



Scientific Integrity and the Right to Fair Trial: Reassessing the Admissibility of Forensic Evidence in Indian Criminal Trials

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Abstract

Forensic evidence now shapes the outcome of a large proportion of Indian criminal trials, yet the statutory architecture governing its admissibility has not kept pace with either the growth of forensic science or the constitutional guarantee of a fair trial under Article 21. This article examines the evidentiary framework built around Section 45 of the Indian Evidence Act, 1872, now reproduced as Section 39 of the Bharatiya Sakshya Adhiniyam, 2023, alongside the constitutional safeguards developed in *State of Bombay v. Kathi Kalu Oghad* and *Selvi v. State of Karnataka*. It argues that Indian courts admit forensic evidence chiefly on the qualification of the witness rather than on the validated reliability of the underlying technique, unlike jurisdictions that apply a Daubert-type reliability standard. Drawing on decisions concerning DNA profiling, handwriting identification, and neuroscientific investigative techniques, the article identifies gaps in forensic laboratory accreditation, chain-of-custody regulation, and judicial gatekeeping, and proposes a reliability-centred admissibility framework to reconcile scientific integrity with the accused's right to a fair trial.

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1. INTRODUCTION

Criminal adjudication in India has undergone a quiet but consequential transformation over the last three decades. Convictions that were once secured almost entirely through eyewitness testimony and circumstantial narrative now routinely rest on DNA profiling, ballistic comparison, digital forensics, handwriting identification, and, in a contested minority of cases, neuroscientific techniques such as polygraph examination and narcoanalysis. Investigating agencies, prosecutors, and trial courts alike have come to treat forensic findings as possessing a presumptive authority that lay testimony rarely commands. Yet the law that determines whether such evidence may enter a trial at all, historically Section 45 of the Indian Evidence Act, 1872, and now Section 39 of the Bharatiya Sakshya Adhiniyam, 2023 (BSA) was drafted to answer a narrower question: whether a witness possesses sufficient skill in a specialised field to have their opinion treated as a relevant fact. It was never designed to test whether the underlying technique is itself scientifically valid, replicable, or free from the errors that plague even well-established forensic disciplines. This gap between admissibility-as-qualification and admissibility-as-reliability sits uneasily with the constitutional guarantee of a fair trial. The Supreme Court has repeatedly held that Article 21 of the Constitution embraces not merely the formal conduct of a trial but its substantive fairness, and that convictions grounded in unreliable or coercively obtained evidence offend this guarantee. Nowhere is the tension sharper than in the reception of forensic evidence, where scientific-sounding testimony can carry an aura of infallibility before a court that is often not equipped to interrogate its methodological foundations. The Supreme Court's own recognition, in *Selvi v. State of Karnataka*, that several widely used investigative techniques rest on contested science illustrates that scientific integrity and evidentiary admissibility cannot be treated as separate inquiries. This article undertakes a doctrinal reassessment of the admissibility of forensic evidence in Indian criminal trials, situated at the intersection of evidence law, constitutional criminal procedure, and the sociology of forensic science. Part II maps the statutory framework governing expert and forensic evidence, tracing the transition from the Evidence Act, 1872, and the Code of Criminal Procedure, 1973 (CrPC), to the Bharatiya Sakshya Adhiniyam, 2023, and the Bharatiya Nagarik Suraksha Sanhita, 2023 (BNSS). Part III examines the constitutional dimensions of forensic evidence collection, particularly the interaction between Article 20(3) and Article 21. Part IV surveys the judicial standards actually applied when courts assess the admissibility and weight of expert testimony, from handwriting and medical opinion to DNA profiling. Part V argues that these standards leave a structural deficit in scientific gatekeeping, compounded by weaknesses in India's forensic laboratory infrastructure. Part VI draws a comparative lesson from the American *Daubert* standard to propose a reliability-centred reform agenda, before Part VII concludes.

2. The Legal Framework Governing Forensic and Expert Evidence in India

2.1 Expert Opinion: From Section 45 of the Evidence Act to Section 39 of the BSA

The primary gateway through which forensic findings enter an Indian trial is the law of expert opinion. Section 45 of the Indian Evidence Act, 1872 provided that when a court has to form an opinion on a point of foreign law, science, art, handwriting, or finger impressions, the opinions of persons specially skilled in those fields are relevant facts. A related provision, Section 45A, inserted by the Information Technology (Amendment) Act, 2008 with effect from 27 October 2009, made the opinion of an examiner of electronic evidence under Section 79A of the Information Technology Act, 2000 a relevant fact. Section 46 permitted facts that would otherwise be irrelevant to be admitted where they support or contradict an expert's opinion.

The Bharatiya Sakshya Adhiniyam, 2023, which received presidential assent on 25 December 2023 and came into force on 1 July 2024, repealed the Evidence Act and re-enacted these provisions with modification. Section 39(1) of the BSA reproduces the substance of Section 45, but widens its scope by adding the phrase "or any other field" to the enumerated subjects of foreign law, science, art, handwriting, and finger impressions, so that expert opinion is no longer confined to a closed list of disciplines. Section 39(2) absorbs the former Section 45A, preserving the relevance of an electronic evidence examiner's opinion. Section 40 of the BSA corresponds to the former Section 46, and Section 45 of the BSA numerically identical to, but not textually the same as, the old Section 45 now governs the grounds on which an opinion is based, a function previously performed by Section 46 read with Section 51 of the 1872 Act.

Neither the old nor the new provision defines what makes a field of knowledge sufficiently scientific to ground admissible opinion evidence, nor does either statute require proof that a technique has been validated, tested for error rates, or subjected to peer scrutiny before its results may be placed before a court. The statutory threshold is the skill of the witness, not the soundness of the method. This has left the task of defining what counts as reliable expertise almost entirely to judicial elaboration, examined in Part IV below.

2.2 Collection of Forensic Samples: Sections 53, 53A and 164A of the CrPC and Their BNSS Successors

A second statutory layer governs how forensic evidence is physically collected. Section 53 of the CrPC, 1973 authorised a police officer to have an arrested person examined by a registered medical practitioner where there were reasonable grounds to believe that such examination would furnish evidence, and permitted the use of reasonable force, including the taking of blood samples. Section 53A, inserted by the Criminal Law (Amendment) Act, 2005, created a specific procedure for the medical examination of a person accused of rape, expressly including the collection of material for DNA profiling. Section 164A, inserted by the same 2005 amendment, required the medical examination of a rape victim within twenty-four hours of the report and similarly contemplated DNA-related sample collection. With the commencement of the

Bharatiya Nagarik Suraksha Sanhita, 2023 on 1 July 2024, Sections 53 and 53A of the CrPC were carried forward as Sections 51 and 52 of the BNSS respectively, continuing to authorise the collection of bodily samples, including blood, semen, and other biological material, from an arrested person or a person accused of rape through a registered medical practitioner. Section 164A was separately re-enacted as Section 184 of the BNSS, which governs the medical examination of a rape victim and, per its explanation clause, imports the definitions of "examination" and "registered medical practitioner" from Section 51.

The Supreme Court has treated the availability of this procedure as consequential rather than merely permissive. In *Krishan Kumar Malik v. State of Haryana*, decided on 4 July 2011, the Court held that once Section 53A had been inserted into the CrPC, it had become necessary for the prosecution, in appropriate cases, to conduct a DNA test and place its results before the trial court; the failure to do so, where semen recovered from the complainant's undergarments was never sent for forensic examination, was treated as a significant evidentiary gap that, combined with other infirmities, contributed to the acquittal of the appellant. The decision illustrates that the statutory availability of forensic testing has begun to generate an expectation, if not yet a rigid rule, that the prosecution will use it, converting the absence of forensic corroboration into a factor that can work against the case for conviction.

2.3 The Absence of a Dedicated DNA Regulation Statute

Despite the growing reliance on DNA evidence, India has no dedicated legislation regulating DNA profiling, data retention, or laboratory accreditation for this purpose. Successive versions of the DNA Technology (Use and Application) Regulation Bill introduced in 2018 and again in 2019, and examined by a Parliamentary Standing Committee that reported in February 2021 sought to establish a DNA Regulatory Board and a national DNA data bank, but the 2019 Bill was formally withdrawn from the Lok Sabha in July 2023 amid concerns over privacy, the risk of caste- or community-based profiling, and inadequate safeguards on data retention. The consequence is that DNA evidence is currently produced, tested, and admitted under the general expert-opinion provisions of the BSA and the sample-collection provisions of the BNSS, without the standard-setting, accreditation, and oversight mechanisms that a dedicated statute would supply. This regulatory vacuum is a recurring theme in Part V of this article.

3. Constitutional Dimensions: Fair Trial, Self-Incrimination, and Bodily Integrity

3.1 Article 21 and the Substantive Content of a Fair Trial

Since *Maneka Gandhi v. Union of India* (1978) read a requirement of fairness, justness, and reasonableness into the "procedure established by law" under Article 21, the right to a fair trial has been understood as extending beyond the formal steps of a criminal proceeding to its substantive integrity, encompassing the reliability of the evidence on which a conviction rests. A trial conducted with scrupulous procedural regularity but resting on scientifically unreliable evidence

would, on this understanding, still fall short of the constitutional guarantee, because the object of Article 21 is not merely procedural regularity but a just and accurate determination of guilt.

3.2 Article 20(3), Bodily Evidence, and Kathi Kalu Oghad

Article 20(3) of the Constitution provides that no person accused of an offence shall be compelled to be a witness against himself. The question of how far this privilege restricts the compulsory extraction of forensic samples was authoritatively addressed by an eleven-judge bench of the Supreme Court in *State of Bombay v. Kathi Kalu Oghad*, decided on 4 August 1961. The accused, charged with murder, had been compelled to give specimen handwriting samples in custody, which were then matched against material found at the crime scene under Section 27 of the Evidence Act. The Court held that compelling an accused to give a specimen of handwriting, signature, or a similar physical, non-testimonial sample does not amount to being a "witness against himself," because Article 20(3) protects against compelled testimonial communication of personal knowledge, not against the compelled production of the body or its physical characteristics as a source of comparison. This bodily-evidence/testimonial-evidence distinction has since operated as the doctrinal foundation permitting the compulsory collection of fingerprints, handwriting exemplars, and, by extension, biological samples for DNA profiling, without offending Article 20(3).

3.3 Selvi v. State of Karnataka: The Limits of Neuroscientific Compulsion

The bodily-evidence exception recognised in *Kathi Kalu Oghad* reached its limit in *Selvi v. State of Karnataka*, decided by a three-judge bench on 5 May 2010 in a batch of appeals beginning with Criminal Appeal No. 1267 of 2004. The Court was asked to determine the constitutionality of the involuntary administration of narcoanalysis, polygraph examination, and the Brain Electrical Activation Profile test. It held that narcoanalysis, which relies substantially on verbal revelations made under the influence of a disinhibiting drug, amounts to testimonial compulsion within the meaning of Article 20(3) even though the statements may later prove exculpatory, because the testimonial character of a statement cannot be assessed only after the fact. The Court further held that although polygraph examination and the BEAP test do not require verbal answers, drawing inferences from an individual's physiological or neurological responses to relevant stimuli still constitutes the extraction of personal knowledge and therefore falls within the protective scope of Article 20(3). On this basis, the Court ruled that none of the three techniques could be administered without the subject's free and informed consent, that any material obtained through consensual administration would not itself be treated as a confession, and that the involuntary administration of such techniques additionally violated the right to privacy and to protection against cruel, inhuman, or degrading treatment under Article 21.

Selvi is significant for this article not only for its constitutional holding but for the manner in which the Court engaged with

scientific evidence to reach it. The judgment scrutinised empirical literature on the reliability of narcoanalysis and polygraphy, noting the documented risk of confabulation under sedation, the suggestibility of a subject in a drug-induced state, and the absence of a scientific consensus validating polygraph outcomes as accurate indicators of deception. In treating the demonstrated unreliability of these techniques as a factor reinforcing the constitutional prohibition on their compulsory use, the Court implicitly recognised that scientific validity and constitutional permissibility are connected rather than independent inquiries, a connection that, as Part V argues, the ordinary law of expert evidence under Section 39 of the BSA does not yet operationalise for other forensic techniques.

4. Judicial Standards for the Admissibility and Weight of Forensic Evidence

4.1 Qualifying the Expert: Jai Lal and Ramesh Chandra Agarwal

Indian courts have developed a body of case law on who qualifies as an expert competent to give opinion evidence, but this jurisprudence addresses the credentials of the witness rather than the validity of the method applied. In *State of Himachal Pradesh v. Jai Lal*, decided in 1999 and reported at (1999) 7 SCC 280, the Supreme Court considered whether a District Horticulture Officer, who admitted he had received no formal training in assessing diseased apple crops and had not personally inspected the orchards in question, could be treated as an expert under Section 45 of the Evidence Act. The Court held that he could not, explaining that an expert is a person who, by virtue of special study, training, or experience, has become skilled in a particular field, and that mere occupancy of an official position without demonstrated skill in the relevant subject does not satisfy the section.

In *Ramesh Chandra Agrawal v. Regency Hospital Ltd.*, decided on 11 September 2009 and reported at (2009) 9 SCC 709, the Supreme Court elaborated the test further, holding that an expert is someone who has devoted time and study to a special branch of learning, whether through formal education, practice, or careful observation, and that formal qualifications are not the sole criterion of expertise. The Court emphasised that the real function of an expert witness is advisory: to place before the court the materials and the reasoning that led to a conclusion, so that the court, although not itself expert, can form an independent judgment by applying those materials to the facts of the case. Citing its own reasoning in *Jai Lal*, the Court held that expert evidence must proceed on principles that are reliable and drawn from a recognised field of expertise, though as commentators examining this line of authority have observed the judgment stops short of explaining what makes a principle "reliable" or a field "recognised," leaving those questions to be answered impressionistically in each case rather than through a defined test.

4.2 Expert Opinion as Weak, Corroborative Evidence

A consistent theme across this jurisprudence is that expert opinion, however admissible, is treated as advisory and corroborative rather than conclusive. Courts have repeatedly held that an expert's bare conclusion, unaccompanied by the

data or reasoning that supports it, does not constitute evidence merely because it originates from a qualified witness, and that such an opinion, while technically admissible, may be given no weight if it does not withstand scrutiny in cross-examination. This treatment reflects the Evidence Act's original design: Section 45 (now Section 39 of the BSA) governs relevance, not the ultimate weight or credibility a court must accord to what is admitted, and Indian courts have consistently declined to treat expert testimony, including forensic testimony, as binding on the trier of fact.

4.3 DNA Evidence: From Krishan Kumar Malik to Pattu Rajan

The judicial treatment of DNA evidence illustrates both the growing centrality of forensic science to Indian criminal adjudication and the continued absence of a developed reliability standard governing it. As discussed in Part II, *Krishan Kumar Malik v. State of Haryana* (2011) 7 SCC 130 held that the insertion of Section 53A into the CrPC created a practical, if not absolute, obligation on the prosecution to conduct DNA testing in appropriate cases, treating its omission as a factor undermining the prosecution's case. In *Pattu Rajan v. State of Tamil Nadu*, decided on 29 March 2019 and reported at (2019) 4 SCC 771, the Supreme Court cautioned, in language later reiterated in subsequent decisions, that although DNA evidence's accuracy has increased markedly with advances in science and technology, the discipline has not reached a stage at which it can be treated as infallible, and that the probative value of DNA evidence, like all opinion evidence, varies with the facts and circumstances of each case and the weight of the other evidence on record, whether corroborative or contrary.

What is notable in this line of authority is that the courts' caution about DNA evidence has been expressed almost entirely as a matter of evaluative weight, how much a trial court should trust a DNA match once admitted rather than as a threshold admissibility inquiry into the laboratory's accreditation, the validation of the specific testing protocol used, the size and composition of the reference population underlying any statistical match probability, or the chain of custody by which the sample reached the laboratory. Admissibility and reliability remain, in practice, two largely separate conversations, the first governed by Section 39 of the BSA and answered quickly in favour of admission, and the second left to the trial court's general appreciation of evidence at the end of the trial.

5. The Problem of Scientific Integrity: Reliability, Validation, and Institutional Gaps

5.1 The Absence of a Gatekeeping Standard at the Point of Admission

The cumulative effect of the doctrine surveyed in Parts II and IV is that Indian law lacks a dedicated, pre-trial gatekeeping mechanism analogous to a reliability hearing, at which the scientific foundation of a forensic technique as distinct from the credentials of the individual witness is tested before the evidence is placed before the trier of fact. Once a witness is found to possess sufficient skill or experience, the underlying technique itself is rarely examined for its error rate, its

susceptibility to bias, or its acceptance within the relevant scientific community, at the stage of admission. Whatever scrutiny the technique receives tends to occur only later, in the course of appreciating the weight of the evidence at final judgment, by which point the evidence has already shaped the conduct of the trial, informed bail and remand decisions, and influenced the psychological register in which the case is tried.

5.2 Forensic Science Laboratory Capacity and Accreditation

This doctrinal gap is compounded by well-documented weaknesses in India's forensic science infrastructure. State forensic science laboratories face chronic shortages of trained personnel and modern equipment, resulting in substantial backlogs in the processing of DNA, ballistic, and digital evidence; delays of many months, and in some cases years, between sample submission and report generation are not unusual, creating pressure that can compromise the rigour of analysis. Accreditation to recognised quality standards, such as those maintained by the National Accreditation Board for Testing and Calibration Laboratories, is not uniform across the network of central and state forensic laboratories, meaning that the same category of evidence may be tested under different quality-assurance regimes depending on which laboratory happens to receive the sample. Because neither the BSA nor the BNSS conditions the admissibility of forensic testimony on accreditation of the laboratory that performed the analysis, an unaccredited laboratory's DNA or ballistic report is, as a matter of formal admissibility, on the same footing as one from an accredited facility; the distinction, if it matters at all, surfaces only as a factor going to weight.

5.3 Chain of Custody and the Risk of Contamination

A related concern is the absence of a codified, uniform chain-of-custody protocol governing the collection, packaging, transport, and storage of forensic samples between the scene of an offence and the laboratory. Because Sections 51 and 52 of the BNSS (the successors to Sections 53 and 53A of the CrPC) regulate who may collect a sample and from whom, but say little about how the integrity of that sample must be preserved thereafter, courts have had to address contamination and mishandling arguments on an ad hoc, case-by-case basis rather than by reference to a settled statutory standard. Where the identity and integrity of a sample cannot be reliably traced from collection to analysis, the probative value of even a scientifically sound test is compromised, yet Indian evidence law addresses this risk only indirectly, through the general requirement that the prosecution prove its case beyond reasonable doubt, rather than through a specific evidentiary rule directed at custodial integrity.

6. Reassessing Admissibility: Towards a Reliability-Centred Framework

6.1 A Comparative Note: The Frye and Daubert Standards

The contrast with the position in the United States is instructive, without suggesting that the American framework should be transplanted wholesale. Under the standard articulated in *Frye v. United States* (1923), scientific evidence

was admissible only if the technique underlying it had gained general acceptance within the relevant scientific community. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.* (1993), the United States Supreme Court replaced general acceptance as the sole criterion with a broader reliability inquiry, directing trial judges to act as gatekeepers who assess, among other factors, whether a technique has been tested, whether it has been subjected to peer review and publication, its known or potential error rate, the existence of standards controlling its application, and the degree of its acceptance within the relevant scientific community. Whatever the criticisms that the Daubert framework has attracted in its own jurisdiction, including inconsistent application by trial judges without scientific training, its underlying premise is one that Indian law has yet to adopt in any structured form: that the reliability of a scientific technique is a distinct question from the qualification of the witness presenting it, and that a court should not defer automatically to a witness's credentials as a substitute for evaluating the soundness of the method itself.

6.2 Elements of a Reform Agenda

A reliability-centred reassessment of Indian forensic admissibility law need not import the Daubert factors mechanically, but could draw on several of its structural insights alongside domestic institutional reform. First, Section 39 of the BSA could be read, or subsequently amended, to require that an expert opinion be shown to rest on a technique that is either well-established through long judicial and scientific acceptance as handwriting and fingerprint comparison have historically been treated or independently validated through documented testing, with a disclosed error rate, before novel or emerging techniques are admitted; this would give statutory content to the "reliable principles" and "recognised field" language already used by the Supreme Court in *Ramesh Chandra Agrawal* without altering the basic structure of the provision.

Second, mandatory accreditation of forensic laboratories, whether under the National Accreditation Board for Testing and Calibration Laboratories or a purpose-built statutory authority, should be made a condition, or at minimum a strong presumptive requirement, for the admissibility of reports from that laboratory, so that accreditation status ceases to be a matter left entirely to weight and becomes part of the threshold inquiry. Third, a codified chain-of-custody protocol, prescribing standardised procedures for the collection, labelling, transport, and storage of forensic samples, would reduce the scope for contamination disputes to be litigated after the fact and would allow courts to assess custodial integrity against an objective statutory benchmark rather than an ad hoc standard. Fourth, revival of a DNA-specific statute, addressing not only the data-bank and privacy concerns that led to the withdrawal of the 2019 Bill but also laboratory standard-setting and proficiency testing, would close the regulatory vacuum identified in Part II. Finally, judicial and prosecutorial training in the fundamentals of forensic science — sufficient to allow judges to ask informed questions about a technique's validation, even without becoming scientists themselves would strengthen the practical capacity of trial courts to perform whatever

gatekeeping role a reformed admissibility standard assigns to them.

CONCLUSION

Indian criminal procedure has embraced the evidentiary promise of forensic science without fully reconciling it with the constitutional guarantee of a fair trial. The transition from the Indian Evidence Act, 1872 to the Bharatiya Sakshya Adhiniyam, 2023 preserved, and in some respects widened, the expert-opinion gateway of the old Section 45 without addressing its central limitation: that admissibility turns on the qualification of the witness rather than the validated reliability of the technique. The constitutional jurisprudence developed in *Kathi Kalu Oghad* and *Selvi v. State of Karnataka* demonstrates that the Supreme Court is capable of engaging seriously with the scientific foundations of an investigative technique when constitutional rights are directly implicated, but this searching scrutiny has not migrated into the ordinary law of expert evidence that governs the vast majority of forensic testimony offered in trial courts every day. A reassessment of admissibility standards, informed by comparative reliability frameworks and matched by institutional reforms to laboratory accreditation and chain-of-custody practice, would bring Indian evidence law closer to its own constitutional commitment: that a conviction, wherever it rests on the authority of science, should rest on science that has actually earned that authority.

REFERENCES

1. Bharatiya Nagarik Suraksha Sanhita, 2023. Act No. 46 of 2023. India.
2. Bharatiya Sakshya Adhiniyam, 2023. Act No. 47 of 2023. India.
3. *Daubert v Merrell Dow Pharmaceuticals Inc.* 509 US 579 (1993).
4. DNA Technology (Use and Application) Regulation Bill, 2019. Bill No. 128 of 2019. India; withdrawn from Lok Sabha on 24 July 2023.
5. *Frye v United States*. 293 F 1013 (DC Cir 1923).
6. Indian Evidence Act, 1872. Act No. 1 of 1872. India; repealed 2024.
7. *Krishan Kumar Malik v State of Haryana*. (2011) 7 SCC 130.
8. *Maneka Gandhi v Union of India*. (1978) 1 SCC 248.
9. P39A Criminal Law Blog, The Square Circle. Foundational validity in forensic evidence: issues with the Indian approach. New Delhi: National Law University Delhi; 2023.
10. Parliamentary Standing Committee on Science and Technology, Environment, Forests and Climate Change. Report on the DNA Technology (Use and Application) Regulation Bill, 2019. New Delhi: Rajya Sabha Secretariat; 2021.
11. *Pattu Rajan v State of Tamil Nadu*. (2019) 4 SCC 771.
12. PRS Legislative Research. The DNA Technology (Use and Application) Regulation Bill, 2019: legislative brief. New Delhi: PRS Legislative Research; 2019 [cited 2026 Sep 27]. Available from: <https://prsindia.org/billtrack/the-dna-technology-use-and-application-regulation-bill-2019>
13. *Ramesh Chandra Agrawal v Regency Hospital Ltd.* (2009) 9 SCC 709.
14. Sekhri A. The right against self-incrimination in India: the compelling case of *Kathi Kalu Oghad*. Indian Law Rev. 2019;3(2):121-146. doi:10.1080/24730580.2019.1646963.
15. *Selvi v State of Karnataka*. (2010) 7 SCC 263.
16. *State of Bombay v Kathi Kalu Oghad*. AIR 1961 SC 1808.
17. *State of Himachal Pradesh v Jai Lal*. (1999) 7 SCC 280.
18. Code of Criminal Procedure, 1973. Act No. 2 of 1974. India; repealed 2024.
19. Constitution of India, 1950. Arts. 20(3), 21. India.

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