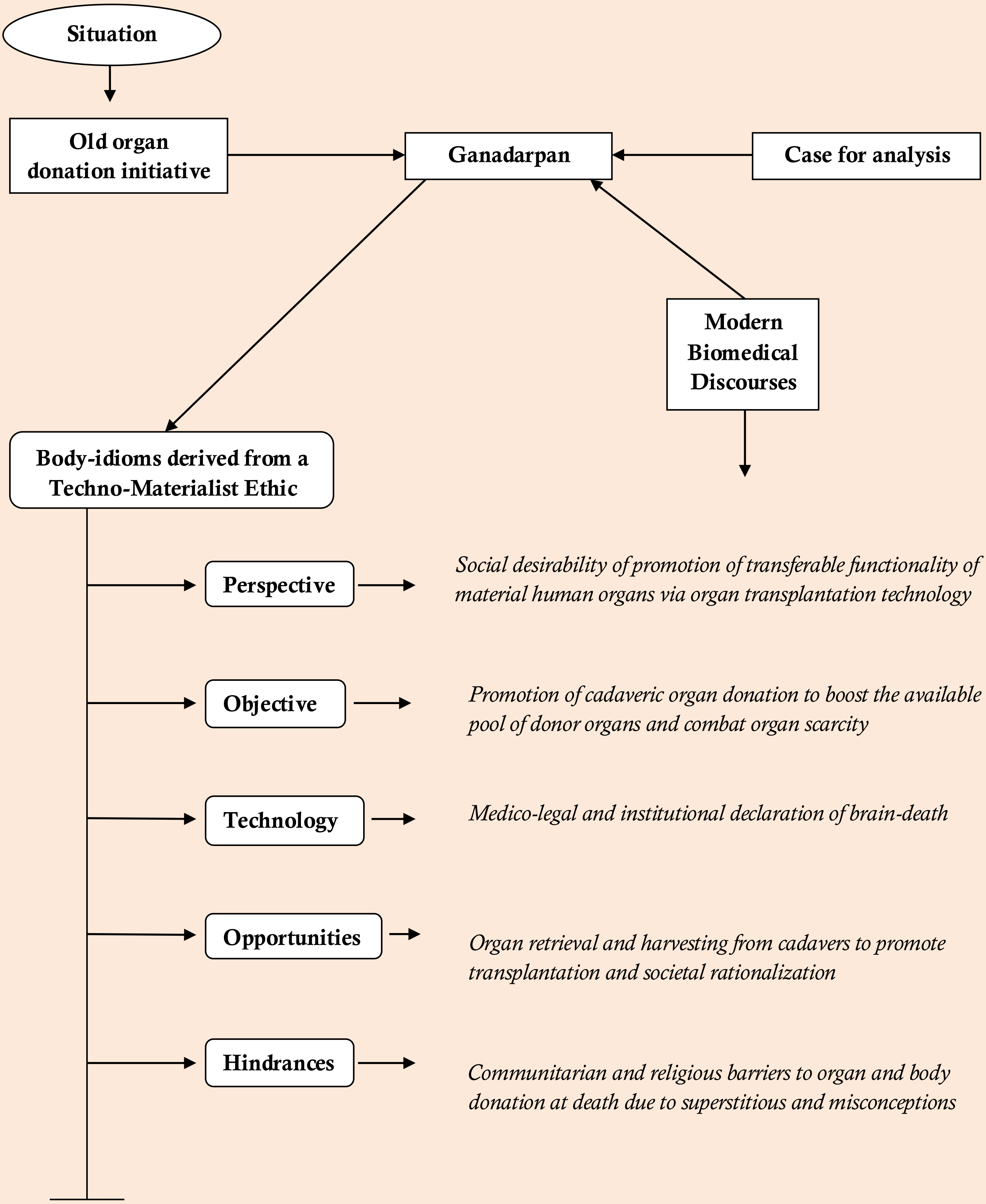
4.1 Situational Map:



4.2 Positional Map:



5.1 Situational Map:



Social desirability of promotion of transferable functionality of material human organs via organ transplantation technology

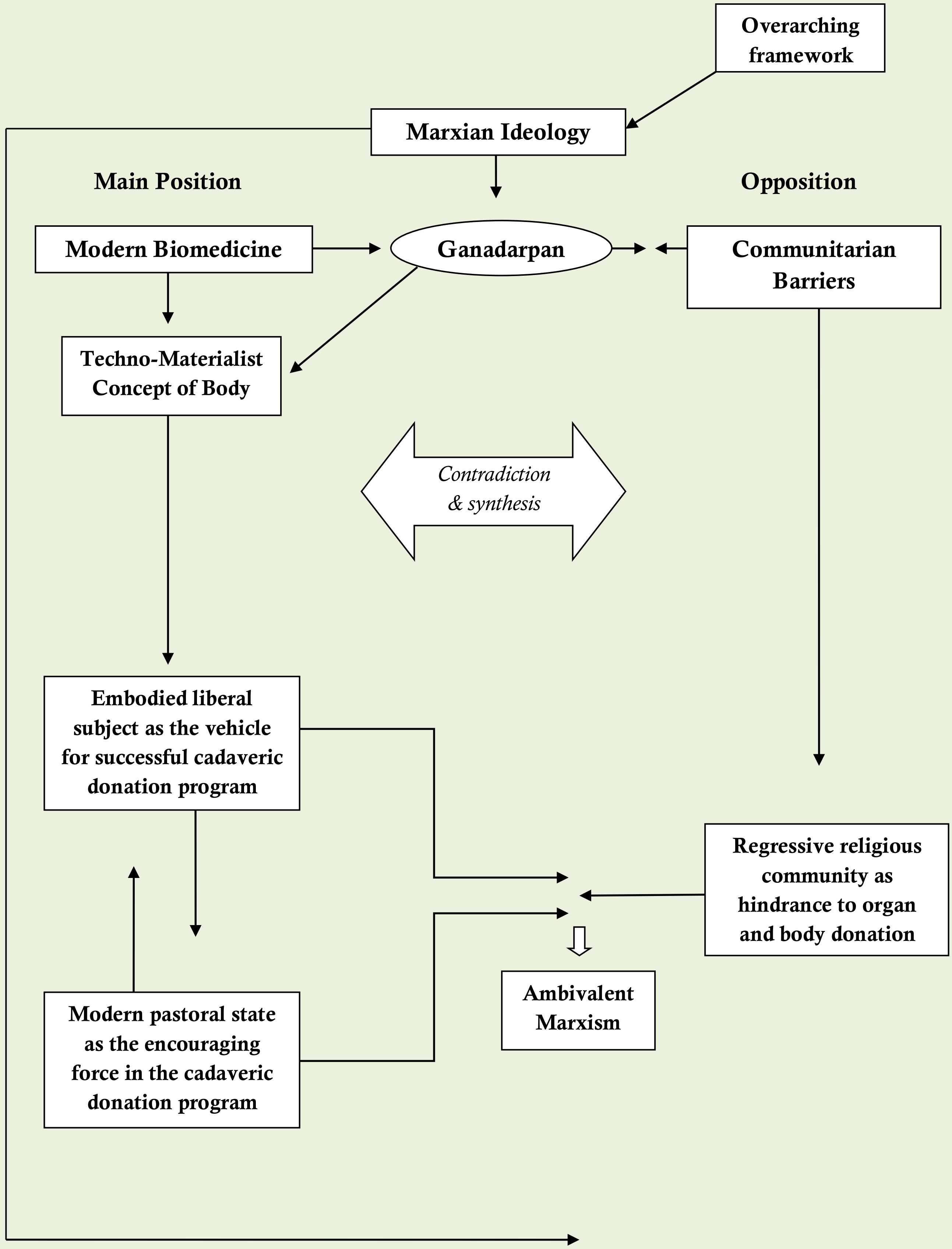
Promotion of cadaveric organ donation to boost the available pool of donor organs and combat organ scarcity

Medico-legal and institutional declaration of brain-death

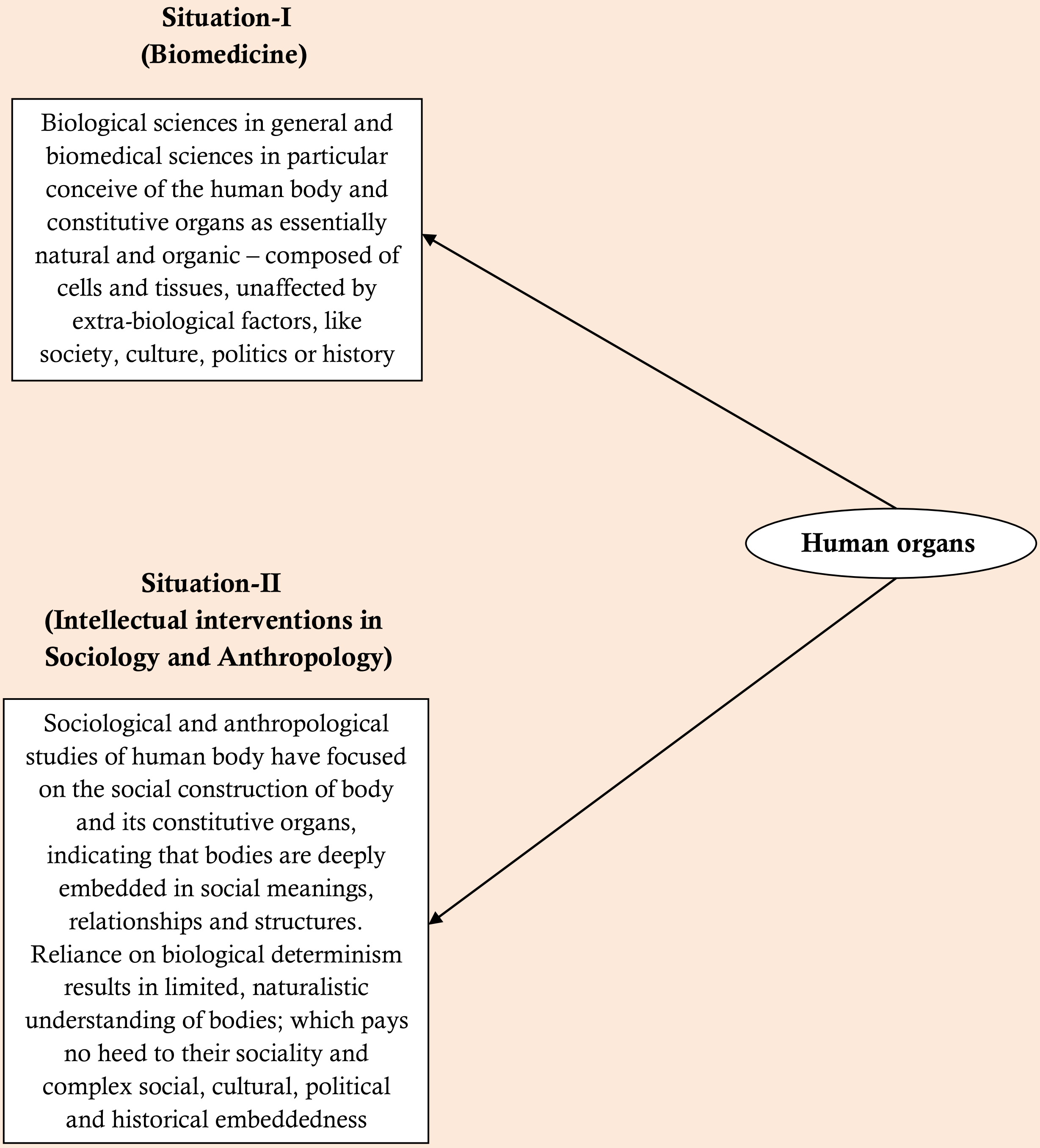
Organ retrieval and harvesting from cadavers to promote transplantation and societal rationalization

Communitarian and religious barriers to organ and body donation at death due to superstitious and misconceptions

5.2 Positional Map:



6.1 Situational Map:



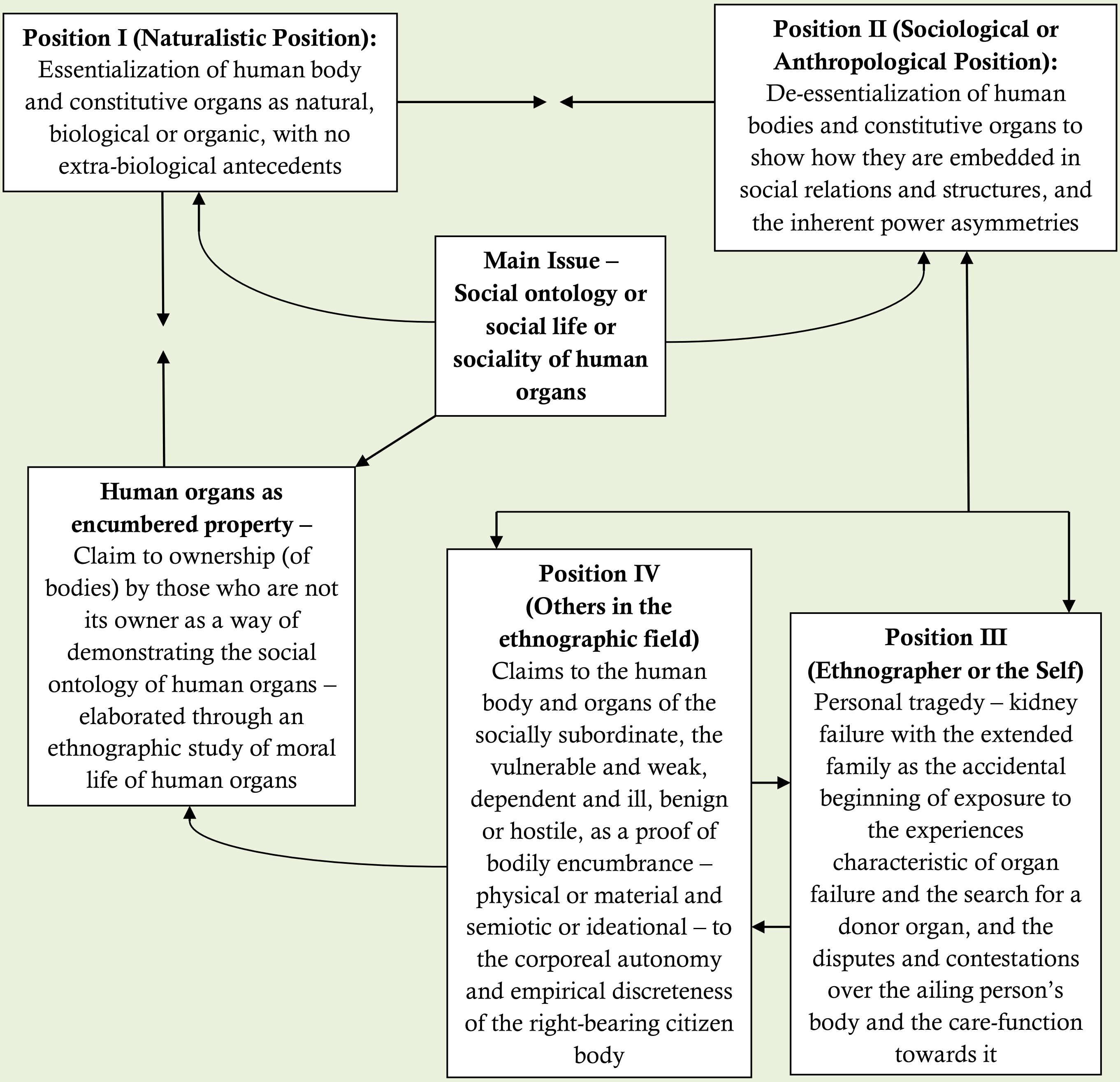
Situation-I
(Biomedicine)

Biological sciences in general and biomedical sciences in particular conceive of the human body and constitutive organs as essentially natural and organic – composed of cells and tissues, unaffected by extra-biological factors, like society, culture, politics or history

Situation-II
(Intellectual interventions in Sociology and Anthropology)

Sociological and anthropological studies of human body have focused on the social construction of body and its constitutive organs, indicating that bodies are deeply embedded in social meanings, relationships and structures. Reliance on biological determinism results in limited, naturalistic understanding of bodies; which pays no heed to their sociality and complex social, cultural, political and historical embeddedness

6.2 Positional Map:



Position I (Naturalistic Position): Essentialization of human body and constitutive organs as natural, biological or organic, with no extra-biological antecedents

Position II (Sociological or Anthropological Position): De-essentialization of human bodies and constitutive organs to show how they are embedded in social relations and structures, and the inherent power asymmetries

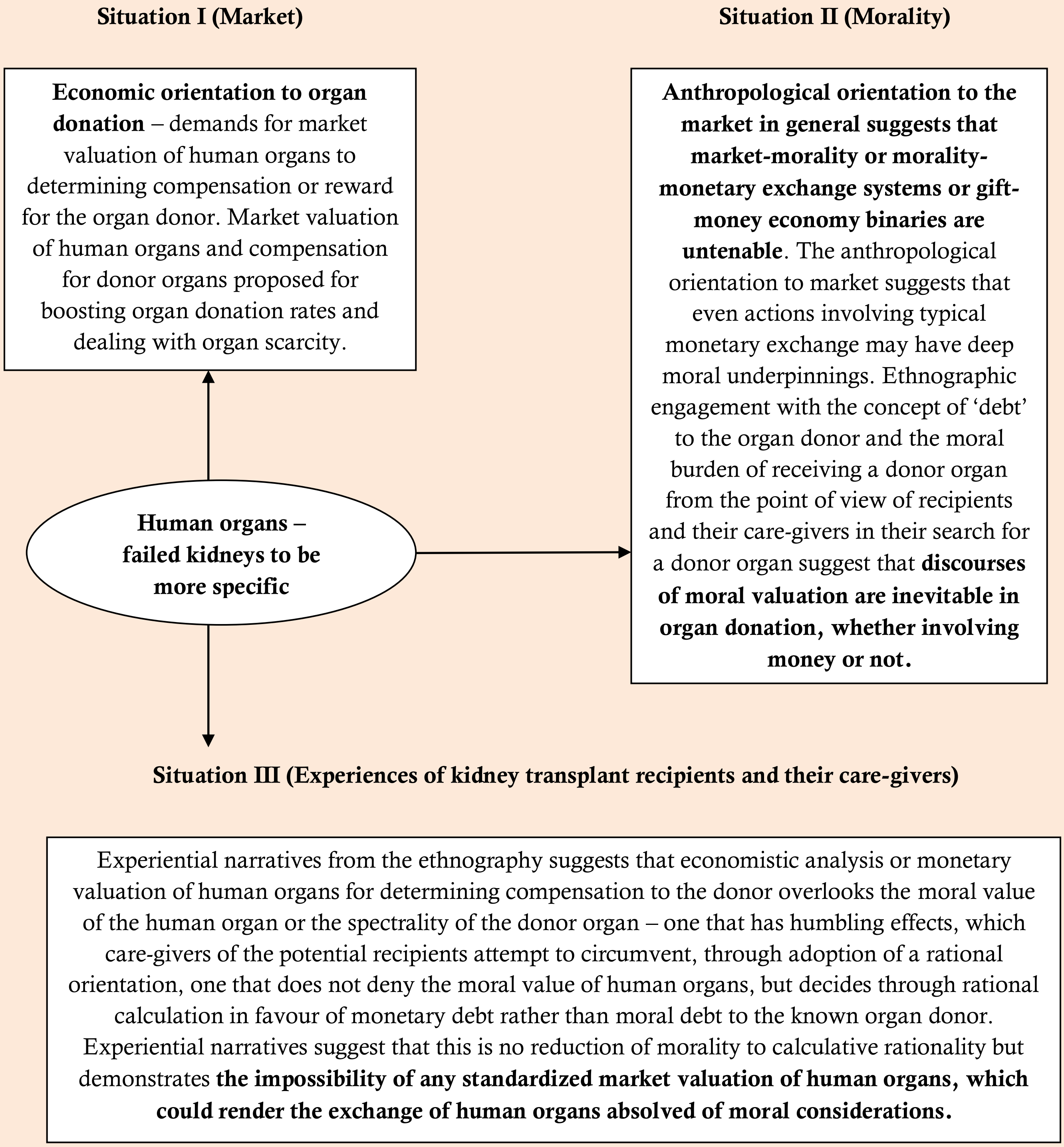
Main Issue – Social ontology or social life or sociality of human organs

Human organs as encumbered property – Claim to ownership (of bodies) by those who are not its owner as a way of demonstrating the social ontology of human organs – elaborated through an ethnographic study of moral life of human organs

Position IV (Others in the ethnographic field) Claims to the human body and organs of the socially subordinate, the vulnerable and weak, dependent and ill, benign or hostile, as a proof of bodily encumbrance – physical or material and semiotic or ideational – to the corporeal autonomy and empirical discreteness of the right-bearing citizen body

Position III (Ethnographer or the Self) Personal tragedy – kidney failure with the extended family as the accidental beginning of exposure to the experiences characteristic of organ failure and the search for a donor organ, and the disputes and contestations over the ailing person's body and the care-function towards it

7.1 Situational Map:



Situation I (Market)

Economic orientation to organ donation – demands for market valuation of human organs to determining compensation or reward for the organ donor. Market valuation of human organs and compensation for donor organs proposed for boosting organ donation rates and dealing with organ scarcity.

Situation II (Morality)

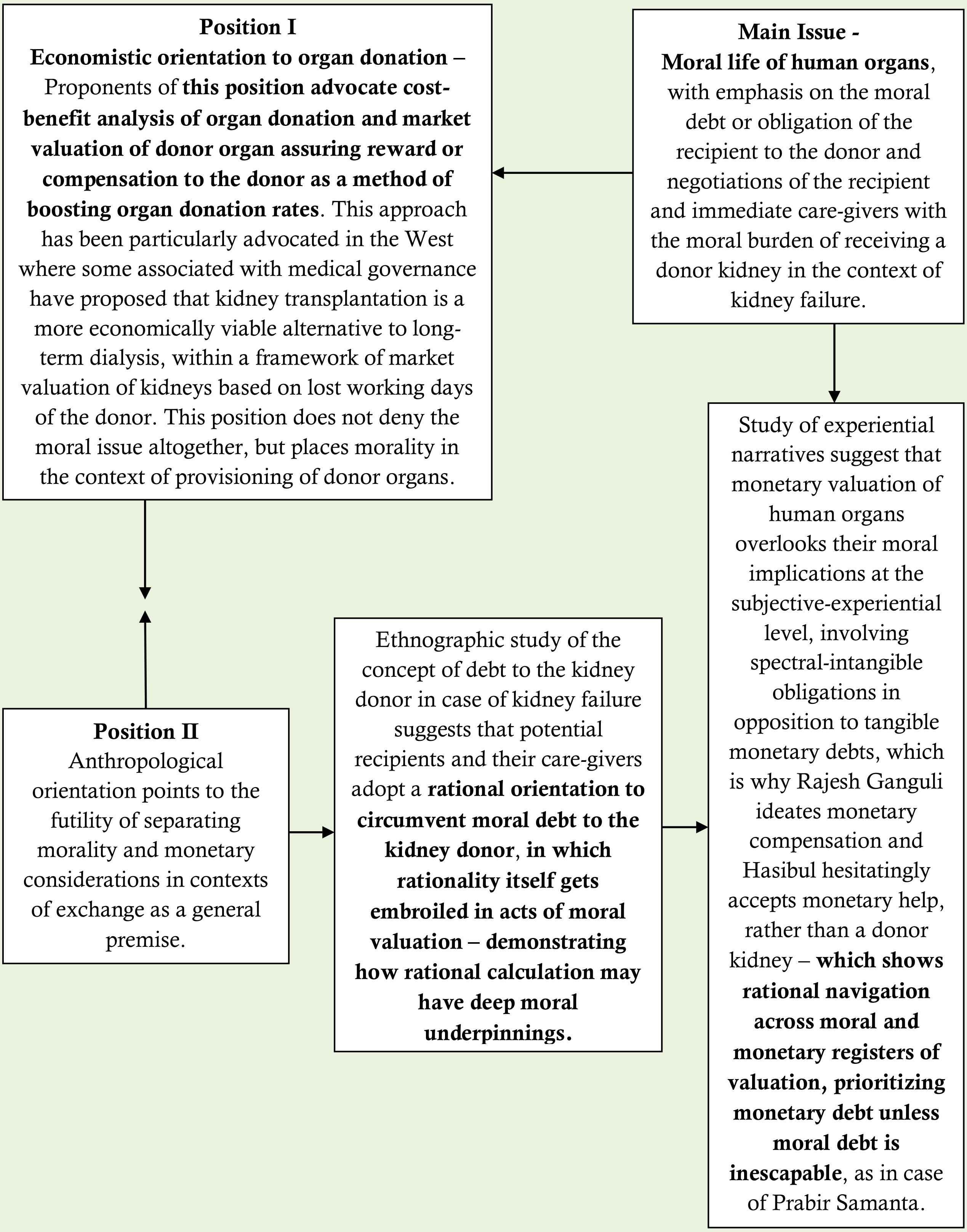
Anthropological orientation to the market in general suggests that market-morality or morality-monetary exchange systems or gift-money economy binaries are untenable. The anthropological orientation to market suggests that even actions involving typical monetary exchange may have deep moral underpinnings. Ethnographic engagement with the concept of 'debt' to the organ donor and the moral burden of receiving a donor organ from the point of view of recipients and their care-givers in their search for a donor organ suggest that **discourses of moral valuation are inevitable in organ donation, whether involving money or not.**

Human organs – failed kidneys to be more specific

Situation III (Experiences of kidney transplant recipients and their care-givers)

Experiential narratives from the ethnography suggests that economistic analysis or monetary valuation of human organs for determining compensation to the donor overlooks the moral value of the human organ or the spectrality of the donor organ – one that has humbling effects, which care-givers of the potential recipients attempt to circumvent, through adoption of a rational orientation, one that does not deny the moral value of human organs, but decides through rational calculation in favour of monetary debt rather than moral debt to the known organ donor. Experiential narratives suggest that this is no reduction of morality to calculative rationality but demonstrates **the impossibility of any standardized market valuation of human organs, which could render the exchange of human organs absolved of moral considerations.**

7.2 Positional Map:



Position I
Economistic orientation to organ donation – Proponents of **this position advocate cost-benefit analysis of organ donation and market valuation of donor organ assuring reward or compensation to the donor as a method of boosting organ donation rates**. This approach has been particularly advocated in the West where some associated with medical governance have proposed that kidney transplantation is a more economically viable alternative to long-term dialysis, within a framework of market valuation of kidneys based on lost working days of the donor. This position does not deny the moral issue altogether, but places morality in the context of provisioning of donor organs.

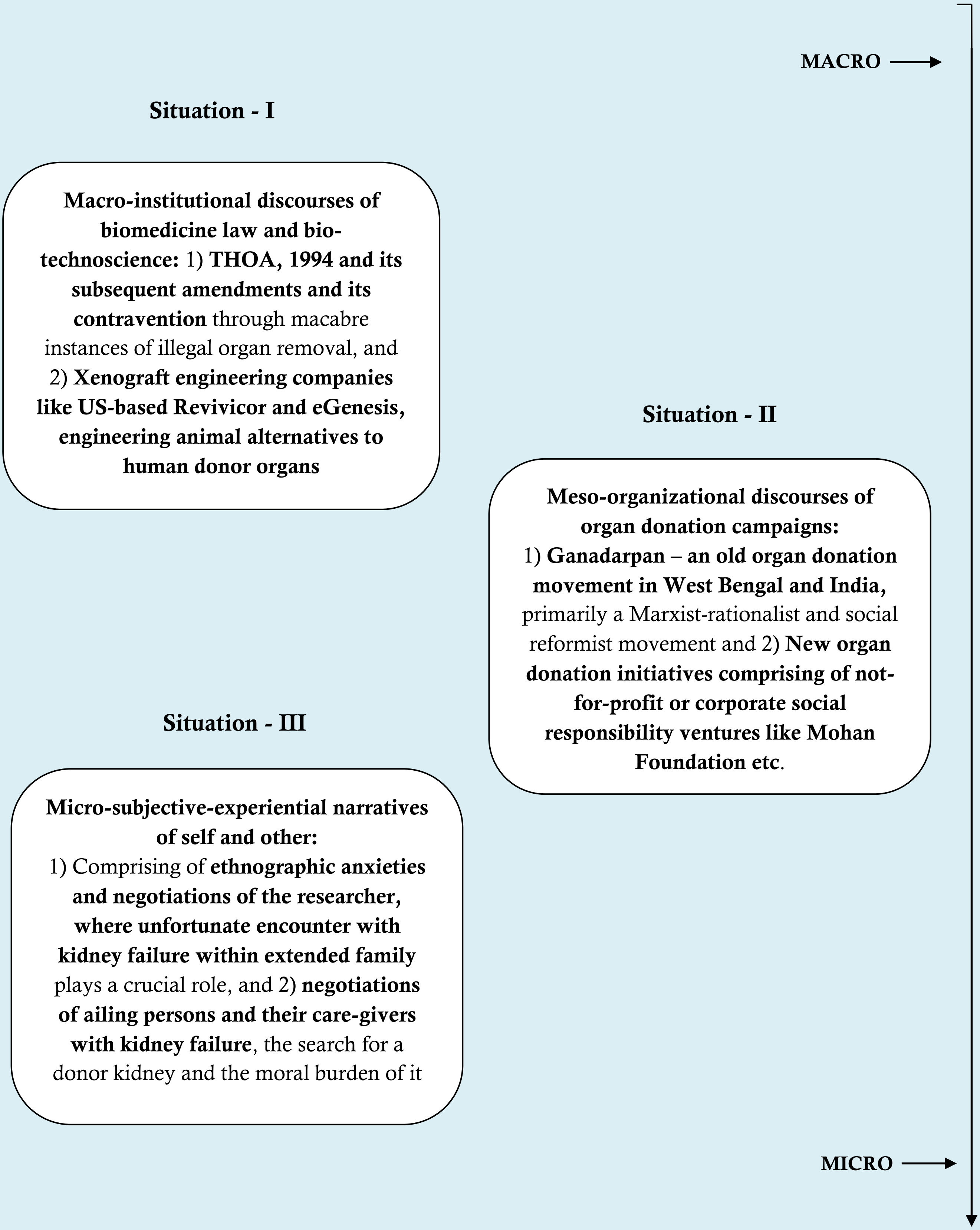
Main Issue -
Moral life of human organs, with emphasis on the moral debt or obligation of the recipient to the donor and negotiations of the recipient and immediate care-givers with the moral burden of receiving a donor kidney in the context of kidney failure.

Position II
Anthropological orientation points to the futility of separating morality and monetary considerations in contexts of exchange as a general premise.

Ethnographic study of the concept of debt to the kidney donor in case of kidney failure suggests that potential recipients and their care-givers adopt a **rational orientation to circumvent moral debt to the kidney donor**, **in which rationality itself gets embroiled in acts of moral valuation – demonstrating how rational calculation may have deep moral underpinnings.**

Study of experiential narratives suggest that monetary valuation of human organs overlooks their moral implications at the subjective-experiential level, involving spectral-intangible obligations in opposition to tangible monetary debts, which is why Rajesh Ganguli ideates monetary compensation and Hasibul hesitatingly accepts monetary help, rather than a donor kidney – **which shows rational navigation across moral and monetary registers of valuation, prioritizing monetary debt unless moral debt is inescapable**, as in case of Prabir Samanta.

8.1 Situational Map:



MACRO

Situation - I

Macro-institutional discourses of biomedicine law and bio-technoscience: 1) **THOA, 1994 and its subsequent amendments and its contravention** through macabre instances of illegal organ removal, and 2) **Xenograft engineering companies like US-based Revivicor and eGenesis, engineering animal alternatives to human donor organs**

Situation - II

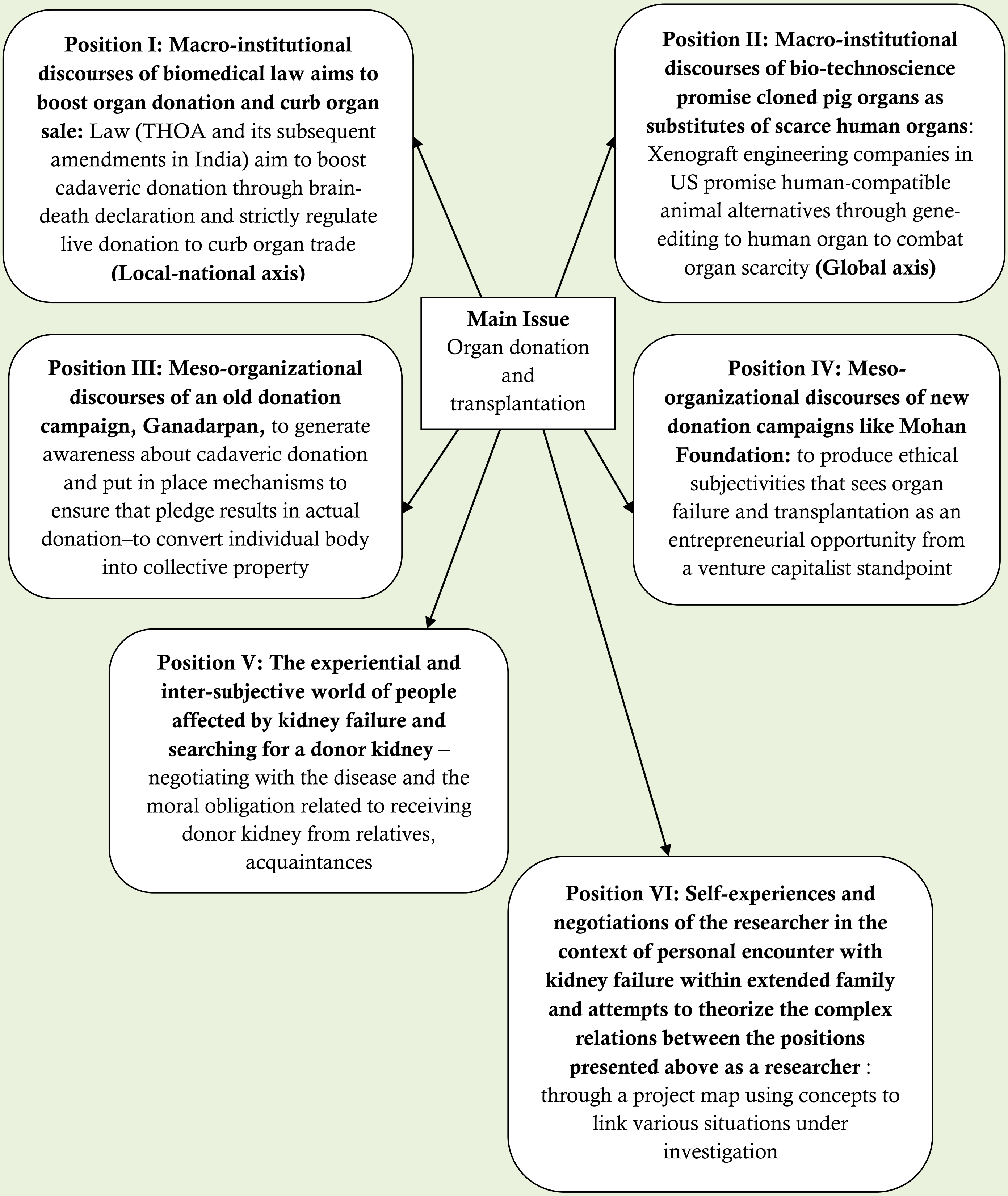
Meso-organizational discourses of organ donation campaigns: 1) **Ganadarpan – an old organ donation movement in West Bengal and India,** primarily a Marxist-rationalist and social reformist movement and 2) **New organ donation initiatives comprising of not-for-profit or corporate social responsibility ventures like Mohan Foundation etc**.

Situation - III

Micro-subjective-experiential narratives of self and other: 1) Comprising of **ethnographic anxieties and negotiations of the researcher, where unfortunate encounter with kidney failure within extended family** plays a crucial role, and 2) **negotiations of ailing persons and their care-givers with kidney failure**, the search for a donor kidney and the moral burden of it

MICRO

8.2 Positional Map:



Main Issue
Organ donation and transplantation

Position I: Macro-institutional discourses of biomedical law aims to boost organ donation and curb organ sale: Law (THOA and its subsequent amendments in India) aim to boost cadaveric donation through brain-death declaration and strictly regulate live donation to curb organ trade **(Local-national axis)**

Position II: Macro-institutional discourses of bio-technoscience promise cloned pig organs as substitutes of scarce human organs: Xenograft engineering companies in US promise human-compatible animal alternatives through gene-editing to human organ to combat organ scarcity **(Global axis)**

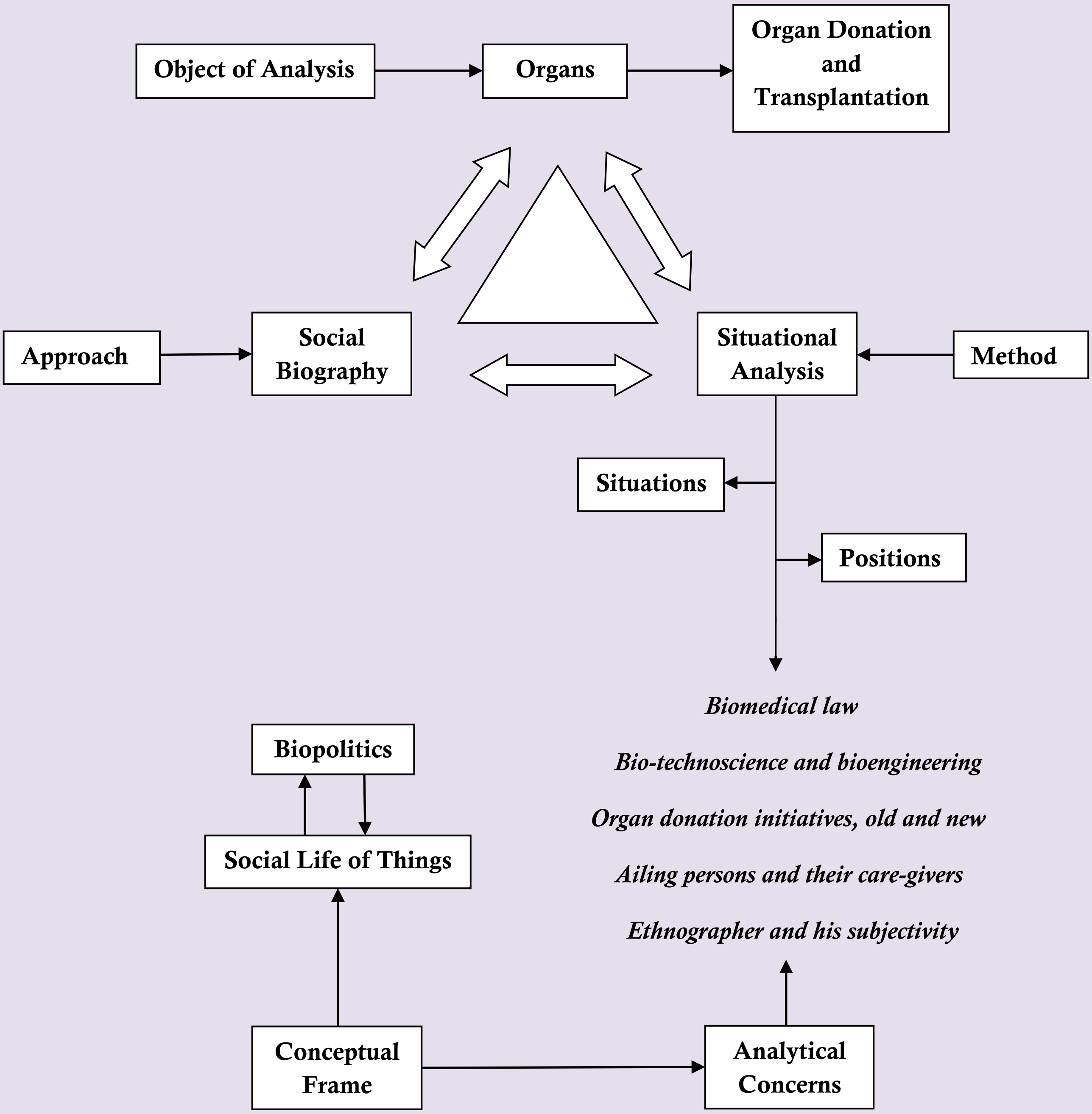
Position III: Meso-organizational discourses of an old donation campaign, Ganadarpan, to generate awareness about cadaveric donation and put in place mechanisms to ensure that pledge results in actual donation–to convert individual body into collective property

Position IV: Meso-organizational discourses of new donation campaigns like Mohan Foundation: to produce ethical subjectivities that sees organ failure and transplantation as an entrepreneurial opportunity from a venture capitalist standpoint

Position V: The experiential and inter-subjective world of people affected by kidney failure and searching for a donor kidney – negotiating with the disease and the moral obligation related to receiving donor kidney from relatives, acquaintances

Position VI: Self-experiences and negotiations of the researcher in the context of personal encounter with kidney failure within extended family and attempts to theorize the complex relations between the positions presented above as a researcher : through a project map using concepts to link various situations under investigation

8.3 Project Map I:



8.4 Project Map II:

Interpretative Itinerary

i. *Limits of* ***biomedical law***
ii. Deductive power as intrinsic to biopolitical processes
iii. Theorization of body as a material-semiotic hierarchical effect helps explain the macabre through the notion of biopolitics of dispensability

i. ***Bio-technoscience*** *as biopolitics of hope – promises of animal future*
ii. Xenoengineering and immunesuppression as biopolitical modes generates a scientific-moral field which rationalizes control of empirical bodies and the body in abstract
iii. The chimeras or cloned or transgenic animals from which animal alternative to human organs to be derived are the others of the biopolitics of hope – the unfortunate case of baboon X201M

i. ***Organ donation initiatives****, whether old or new, are steeped in hopeful life-fostering ideologies and gestures of contemporary biopolitical dispensations*
ii. Ganadarpan despite being an old initiative eulogizes liberal freedom and at the same time is suspicious of its frailty and caprices. New initiatives involve in shaping responsible subjectivities towards larger moral and public goals through manipulation of affect and maneuvers of the psyche from a venture capitalist vantage point

i. Organs and bodies, failing or not, are focal point of discourses of dispute pertaining to proprietorship
ii. Kidneys of Kartick and Saraswati display properties of encumbrance or dispute over proprietorship by external factors or others, although they belong to discrete bodies

i. The rational man deciding what is less morally burdening than receiving a donor organ is not a reduction of morality into a matter of calculative rationality. Rather it points to the impossibility of any standardized market valuation of human organs, absolved to moral considerations

⇩

Toward travels of organs through
situated discourses (macro-institutional, meso-organizational
and micro-subjective-experiential) of organ donation and transplantation

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