

Judicial Cartography in Public Interest Litigation in India: Re-reading the Kudankulam case

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Science, Scientists, and Society

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Abstract

India has witnessed strong and sustained civil society resistance movements against nuclear power plants in the recent past. The Kudankulam Nuclear Power Plant was both a site of such a movement and was also one of the few where the legal challenge was also launched. How should we understand this legal challenge and the judgments of the Madras High Court and then the Supreme Court? This question is explored through the theoretical lens of judicial cartography. Judicial cartography allows us to appreciate the critical role of the Court in deploying its formidable discretion in public interest cases, to legitimate State action and delegitimize citizen demands *vis-à-vis* the development and deployment of nuclear technology. Judicial cartography draws attention to the choices exercised by the Court in the selection of material facts, identification of legal issues, consideration of epistemic resources and in the determination of equitable outcomes. Such judicial choices reduce the space for public deliberation and citizen's engagement in policy and deeply undermine democracy.

1 Introduction

Nuclear technology has played a unique role in the Indian polity. Very early after independence, political commitment towards the development of this technology was made clear and it continues to be unwavering ([Ramana 2012](#), [Mallavarapu 2007](#)). As a consequence, questions raised by civil society actors on the risks associated with this technology have been

largely ignored by the State (Abraham 2009). The Supreme Court of India (henceforth SCI) is one such actor who has also played a formative role in this debate. This is not surprising given that the Court has steadily expanded its remit beyond the traditional function of adjudication of legal disputes to that of policymaking by allowing public interest litigation (PIL).

However, expansion of remit into policymaking requires the Court to increasingly rely on 'experts' who could advise it on technical issues. Such experts may be appointed by the Court as *Amicus Curiae* (friend of the Court) to advise the Court on specific public interest cases. Alternatively, the Court relies on experts from public institutions who are themselves deeply committed to the development of certain technologies, and thus mired in conflict of interest.

Within the political philosophy and also within the sociology of technology, scientific authority and specifically 'expertise' has been extensively analyzed. Paul Feyerabend's argument in *Science in a Free Society* critiqued expert advice and supported for a plurality of argumentation which supported democratic deliberation in policy decision-making on questions of science and technology developments (Feyerabend 1982). Collins and Evans, differentiate between different kinds of expertise and carve out specific roles for scientific specialists and citizens within democratic societies (Collins and Evans 2007). Sheila Jasanoff's research specifically speaks to how scientific expertise has played out in litigation in Court and in case of differences of scientific opinion what is the evidentiary standards evolved by Courts to address such differences in opinion (Jasanoff 2012, Jasanoff 2015).

The Indian context is of course quite unique in how Courts operate in the context of public interest litigation where the normal modes of adversarial litigation (wherein experts from both sides would be open for cross-questioning) are abandoned in favour of a more interventionist Court which then has to make a decision on reliance on experts to address legal questions relating to the regulation of risk. These experts may not be drawn from either of the parties but may be any person which the Court considers to have expertise. Expertise is then an ascriptive identity conferred by the Court and therefore shielded from the scrutiny of the litigants and the public.

What are the risks associated with nuclear technology, how it should be regulated and ultimately what should be the role of the state in addressing associated risks, are all questions which have been raised in the *Kudankulam case*. The case was filed as a PIL challenging certain policy decisions of the government, specifically the establishment of the Kudankulam Nuclear Power Plant (KKNPP).

In response, the Court rejected the evidence adduced by civil society activists as that of 'non-experts' and accepted and relied on expert evidence from public institutions despite their testimony being caught up in a conflict of interest, since it was experts were drawn from those very institutions whose actions were under legal challenge. Thus, public experts were recognized as legitimate actors whose evidence would carry weight in judicial deliberations on such issues. On the other hand, civil society actors were characterized as 'emotional' and therefore not worthy of legal consideration. How do we theorize these developments? I

suggest *judicial cartography* as a possible category through which such developments can be understood, analyzed and critiqued.

Cartography quite simply refers to the process of making maps. Cartographical references have also permeated theorists working in the sociology of law. The most prominent being Boaventura de Sousa Santos's influential essay, "Law: A Map of Misreading. Toward a Postmodern Conception of Law" (Santos 1987). Santos suggests that law-making and application can be chartered and analyzed through cartographical processes such as scale, projection and symbolization. Interlegality is proposed as a postmodern understanding of the law, which draws attention to the dynamic process through which different legal spaces – local, national and world legal spaces – interact in a non-synchronic manner to produce a legal reality. Santos's thesis serves as an inspiration for this article. However, this is not an ethnographic study. I take Santos's study to recognize that law can also be seen as a cartographic tool wherein some actors (to the exclusion of other actors) can play a determinative role in fashioning a legal reality. The autonomy of law as a separate and distinct field which does not only reflect and reproduce social power relations is also underlined by Santos and is reflected in the present study.

Cartography as a process in law has attracted a great deal of myriad scholarship specifically in legal studies (Reiz, et al 2018). For instance contributions from Pickles and others have focused attention on how through mapping subject identities are produced and reoriented for the purpose of law-enforcement in crime control (Pickles 2004). Thus, map-making is an exercise of autonomous choice of the map-maker rather than just an objective capturing of physical reality. Critical geography has explored this agency and subjectivity of the map-maker in the selection of subjects, the arrangement of subjects, and creation of new meanings and ascription of such meanings to these subjects (Crampton and Krygier 2005). In that sense, the idea of cartography draws attention to the agency of the map-maker in representing a certain reality.

I am interested here to explore how the Court in India, specifically with reference to public interest litigations, has also exercised choices which are akin to the role of the cartographer. I use the term *judicial cartography* to describe the process adopted by the Court to delineate the legal problem confronting the court, establish the choice of epistemic resources that would aid in the exploration of the problem, and privilege the narrative of certain actors and render illegitimate other actors. Through the exercise of these series of choices, the Court plays a determinative role in establishing a public narrative of the legitimacy of citizen's demands *vis-à-vis* the State and this has an implication on the public deliberation of technology in India.

In this article, I draw attention to a set of choices through which the Court establishes a narrative on specific technologies. The objective being, to understand and evaluate how 'evidence' as an epistemic resource is generated and the democratic implications of these processes. This also highlights the critical ability of law (principles, institutions and actors) to constitute technologies (Faulkner 2010). All of these aspects are explored through a case study of the *Kudankulam case*.

The *Kudankulam* case refers to the series of legal challenges that have been played out first in the Madras High Court and then was finally addressed by the Supreme Court.

An exploration of the legal challenges is an opportune moment to appreciate the imagination of nuclear technology by state actors, the *public* challenge to this idea of nuclear technology. This is also an opportunity to explore the means by which such challenges are sought to be disciplined within the Court and the democratic implications of this judicial control. How do we understand the relationship between law and technology in light of these explorations? This is the final question that is sought to be addressed in this essay. The following section narrates the legal challenge through the primary court cases first in the MHC and then in the SCI. Section 3 delineates the implications of this narrative. Finally, section 4 comments on the theoretical relationship between law and technology in light of this case study.

2 Tracing the Legal Trajectory of Kudankulam case

Before we proceed with the legal case, it is important to temporally locate the chain of events relating to the establishment and operationalization of the Kudankulam Nuclear Power Plant (henceforth KKNPP). The KKNPP was originally planned to be established in technical cooperation with the erstwhile USSR in 1988. Post the breakup of the USSR, a supplementary agreement was signed with Russia in 1998. Meanwhile, the environmental clearance was granted (albeit with certain conditions) on 9.5.1989. Site clearances were obtained from AERB on 10.11.1989. In 2003 NEERI conducted an Environment Impact Assessment and subsequently in 2004 the project obtained the approval from the Tamil Nadu Pollution Control Board (TNPCB). Following the Fukushima nuclear disaster in March 2011, the Task Force Report on the Safety Evaluation of KKNPP (TFRSEK) recommended seventeen steps as an abundant caution prior to the second stage commissioning of the project in May 2011.

The public interest litigation was first filed in the Madras High Court (hereafter MHC) and thereafter the decision of the MHC¹ was challenged in the SCI. The SCI substantially upheld the judgement of the MHC. It is necessary that both these judgements are discussed and analyzed separately. Although the facts and the final decision of both the Courts were substantially the same, there were differences in how both these courts exercised judicial cartography on all four aspects identified in the Introduction to this article; i.e. the selection of material facts, identification of legal issues; consideration of epistemic resources for the purpose of evidence and finally in the determination of equitable solutions.

[1] Madras High Court Decision was given on Aug 31, 2012.

2.1 Madras High Court Decision

It should be noted that there were eight separate petitions which were co-joined together by the Court. The first four petitions challenged the commissioning of the KKNPP due to regulatory failures. One of these four (filed by PUCL) challenged the establishment of the project itself and wanted the project to be quashed.

The next two petitions² took an adversarial position against those involved in the resistance movement – specifically directed at Mr. Udayakumar (who headed the People's Movement Against Nuclear Energy (PMANE)) – petitioning the Court to direct the local administration and the police to take deterrent steps against the violent activities of the PMANE and apprehend Mr. Udayakumar under the stringent National Security Act, 1980.³ The last two petitions⁴ prayed for directions for the immediate opening of the KKNPP Units 1 and 2 to meet the demand for electricity and that the project was necessary for economic development.

Thus the eighth petitions could be divided into two groups of four petitions each – the first batch challenged the regulatory approvals granted to the project and the second batch of four petitions was largely filed in support of the project.

G.Sundarrajan, the first petitioner (submitted two petitions), filed the public interest litigation in the Madras High Court, challenging the commissioning of the KKNPP in Tamil Nadu.⁵ There were primarily three grounds involved in this legal challenge. First that a fresh and transparent review of the KKNPP should be undertaken, since following the first EIA clearance there was an expansion in the capacity and modernization of the plant. Second, a public hearing should also be held as part of the EIA process and the review process should be undertaken by an independent group of experts. Third, full compliance with the TFRSEK was yet to be undertaken.

The second petitioner was the People's Union for Civil Liberties (PUCL)⁶ that opposed the installation of the KKNPP on the basis that it is likely to severely affect the livelihood, health and safety of people residing in and around the plant, and that the entire project was undertaken secretly and was fraught with illegalities. Additionally, the environmental clearances and safety clearances granted were based on incorrect factual grounds relating to the source of water for KKNPP, disposal of spent fuel, build of Reactor Pressure Vessel and the

[2] Writ Petitions (MD) Nos. 1823 and 2485 of 2012.

[3] The NSA is referred to as stringent here because like all other extraordinary laws it allows for preventive detention of suspects who are a threat to national security and law and order.

[4] Writ Petitions (MD) Nos. 14054 and 14172 of 2011.

[5] Writ Petition No. 24770 of 2011 and Writ Petition No. 8262 of 2012 of the Madras High Court.

presence of welds. The Court made a distinction between these two demands – i.e. review of the KKNPP and the other against the establishment of the plant.

The third petitioner was Fisherman’s Care,⁷ that approached the Court to issue directions to the TNPCB to inspect the KKNPP and ensure full compliance with the mandatory requirements imposed as part of the “consent to establish” before issuing the “consent to operate”, which is a legal requirement before the operationalization of the project. The petitioner had relied on the information obtained through an RTI (Right to Information) request (dated 2.4.2012) which verified that the TNPCB had not undertaken an inspection of the KKNPP for verification of safety measures and had not been granted the consent to operate.

The fourth petitioner⁸ was filed by a practising advocate of the Madras High Court, requesting the Court to not allow for the commissioning of KKNPP until adequate medical facilities and infrastructure for the persons residing in the vicinity of the project given that public safety was of utmost concern.

The respondents included the Department of Atomic Energy (DAE) (representing the Union of India), the Ministry of Environment and Forests (MOEF), Atomic Energy Regulatory Board (AERB), NPCIL (Nuclear Power Corporation of India Limited) and the District and Police Administrations of Tirunelveli district. It is necessary to briefly introduce the rationale of these inclusions. The DAE is the primary government agency tasked with the research, development and implementation of nuclear technology projects in India. The MOEF is the regulatory authority that undertakes regulatory clearances relating to environmental impacts (specifically Environment Impact Assessment and Coastal Regulation Zone). The AERB is the safety reviewer for all nuclear projects (these are all government projects) and radiation activities (both private and government). It functions under the operational control of the DAE. Lastly, the district administration was also involved because there was a large scale public protest led by the PMANE (People’s Movement Against Nuclear Energy) and that had sought to be controlled by invoking the preventive detention provisions under the National Security Act, 1980.

The regulation and governance of nuclear technology had attracted a fair bit of litigation. The PUCL and Bombay Sarvodaya Mandal (BSM) had filed writ petitions⁹ first in Bombay High Court and then upon dismissal in the SC, challenging the nuclear establishment. The SC upheld the dismissal. The constitutional validity of the Nuclear Liability Act, 2010 was also challenged and the SC upheld its validity.¹⁰ This is to underscore that the Courts themselves have been reticent in proposing changes or interfering with the nuclear establishment.

[6] M.P. No. 1 of 2012 in W.P. No. 24770 of 2011.

[7] Writ Petition No. 13987 of 2012. Impleaded as per the order dated 18.06.2012 in M.P. No. 2 of 2011 in W.P. No 24770 of 2011.

[8] Writ Petition No. 22771 of 2011 in Madras High Court

[9] Writ Petition No. 1785 and 1792 of 1996 in Bombay High Court

The respondents' support of the KKNPP was based on four premises. First, the KKNPP was safe because it was built with technology that was more advanced than that used in Chernobyl and Fukushima. It had cleared all safety reviews and conditionalities that were imposed by regulatory agencies like the MOEF and TNPCB and AERB which is the statutory body to undertake a safety audit of the nuclear power plant. Emergency procedures were also in place to meet any eventuality. Second, a considerable amount of public monies had already been invested in the project and international contracts had been signed creating third party rights. Thus stopping the project would amount to great financial loss. Third, India required a rapid increase in power generation and nuclear power plants were necessary. Intervention by the Court would adversely affect the economic development of the country. Fourth, as a policy decision of the government, this was not open to public questioning and judicial scrutiny.

It would be useful to highlight some of the specific arguments made by the respondents with reference to the motivations of the petitioners. This is important because although the public interest litigation as a tool is frequently used by public-spirited individuals and organizations to draw attention to environmental violations and to request for intervention of the Court. A manner in which the process and the challenge can be delegitimized is to personally attack the motivations of the petitioners. Indeed the Court has frequently underlined that public interest litigation should not be pursued for private gain and has used the *doctrine of clean hands* to refuse to admit frivolous petitions or dismiss pending petitions.¹¹ However, respondents representing the State have also frequently launched personal attacks on petitioners as an acceptable route to delegitimize the legal challenge in such cases in Courts, as is apparent in this case.¹² Personal attacks in the absence of a direct conflict of interest (which the doctrine of clean hands aims to protect) only seek to deflect attention away from the substantive legal challenge. Further, when such remarks by respondents are adopted as a whole by the Court, it undermines the public interest litigation system itself and has a chilling effect in dissuading future litigants.

[10] Writ Petition (C) No. 264 of 2011.

[11] See for instance *Subhash Kumar v. State of Bihar* (1991) 1 SCC 598; *Ashok Kumar Pandey v. State of West Bengal* (2004) 3 SCC 349; *Dattaraj Nathuji Thaware v. State of Maharashtra and Others* (2005) 1 SCC 590. The Doctrine of clean hands is a principle that was recognized specifically in the context of public interest litigation, as a caution by the Court in deny admission or dismissing such petitions which were filed by petitioners for their private gain.

The Department of Atomic Energy (DAE) in its counter-affidavit stated:

*“...the claim of the petitioners that there is no need for any electricity generation and nuclear power plant in India is most unreasonable and in respect of these issues the petitioners cannot be regarded as custodians of public perspective...”*¹³

The NPCIL in its counter-affidavit stated:

*“...it is stated that the writ petitions are filed against public interest...”*¹⁴

*“It is stated that the object of the petitioner appears to be not to get more information, but to create and spearhead an anti-nuclear lobby. It is stated that the petitioners has raised various disputed questions of facts and dates, which are not within the jurisdiction of the Court; and that whatever is sought by the petitioners is already provided in Act, Rules, Regulations and Guidelines and are being implemented strictly and, therefore, the petition is prejudiced and misconceived.”*¹⁵

The MHC found that the Supplementary Agreement entered into with Russia to be a continuation of the earlier agreement and was therefore not new. This meant that it did not have to undergo new regulatory reviews under the CRZ and EIA notifications. It also found the contention of modernization was unfounded. Although the court recognized that the safety concerns emanated from the Fukushima nuclear accident, it noted that both government agencies (MOEF and AERB), as well as independent experts (NEERI (National Environmental Engineering Research Institute) and MSSRF (M S Swaminathan Research Foundation)), had found that apprehensions of safety of KKNPP were unfounded. Accepting this as ‘expert opinion’ the court expressed its inability to review it and established clear practice of deference to regulatory bodies. Prima facie the court was satisfied with the safety measures undertaken by the respondents and was confident that the regulatory agencies

[13] 2012 SCC Online Mad 3331. Para 13.3.

[14] 2012 SCC Online Mad 3331. Para 17.1.

[15] 2012 SCC Online Mad 3331. Para 17.2.

[12] See for instance *Anuradha Bhasin v. Union of India* (2020): Writ Petition (Civil) No 1031 of 2019, Supreme Court judgment dated 10 January. The petition was filed by Anuradha Bhasin, the Executive Editor of Kashmir Times. The State while arguing that the communication shut down was essential to address terrorism also cast aspersions on the petitioner, on why the petitioner had not previously approached the Court, for instance in 2016 when a three month long internet shut down was imposed following the death of Burhan Wani in 2016. See blog post <https://internetfreedom.in/government-files-affidavit-in-kashmir-communication-shutdown-and-press-freedom-case/> (accessed on 12/01/2019). Supreme Court has also cast aspersions on the personal motivations of the petitioners in public interest litigations which involve challenging constitutional institutions. See for instance *Anindita v. Pranab Kumar Mukherjee* (2017) SCC OnLine SC 71, decided on 30.01.2017, in this case the Supreme Court while responding to a public interest litigation filed challenging the appointment of the President, went so far as to debar the petitioners from filing any future PILs. Similarly in *Suraz India Trust v. Union of India* (2017) 14 SCC 416, the case was filed challenging the constitutional validity of a provision in the Judges Inquiry Act, 1968. The Court listed the previous petitions filed by the petitioner (over sixty) and found that certain criticisms were made against judges of the High Court and Supreme Court, and found that the petition was thoughtless and frivolous and imposed a cost of Rs. 25 lakhs on the petitioners and barred them from filing any petition in the future. This is of course illegal since barring a petitioner from filing future petitions would also ipso facto would also limit the constitutional power of the High Court’s under Art. 226 to entertain any matter involving enforcement of any of the rights conferred in Part III from the petitioner. So it is not only State counsels who cast aspersions on the personal motivations of the petitioner but also the Court itself when confronted by petitions that raise questions of institutional impropriety, have responded by casting aspersions on the personal conduct of the petitioners rather than addressing the substantive issues raised by the petition

(AERB and TNPCB) were both competent to continuously monitor to plant and intervene in case of non-compliance.

It also accepted the respondent's argument that this was a policy decision and indeed went further to state that *"interference by the Court in the policy decisions which are of basic importance and public importance for the benefit of the public is opposed to the public interest itself."*¹⁶ In effect, it seemed to find that the petitioners were acting against the public interest.

It rejected the demand for post facto public hearing as in such situations *"public hearing can at the most be for rectification of possible defects and not for the purpose of abandonment of the project. In this view of the matter we totally disapprove of the contention raised by M/S. Nagasaila and T. Mohan opposing the project itself."*¹⁷

Indeed it is surprising that the Court expressed its disapproval in such strong terms. PUCL's prayer for the abandonment of the project was based on legal arguments which the Court was free to accept or reject based on evidence adduced by the petitioner and the respondents. However disapproval of the prayer itself – i.e. abandonment of the project – seems to suggest that the Court was not prepared to give fair consideration to the prayer based on its merits.

Evidently, the legal issue as framed by the Court reflects this determination to give preference to certain prayers over others. The Court framed the legal issue as follows:

*"...Whether the KKNPP started by the Government of India through the NPCIL has all required confirmations as per the various statutory provisions, so as to enable the project to proceed further.."*¹⁸

Thus, the plea of PUCL for the abandonment of the project was not considered while framing the legal issue in this case. This erasure of litigant pleas in the Court's determination of the legal issue(s) highlights the enormous power the Court wields in determining the contours of such public interest cases.

The Court chose to ignore a crucial fact which was raised by the petitioners. That NPCIL was going ahead with the operationalization of the plant without fully complying with the conditions laid down in the 'consent to establish' approval issued by TNPCB and that the TNPCB had not conducted a site visit to review the compliance of NPCIL nor had issued the 'consent to operate' order. Fisherman's Care one of the petitioners had obtained this information through an RTI information response dated. 2.4.2012. The TNPCB argued that the information obtained was outdated, given that since then and during the pendency of the case, NPCIL had submitted a letter of compliance which indicated full compliance. It is evident that the TNPCB was caught unaware and that NPCIL only reported on compliance after the case

[16] 2012 SCC Online Mad 3331. Para 72.

[17] 2012 SCC Online Mad 3331. Para 73.

[18] 2012 SCC Online Mad 3331. Para 33.

was filed. Despite this, the Court expressed full faith in the regulatory competence of the agencies involved.

The court relied solely on epistemic resources as adduced by the State. It stated”

*“...as it is seen in the voluminous reports of various authorities like AERB, MOEF, Environmental Impact Assessment, it is not known as to how the Court can substitute its own view, for the reason that the Court is neither an expert nor competent to make a scientific study of recommendation, when once prima facie we are satisfied that the safety measures have been adequately taken.”*¹⁹

Despite PUCL’s contention that unanimity was lacking between nuclear scientists on the safety aspects of the KKNPP, the Court again chose not to engage with those differing experts and rather provide legitimacy by relying completely on experts drawn from the nuclear establishment of the State. Further, by allowing the State Government of Tamil Nadu to submit the Expert Committee report which it had appointed, in a sealed cover, it disallowed the petitioners from accessing the expert report during the pendency of the case.²⁰ Apparently, the Court, therefore, relied on the secret opinion of the Expert Committee – thereby drawing a map of environmental and nuclear safety while at the same instance, dismissing other expert opinions adduced by the petitioners, as rhetoric. Nuclear disasters were framed as errors and accidents, and therefore preventable and not worth consideration by the Court.

Allowing submission of expert opinions in sealed covers prevented the petitioners from challenging the expert opinion or for that matter drawing support for their legal contentions depending on the contents of the report.

Surprisingly, the judgement quotes extensive extracts from the international expert review committee reports which were established to assess and identify failure post the Chernobyl and Fukushima nuclear accidents. Both of which underlined the need for full transparency and the need to full and comprehensive disclosure of information to the public. However, it is apparent that the Courts did not itself imbibe these values in adjudicating this case.²¹

Interestingly, the Court noted the various developmental works created through the KKNPP Neighborhood Development Scheme (residential houses, primary healthcare centers, etc.) and also directed the State government to create further educational, healthcare and fishing infrastructure to help the local residents. Involvement of local residents in offshore drills periodically was also suggested by the Court to raise public awareness. Quite apparent is the Court’s idea of equitable outcomes. Since the operationalization of KKNPP will expose those

[19] 2012 SCC Online Mad 3331. Para 75

[20] This trend of admitting evidence in “sealed covers” has been rapidly expanded by the Court and has drawn criticism from legal academics – see Bhatia Gautam 2018 A petty autocracy”: The Supreme Court’s evolving jurisprudence of the sealed cover. Blog post <https://indconlawphil.wordpress.com/2018/11/17/a-petty-autocracy-the-supreme-courts-evolving-jurisprudence-of-the-sealed-cover/> (accessed on 3/11/2019).

[21] It is interesting to note that the details of the Task Force Report post-Fukushima and other expert committee reports on Kudankulam was only made available by the Department of Atomic Energy to the public through a long process of filings and challenges initiated under the Right to Information Act – see Dr. P Udayakumar v. Nuclear Power Corporation Of India, Decision No. CIC/SG/A/2012/000544/18674 of the Central Information Commission, 30 April, 2012. Accessed from <https://indiankanoon.org/doc/10369858/on 22/11/2019>.

residing in the vicinity to some risk (however minimal), therefore the Court supports a compensatory framework for those exposed to this risk (however involuntarily) by providing access to improved health, education, etc.

2.2 Supreme Court Decision

A slew of petitions was filed in the Supreme Court challenging this dismissal by the Madras High Court.²²

Justice Radhakrishnan delivered the judgement of the Court and Justice Dipak Misra wrote a separate concurring opinion.²³

The judgement began by stating that *“India has 20 nuclear reactors, in place, and the world over about 439, but people still react emotionally, for more reasons than one, when a new one is being established.”*²⁴

This is revealing of the SC’s presumptions about the utility of nuclear technology and the characterization of citizen’s resistance to this technology as a non-rational expression of fear stemming from lack of education and knowledge.

Quite early on in the judgement,²⁵ the Court chose to limit the contours of its judicial scrutiny to only include the safety and security of KKNPP and the environmental issues relating to its operationalization. The decision to establish the KKNPP through an international agreement with Russia was clearly excluded from the purview of the Court. For the SC, the fundamental challenge to the establishment of the KKNPP was not considered by the Court.

Although the Court acknowledged that the appellants had adduced:

“Lot of scientific literatures, expert opinions, etc. have been produced before us to show its dangers, harm it may cause to human health, environment, marine life and so on not only on the present generation but on future generation as well.” Yet the court refused to consider the plea challenging the government’s decision to establish the KKNPP, since it held that it *“cannot be questioned before this Court being part of national policy.”*²⁶

[22] SLP (C)No. 27335 of 2012, SLP (C)No. 27813 of 2012, SLP (C)No. 29121 of 2012 and SLP (C)No. 32013 of 2012.

[23] (2013) 6 SCC 620

[24] (2013) 6 SCC 620 Para 1. This specific reference to “reacting emotionally” to radioactivity – is inspired – from a statement included in the Royal Commission on Environmental Pollution, Sixth Report, Nuclear Power and the Environment”. It is interesting that the Court refers to a report published before the world witnessed nuclear disasters like Chernobyl and Fukushima. The world had completely changed in many ways post these nuclear disasters and experts have sought not to dismiss “non-expert reactions” instead of dismissing them as subjective and non-rational.

[25] (2013) 6 SCC 620 Para 15

[26] (2013) 6 SCC 620 Para 24

Instead, the Court chose to focus instead on two aspects – nuclear safety and environmental safety – as it was deeply concerned with the safety and security of people and the environment.

Thus it directed its attention in addressing the following factual question:

“..whether the project proponent has taken adequate safety requirements in site and off site of KKNPP and followed the Code of Practices laid down by AERB and national and internationally recognized safety methods.”

In addressing this question the Court was able to establish that since the Spent Nuclear Fuel (SNF) would be retained by India (as per the initial with the USSR for establishing the KKNPP it was supposed to be transported back to USSR) and that there was no definite plan yet to establish a Deep Geological Repository (DGR) for that percentage of SNF which would be leftover from processing. Even though the SNF has a long life and will have an environmental impact. Admittedly, this is an issue which had been left unaddressed by the state agencies including AERB.

In the face of its own factual findings, the Court still held steadfastly:

*“We are of the view that these issues have to be dealt with by the experts in the field, evidently without much delay. The AERB Safety Code on “Management of Radioactive Waste of 2007” of 2007 does not deal with the requirements of DGR.... Research is on to handle SNF in DGR which, in the near future, let us hope, would be a reality, but that shall not deter us in holding up of such a project which has been established in KKNPP in implementation of India’s nuclear policy.”*²⁷

Apparently, even while confronting material facts which should have prompted the Court to give fairer consideration to the pleas of the appellants; it could not be deterred from its determination to keep within the self-imposed limits of judicial scrutiny. The primary reason for this is because the Court was convinced about the economic argument forwarded by the State in support of nuclear energy.

The SC dedicated much energy in establishing the economic argument for nuclear energy. Relying on the contentions of the respondent, the Court accepted that it is a clean, safe, reliable and competitive energy source that can significantly replace fossil fuels. As an important element of India’s energy mix, it declared nuclear energy necessary for sustaining economic growth. Here, the Court chose to ignore analysts who have taken contrarian positions on this question (Bidwai 2014, Joshi 2019).

[27] (2013) 6 SCC 620 Para 77

The Court undertook an extensive review of the safety procedures relying on the ground reports and the undertakings given by AERB, NPCIL and regulatory bodies (MOEF, TNPCB). It found the steps taken to be adequate and in addition exhorted the respondents to continuously review the safety measures. It supported the Madras High Court's direction of actively engaging the local populace in offsite emergency exercise.

This would in the understanding of the SC “*make them understand that the project is part of the national policy, participatory in nature and hence we cannot remain a nuclear isolated nation.*”²⁸

The conceptualization of citizens resisting nuclear technology as ignorant and therefore in the need of education and public engagement by the State in order to make them realize that nuclear energy is in their own interest is revealing of the Court's benign paternalism and its inability to appreciate that in a democracy citizens have a right to raise questions, discuss and deliberate over policy issues and especially resist State actions which they expect to adversely affect them. In effect, this is also an emanation of *parens patriae* doctrine – which Indian appellate Courts invoke widely especially in public interest litigation cases – to make State responsibilities towards its citizens – invoking a relationship between a parent and the child.

Unsurprisingly, the Court followed the Madras High Court in upholding compensatory jurisprudence of providing *ex-ante* piecemeal benefits through CSR (Corporate Social Responsibility) to those citizen groups most vulnerable to risks to livelihood, health and indeed life itself from developmental actions of the State.²⁹ CSR is not a right, and therefore completely upon the discretion of the project developer, but this strategy does allow the Court to create a patina of legitimacy for the developmental activities undertaken by entities (whether public or private) with the approval of regulatory agencies. In effect, it is an expression of the Court's idea of equitable solutions. Essentially it accepts the replacement of a right with a promise of charity by the project proponent albeit one which the Court exhorts them to deliver.

Leading the Court to reformulate the idea of public interest on extremely narrow utilitarian grounds: “*...since the production of nuclear energy is of extreme importance for the economic growth of our country, alleviate poverty, generate employment, etc. While setting up a project of this nature, we have to have an overall view of larger public interest rather than smaller violation of right to life guaranteed under Article 21 of the Constitution.*”³⁰

And “*Public money running into crores and crores of rupees have already been spent for the development, control and use of atomic energy for the welfare of the people and hence, we have to put up with such “minor inconveniences, “minor radiological detriments” and “minor*

[28] (2013) 6 SCC 620 Para 117.

[29] *Banwasi Seva Ashram v. State of UP* (1986) 4 SCC 753.

[30] (2013) 6 SCC 620 Para 198.

*environmental detriments” in our lives because the benefits we reap from KKNPP are enormous...”*³¹

Thus, the economic justification for the Court was the ultimate touchstone on which the case was decided. It indicated as such when it held “*apprehension, however legitimate it may be, cannot override the justification of the project. Nobody on this earth can predict what would happen in future and to a larger extent we have to leave it to destiny. But once the justification test is satisfied, the apprehension test is bound to fail. Apprehension is something we anticipate with anxiety or fear, a fearful anticipation, which may vary from person to person.*”³²

The primacy of the argument is made further palatable by undermining citizen’s resistance as being subjective, uninformed and irrational.

On the environmental safety aspects, the Court framed the question in terms of: “*whether NPCIL, the project proponent, while establishing KKNPP, had obtained all necessary environmental clearance and other requisite permission from all the authorities?*”³³

It found that the EIA notification 1994 would be inapplicable to the project since the environmental clearance for the project was granted in 1989. Further EAC (Expert Appraisal Committee) had recommended environmental clearance for the Units 3 and 4 of the KKNPP in 2008 and 2009. Public concerns relating to the safety, livelihood, radiation, impact on marine life, rehabilitation were all considered by the EAC and thereafter necessary clearances were granted.

It underlined the unanimity in the opinion of all expert bodies that KKNPP fully satisfied all safety norms and therefore it was not open to judicial review. Supporting, in essence, the judgement of the Madras High Court, the SC made a few additional directions relating to continuous monitoring of the KKNPP by MOEF, AERB and TNPCB.

Justice Dipak Misra’s concurring opinion was based on an important distinction with the judgement of the Court. Public safety was identified as the primary concern for the Court and given the history of industrial disasters like Bhopal, Justice Mishra exhorted the regulatory authorities and NPCIL to take all necessary measures to ensure safety and security of people living in the vicinity of the project.

Noting that there was substantial compliance with the extant rules and regulations, he, however, cautioned the respondents that “*the Court has not directed for closure of the plant on the basis of the asseverations made before this Court.*”³⁴

[31] (2013) 6 SCC 620 Para 202.

[32] (2013) 6 SCC 620 Para 203.

[33] (2013) 6 SCC 620 Para 140

[34] (2013) 6 SCC 620 Para 235

Further, he was less dismissive of the ‘apprehension’ and underlined the need to take adequate safety measures to assuage fear from the mind of the people and remarked that failure to do so may mean that posterity may not recognize the establishment of a nuclear power plant as progress or development.

Rejecting the utilitarian logic employed by Justice Radhakrishnan, Justice Mishra stated that life was precious and therefore given the risk from nuclear power, all concerned have to be constantly alert because “*life of some cannot be sacrificed for the purpose of the eventual larger good*”.³⁵

In direct contrast to the MHC, ultimately the Supreme Court, in its directions, recognized that the appellants were acting in the public interest to bring this matter for the determination of the Court since they drew attention to the “...*grievance of the local people and the necessity of adequate safety measures.*”³⁶ Further, the Court also urged that all criminal cases filed against those resisting KKNPP, should be withdrawn by the State in pursuance of restoring normalcy and reiterated the need to educate them on the necessity of the plant and that it was in public interest.

3 Excavating Judicial Narratives on the Citizens, Expertise and Equitable Outcomes

The *Kudankulam case* was admitted as public interest litigation by the Madras High Court and thereafter the appeal was admitted by the SC. Presumably, both the Madras High Court as well as the SC saw substantial *public interest* involved for the plea to be admitted. Nevertheless, the respondents from the government agencies attacked the public interest foundations of these petitions by questioning the credentials and intentions of the litigants’ right from the start of the litigation. Various allegations which were defamatory in character were made against the petitioners and faithfully documented by the MHC in its judgement. The judgement itself does not discuss whether there was any proof adduced to support such allegations.

The question arises, what purpose do these allegations serve? As discussed earlier, the sole aim is to delegitimize the legal challenge. Possibly, the documentation of such allegations in the text of the judgement is also used as a textual device by the MHC to draw implicit support for its decision which was against the petitioner. It is even more surprising, given that decision to admit the petition itself reflects, that the Court acknowledges that the petitioners are acting in the public interest. Use of such textual devices, ultimately is against the public interest, because it has a chilling effect on future litigants.

[35] (2013) 6 SCC 620 Para 242

[36] (2013) 6 SCC 620 Para 243

The SC was careful not to follow the MHC's moral judgement on litigant behavior. It was quite categorical in stating:

*True it is, the prayer is for the total closure of the plant and the Court has not acceded to the said prayer but his noble effort is appreciated to put forth the grievance of the local people and the necessity of the adequate safety measures as is perceived.*³⁷

Further, the SC also made a plea that the district administration *endeavour should be made to withdraw all the criminal cases filed against the agitators so that peace and normalcy be restored at Kudankulam.*³⁸

The SC believed that the protests are genuine and that litigants reflect this public questioning in this case.

Interestingly, both courts (SC and MHC) converge on how the *public* is viewed in this legal challenge (emphasis added). The *public* is viewed as this amorphous collective of simpletons who are generally good-hearted but are ill-informed and therefore ignorant about nuclear technology and its utility within national policy and therefore the reliance on benign paternalism. This explains the repeated emphasis on the role of education and public awareness in addressing public protests. Both courts exhort the nuclear establishment to educate the local population in the benefits of nuclear technology and address their apprehensions on safety by involving them in offsite drills.

What the state espouses to be in the public interest in the form of a national policy (in this case promotion of nuclear energy for power generation) is accorded primary importance by the Court. Noting that a substantial amount of public investment has already been made in the development of nuclear energy and specifically the KKNPP, the Supreme Court provided implicit approval to the logic of *fait accompli* in accepting this argument from the petitioner, in the adjudication of this dispute. Public interest becomes coterminous with reductive ideas of utilitarianism and the State becomes the only legitimate voice and legal representative of such interest. Presumably, the Court is inspired by Bentham's idea of legislator's as those enlightened beings, who were elected to represent their idea of what is in the public interest for their electorate and legislate accordingly, rather than directly represent their electorate's interests (Bentham 1789). Thus, legislators exercised considerable agency to determine the best interests of their constituency (given that they were rich and therefore had the time and faculty to expend in making legislations) and since the electorate themselves were not enlightened enough to determine and express what their best interest.

Admittedly, such arguments are not enough to hide policies that tend to disproportionately distribute the risks and benefits especially in the context of hazardous technologies such as nuclear technology. Protest in the grassroots and in the margins is precisely because they are

[37] (2013) 6 SCC 620 Para 243

[38] (2013) 6 SCC 620 Para 244.14

at maximum risk of radiation. Court responds to this truth in two specific ways. First, it attempts to assuage the legitimate fears as mere apprehensions (therefore without any scientific foundational basis) and therefore not worthy of serious consideration.

*Apprehension, however legitimate it may be, cannot override the justification for the project. Nobody on this earth can predict what can happen in the future and to a large extent we have to leave it to the destiny. But once the justification test is satisfied, the apprehension test is bound to fail. Apprehension is something we anticipate with anxiety or fear, a fearful anticipation, which may vary from person to person.*³⁹

Thus, for benefit of the numerical majority, a small minority should be agreeable to bear the aggravated risk. This is justified also because the risk is sought to be undermined by using terms such as *fear, apprehension, and anxiety* and therefore subjective and not a public hazard that should be legitimately addressed.

Second, the SC supports a heightened burden of CSR (corporate social responsibility) activities to be undertaken by the project proponent in such cases.

CSR is much more when the project proponent sets up NPPs, thermal power plants, since every step taken for generation of energy from such hazardous substances, is bound to have some impact on human beings and environment, even though it is marginal.....this Court in Banwasi Seva Ashram v. State of UP ⁴⁰ allowed the construction of NPP in a displaced forest area, but ordered inter alia that every family of forest dwellers be provided with a housing plot of specific dimensions elsewhere, that health, education, sanitation services and the like, be provided there, as part of CSR. ⁴¹

This is formulated very much as a buyout! Somewhat contradicting itself, the SC admits to the reality of nature of the activity as hazardous but in response, it proposes corporate philanthropy to maybe lighten the heightened risk burden by ensuring private services for basic public goods such as sanitation, education and health. SC shows an acute awareness of the reality that first such projects are usually developed in the periphery where availability and access to public services will be a problem. The solution is indeed ingenious! Rely on philanthropy to provide basic public goods in return for undertaking higher risk to life, property and livelihoods in the greater public good. Who benefits and who undertakes the risk burden? This fundamental question is implicitly acknowledged but never directly addressed by the Court. The Court formulates an unjust compromise in the garb of legal solutions.

[39] (2013) 6 SCC 620 Para 203

[40] 16 (1986) 4 SCC 753

[41] (2013) 6 SCC 620 Para 120 and 121

Both courts reiterated the principle of judicial deference to expertise. This is evident from the almost ritualistic reliance on affidavits of various government agencies for the establishment of facts and belief in the undertakings being granted. There is no engagement of the scientific literature adduced by the petitioners and the appellants, rivalling the claims of the nuclear establishment and the regulatory authorities. By accepting expert reports in ‘sealed covers’, the MHC also denied the petitioners the opportunity to challenge expert findings and provide ground and opportunity for cross-examination.

The court failed to consider the factual reality that the nuclear regulator (AERB) is not an independent agency, but functions within the operational control of the DAE – the nodal agency for the promotion of nuclear energy. The Controller and Auditor General (CAG) as well as the Public Accounts Committee of the Parliament has criticized this and recommended an independent nuclear regulator in India.⁴² Blind reliance on experts who are in this case ‘interested parties’ compromises the Court’s ability to provide an open forum in which expert witnesses can be cross-questioned by all litigants. This is especially required in such cases wherein the science on the potential for environmental hazard is disputed.⁴³ The exalted status extended to public experts by the Court is unnecessary and indeed creates inequality between litigants especially when there are rival narratives of risk and public safety.

The preceding discussion highlights the myriad processes through which the Court practised judicial cartography thereby playing a constitutive role in shaping the public discourse on nuclear technology in India. Judicial cartography is exercised through a series of choices made by the Court, in the selection of material facts, the definition of the legal issue(s), determination of epistemic resources for the purpose of evidence and in identifying the parameters of equitable outcomes.

I would like to specifically comment on the Court’s undermining of legal claims by petitioner and appellants and in ascribing new identities to them in course of adjudication. The Court, therefore, appeared to deny the space for self-representation to a set of litigants.

It is important to contextualize this discussion with reference to the academic debate between Sundar Sarukkai and Gopal Guru on the question of identity in social theorization (Guru and Sarukkai 2012). Guru has argued that the identity of the researcher and their lived experience is critical in equipping them to act as faithful chroniclers of social reality. Sundar emphasizes that the nature and depth of experience may not only be a function of lived social identity but also through empathy, education and reflection. Social sciences have witnessed a rich and engaging debate on the ethics of representation (Bakan 1996, Moore 2012, Pickering and Kara 2017).

Law, as an academic discipline has largely been an outsider to this debate. The reason primarily is unlike social sciences; legal academia has been shaped and influenced by the

[42] Lok Sabha Secretariat, Activities of the Atomic Energy Regulatory Board, Ninetieth report of the Public Accounts Committee, Fifteenth Lok Sabha, Public Accounts Committee. 9 December 2013.

[43] The ICJ also recommends that expert evidence should be open for cross questioning especially in cases of dispute over the nature and extent of environmental hazards resulting from a certain activity. See *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, I.C.J. Reports 2010, p. 14

nature and practice of the legal profession. Law as a discipline recognizes that law in terms of both substantive principles and practice requires access to specialized knowledge and skills and the translation of social reality into legal claims by the advocate. As an academic discipline (specifically for positivist lawyers), social reality, therefore, is always presumed to exist outside of law, and therefore a legal academic is well equipped to objectively analyze, represent and articulate this social reality in terms of legal issues and suggest legal mechanisms to address this ([Davies 2002](#)). Nevertheless, there has also been a growing reflection specifically in critical legal theory on the necessity of dismantling subject positions in pursuance of revealing the structural inequality of society and in interrogating the role of law in perpetuating this ([Munger and Seron 1984](#)). Even amongst positivists, the ethics of translation of social reality into legal language and law's failure in many ways to respond to the methodological debates in social science has attracted a fair bit of soul searching and critique ([Samuel 2008](#)).

It is interesting to note, that law as a profession has well-developed codes of professional ethics which aim to discipline lawyer-client relationships with the objective of ensuring fidelity to client self-representation and in ensuring for the protection of best interest of clients. Within common law countries, in the Court, this process is played out through the adversarial trial process, in which lawyers representing their clients engage in legal argumentation, with the judge presiding as the neutral arbitrator and pronouncing judgement based on well-developed rules on precedence and interpretation of the law. Similarly, in Courts operating within the civil law jurisdiction, Courts are guided by well-established rules on procedures in following an inquisitorial process of establishing facts through the examination of witnesses.

Public interest litigation, however, has thrown a unique set of challenges to the appellate Courts in India. In these cases, the Court in the early eighties actively developed and deployed procedural rules (for instance liberalizing rules on standing) which allowed for litigants to approach and seek the intervention of the Court on a wide range of issues concerning social justice. However, in the course of its expanding jurisdiction over the 90s and during the turn of the century the Court has been secured for itself wide and continually expanding discretion ([Bhuwania 2016](#)) in dealing with the deluge of public interest litigations, that was marked by certain attributes. First, in the face of repeated executive recalcitrance witnessed through the repeated non-compliance of judgments and orders, the Court used the writ of mandamus to keep cases pending as a mechanism for actively overseeing the enforcement of its orders. For instance, in the *Godavarman case*⁴⁴ one of the longest-running environment cases in the world, the case has been ongoing in the Supreme Court for over two decades.

Second, the Court has also wielded its inherent powers under Article 32 (constitutional provision under which most public interest litigations in the Supreme Court are filed) to enlarge the scope of the petition to include legal issues in addition to those identified by the petitioners. For instance, again in the *Godavarman case*, the petitioner Mr. T. N. Godavarman had approached the Court seeking its intervention to check timber felling in the state of Tamil

[44] (WP 202/1995) CDJ 2005 SC 713.

Nadu. The Court subsequently found timber felling to be a national problem and consequently enlarged the remit of the initial petition to include all aspects of forest governance (including diversion of forests, use of forests for non-forest use, monetary value of trees) ultimately the cumulative orders of the Supreme Court has triggered the enactment of a legislation (Compensatory Afforestation Fund Management and Planning Authority Act, 2016) to regulate the monies collected from the diversion of forests. Such instances are increasingly common in public interest litigation. Recently, the Supreme Court in the public interest litigation filed by Harsh Mander on the condition of detention centers for foreigners in Assam refocused the scope of the petition to address the deportation of illegal migrants ([Venkatesan 2019](#)).

Third, there has been excessive reliance by the Court in public interest litigations on the amicus curiae to provide an objective fact narrative with reference to the case, to report on the execution of court's orders, framing of legal issues, provide expert advice on the merits of the arguments made by the parties to the petition and also suggest equitable outcomes to the Court. Some of these are quite apparent from judgements and orders of the Court where it explicitly refers to the amicus's submission but more often this can only be traced through actually ethnography of court hearings in such cases. Such interaction provides the amicus to inordinately influence the proceedings in a case without sufficient procedural safeguards.

Fourth, there has been the Court's pursuance of equitable outcomes, this is especially prevalent in cases where the Court has tolerated legal violations because it apprehends an executive backlash or popular support for such violations. The *Kudankulam* case is a textbook example of such a propensity. In such circumstances, the Court heavily relies on the provisioning of monetary or other physical benefits to those adversely affected by such violations so as to provide some modicum of reparative relief as against restitutive forms of justice.

All these attributes have strengthened the hands of the appellate Courts in India and specifically the Supreme Court in completely undermining and in some cases even silencing ⁴⁵ the petitioner's representation (facts narrated, legal issues raised and legal relief sought) in the case. The Madras High Court, in this case, chose to reproduce the personal allegations made by the State agencies, with reference to the petitioners. This is not only a denial of self-representation but an act of misrepresentation. Unlike an advocate whose actions are circumscribed by ethical rules requiring the standard of best interest of the client or for that matter, a common-law court (overseeing an adversarial trial) or an inquisitorial court pursuing the establishment of truth, a public interest litigation Court is a *sui generis* creature which wields enormous discretionary power with only limited procedural rules curbing the use of this power. Conditions for the abuse of this discretion and the chilling effect it has on litigants who approach the Court in such cases. Misrepresentation should be fundamentally understood as an act of identity ascription by the Court on litigants, depriving them of citizenship

standing and reduces them to supplicants of State paternalism. More gravely it succeeds in corraling technology choices by the State from public deliberation.

At the very least, a strong moral case exists for the Court at the *de minimum* to undertake a duty not to misrepresent. Of course, the best-case scenario would be for the Court to revisit the origins of the public interest litigation movement in India and recognize that this was evolved as an instrument not to wield discretionary power of the judiciary but as a mechanism for allowing social justice claims to be brought for legal adjudication and granting of accessible reliefs to the marginalized. To recover the original imperative and inspiration for the public interest litigation, the Court should develop procedures that would allow litigants the fullest right and expression of self-representation in the Court and in the case.

4 Law and Technology: Some theoretical musings

The MHC constructed the resistance movement as dangerous and security risks and therefore implicitly supported their criminalization through the application of the National Security Act, 1980. On the other hand, the risk from the nuclear power plant is couched in the realm of error or in the language of accidents. State monopoly over science and technology is accepted and treated as a secret. Those outside the nuclear establishment (including those affected by nuclear power plants) cannot possess scientific expertise. Such characterizations evoke the genealogy to the Bhopal gas disaster, where victims were constructed as malingers (Das 1997) and the State's relationship with citizens was constructed on the *parens patriae* principle which denuded the citizens any right of questioning State inaction and failure in securing justice (Baxi and Dhanda 1990).

In the context of this case study, what is apparent from this discussion is that we need to confront a necessary truth about the public interest litigation system in India, which is that it is not an open space for the contestation of different public visions and ideas. But in fact, this space is tightly controlled by the judiciary. Judicial control extends to various aspects both fundamental (for instance, what is the public interest, admissibility of expert evidence, nature of judicial scrutiny of government pledges) and auxiliary (length of argumentation, etc.) and this should be expressly recognized as an exercise of judicial cartography. Recognition would allow us to explore and investigate this development more critically.

In the *Kudankulam case*, the Court made a series of choices of form and substance. How were legal positions represented by both parties in their initial complaints and thereafter in their written submissions? How were they received and thereafter narrated by the Court is markedly different? For instance, both the petitioners pleaded for an independent assessment of the KKNPP, but the Court chose to focus on allegations of environmental violations

[45] Matthew Nedumpara barred from practicing before the Supreme Court - <https://barandbench.com/breaking-sc-bars-mathews-nedumpara-from-1-year-suspended-prison-sentence/> Accessed on 13/11/2019.

[46] There are honourable exceptions, such as the work of Sheila Jasanoff, Alex Faulkner and Gary Edmond.

(Environmental Impact Assessment notification and Coastal Regulation Zone notification). The judgement reiterated the unanimity of expert opinion which in fact is untrue – given that that almost all opinion emanated not from independent scientists but from those within the nuclear establishment entrenched within the State. The Court was complicit in ensuring continued secrecy of the nuclear establishment. In response to the allegations of environmental violations in terms of EIA and CRZ, the Court took refuge in the stated undertakings of the various government agencies. Ultimately, by framing it as a policy issue rather than focusing on the environmental violations, the Court created an impeccable line of legal argumentation which denied the litigants the legal space for questioning such technological developments.

In the Court's eyes, the State is the only repository of public interest. Questions raised by members of the *public* are necessarily due to misinformation and misunderstanding. This sanitizes the notion of technology as a necessary public good to be pursued by the benevolent state on behalf of its naïve citizens. Such conceptions of public participation (or the lack of it) in technology governance are fundamentally undemocratic and harmful for any civil society.

The litigation space as conceptualized in common law is messy and necessarily adversarial. Ideally, it is a space open to participation and manipulation and indeed thrives on contestation. The public interest litigation as has developed in India, on the other hand, is fashioned as space which even though it is technically accessible by the public – is substantively removed from public deliberation. The promise of fashioning a new remedy for the marginalized has failed and in the process, we have a much-impooverished idea of technology that is seemingly for the public good.

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