
SCIENTIFIC INVESTIGATION, PERSONAL LIBERTY, AND CONSTITUTIONAL RESTRAINT IN INDIA: TOWARD A LIBERTY-CENTRIC FORENSIC FRAMEWORK

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ABSTRACT

Growing use of current forensic techniques (such as Narco Analysis, Polygraphs, Brain Electrical Activity Profiling, Mandatory DNA Extracting, Biometric Surveillance and Seizure of Digital Evidence) has changed fundamentally the balance between individual civil liberties and investigation authorities in India. This paper will show that scientific value will not provide legal constitutional authority alone. Using a doctrinal approach to analysing Article 20(3) and Article 21 of the Constitution of India and considering the reasoning used by the Supreme Court in *Selvi v State of Karnataka* (2010) and *KS Puttaswamy v Union of India* (2017), will show that the bodily integrity, mental privacy, cognitive liberty and decision-making autonomy of the accused are absolute limitations placed on the investigative powers of the State through the Constitution. The rights of the accused do not end with being viewed as an object containing evidence: the accused are full rights-bearing persons with their own dignity having rights regardless of the seriousness of the offence being prosecuted. Additionally, this paper will conclude that the use of custodial consent is frequently an illusion in reality, due to the coercive nature of police custody in India, and that the application of scientific methods to people without conscious consent incurs the same issues of the Constitution as does the use of physical coercion and, whether through the use of pharmacology, psychology or neuroscience, will have similar implications regarding the Constitution. Drawing on the proportionality framework established in *Puttaswamy* and on comparative human rights standards, the paper proposes a liberty-centric framework for forensic investigation. This framework requires: mandatory prior judicial authorisation for all invasive procedures; genuine, magistrate-recorded consent with independent legal representation; audio-visual recording of all forensic processes; comprehensive statutory regulation of DNA and biometric databases, including strict purpose limitation and retention limits; and enforceable remedies for constitutional violations. The paper concludes that the legitimacy of criminal investigation in a constitutional democracy depends not only upon securing convictions, but

upon preserving the humanity of those subjected to investigation. Scientific progress can strengthen justice only when it remains disciplined by constitutional morality.

Keywords: Bodily integrity, Mental privacy, Cognitive liberty, Custodial consent, Judicial authorization.

I. Introduction: Scientific Policing and the Constitution

Modern criminal justice systems have increasingly turned to science and technology to investigate crime, identify suspects, and secure convictions. India has followed this trajectory - sometimes swiftly, sometimes unevenly - with law enforcement agencies adopting DNA profiling, digital forensics, narco analysis, polygraph examinations, and brain-mapping techniques over the past three decades. The appeal is understandable. Empirical evidence appears more reliable than a forced confession, more objective than eyewitness testimony, and less susceptible to the kind of manipulation that has historically tainted custodial interrogation in India.¹

And yet the constitutional legitimacy of many of these techniques remains deeply contested. The question is not simply whether forensic science works - at least some of it does, and no serious scholar denies its utility in appropriate contexts. The real question is whether the State, in its pursuit of truth and crime control, may intrude into the body and mind of an accused person in ways that the Constitution was designed to prohibit. That question acquired renewed urgency following the Supreme Court's landmark pronouncements in *Selvi v State of Karnataka* and *KS Puttaswamy v Union of India*, decisions that fundamentally redefined the constitutional relationship between investigative authority and personal liberty.²³

This paper proceeds as follows. Part II examines the constitutional foundations of personal liberty, dignity, bodily integrity, and mental privacy as they apply to the accused. Part III analyses specific forensic techniques - narco analysis, polygraph testing, brain mapping, DNA extraction, and digital surveillance - against those constitutional foundations. Part IV addresses the right against self-incrimination under Article 20(3) and the seminal authority of *Selvi*. Part V considers the privacy jurisprudence emerging from *Puttaswamy* and its implications for forensic practice. Part VI proposes the elements of a liberty-centric forensic framework. Part

¹National Crime Records Bureau, Prison Statistics India 2022 (Ministry of Home Affairs 2023) 1, 4.

²*Selvi v State of Karnataka* AIR 2010 SC 1974 (Supreme Court of India).

³*KS Puttaswamy v Union of India* (2017) 10 SCC 1 (Supreme Court of India).

VII concludes.

II. Personal Liberty, Dignity, and the Accused

A. Article 21 and the Evolution of Personal Liberty

Article 21 of the Constitution provides that no person shall be deprived of life or personal liberty except according to procedure established by law.⁴ When the Constitution was framed, this guarantee was interpreted narrowly - little more than a requirement that some law authorise the relevant deprivation. *Maneka Gandhi v Union of India* changed that permanently.⁵ From 1978 onward, the Court has insisted that the procedure must itself be fair, just, and reasonable. Arbitrary or oppressive procedures do not acquire constitutional validity merely because a legislature has enacted them.

Within criminal law, Article 21 now protects freedom from torture, arbitrary arrest, prolonged detention, and coercive interrogation.⁶ It safeguards the right to legal representation, to a speedy trial, and to humane custodial treatment. Following *Puttaswamy*, it also encompasses the right to privacy in its bodily, informational, and cognitive dimensions.⁷

B. Dignity as a Constitutional Limitation on Investigative Power

Human dignity has emerged as a concrete constitutional limitation on State authority, not merely an abstract aspiration.⁸ The Supreme Court has affirmed that dignity inheres in every person and that the State may not treat individuals as instruments for achieving governmental objectives.⁹ This principle carries particular force within the criminal justice context, where the accused occupies a position of structural vulnerability.

Forensic techniques that forcibly penetrate the body or manipulate cognitive processes raise concerns not only about physical harm but about objectification. When the State seeks to chemically induce speech or to measure neurological responses without the conscious cooperation of the subject, it treats the accused as a repository of evidence rather than a rights-

⁴Constitution of India 1950, art 21.

⁵*Maneka Gandhi v Union of India* AIR 1978 SC 597 (Supreme Court of India).

⁶*Maneka Gandhi* (n 3); see also *Bachan Singh v State of Punjab* AIR 1980 SC 898.

⁷*Puttaswamy* (n 2) [113]–[121] (Chandrachud J), [35]–[40] (Khehar CJ).

⁸Aharon Barak, *Human Dignity: The Constitutional Value and the Constitutional Right* (CUP 2015) 3–7.

⁹*Aruna Ramchandra Shanbaug v Union of India* (2011) 4 SCC 454 [26] (Panchal J).

bearing constitutional subject. This is incompatible with the dignity guarantee embedded within Article 21.

C. The Problem of Custodial Consent

Much of the legal justification for invasive forensic procedures rests upon the concept of consent. The argument runs: if the accused voluntarily agrees to narco analysis or a polygraph examination, no constitutional violation occurs. This argument is superficially plausible and constitutionally misleading.

An accused person in police custody faces dependency, fear, uncertainty, and severe informational disadvantage.¹⁰ Access to legal advice is frequently limited. Investigators exercise overwhelming authority over detention conditions, interrogation schedules, and the procedural choices that shape the accused's immediate future. Even without explicit threats, the accused may reasonably conclude that refusal will produce harsher treatment, prolonged custody, or adverse inference. Under these conditions, apparent voluntariness may conceal structural coercion that no signature on a consent form can cure.

The Supreme Court in *Selvi* recognised this danger explicitly, holding that consent in this context must be free, informed, and recorded before a Judicial Magistrate.¹¹ To be constitutionally meaningful, consent requires: independent legal representation before any decision is made; a clear explanation of the procedure and its consequences; express confirmation that refusal will produce no adverse inference; and freedom from custodial pressure throughout the process. The absence of any of these elements renders apparent consent constitutionally defective.

D. The Presumption of Innocence and Accused-Centred Constitutionalism

The presumption of innocence is not merely an evidentiary rule; it reflects a foundational constitutional philosophy.¹² A person accused of a crime is entitled to rights and should not be treated solely as someone who may be guilty of committing a crime (or has committed a crime).

¹⁰DK Basu v State of West Bengal AIR 1997 SC 610 (Supreme Court of India) (guidelines on custodial interrogation and arrest procedures).

¹¹Selvi (n 1) [254] (Balakrishnan CJ) ("We are of the opinion that the results of such tests cannot be admitted in evidence if they have been obtained through the use of compulsion").

¹²See Noor Aga v State of Punjab (2008) 16 SCC 417 [50]–[52] (Supreme Court of India) (on the presumption of innocence).

Constitutional law that centres around the rights of those being accused of a crime places a priority on protecting a person's right to liberty from unfair investigative practices. Although there are instances where scientific investigations can create additional pressures to process expediently (obtain evidence quickly vs obtaining evidence fairly), constitutional law that governs criminal procedures clearly states that the validity or legality of evidence obtained through either police/govt agency will depend on obtaining evidence fairly, voluntarily and with dignity, regardless of how serious the crime alleged to have been committed may be.

III. Forensic Techniques and the Risk of Compulsion

A. Narco Analysis

Narco analysis is conducted using sodium pentothal (a barbiturate) in order to create a semi-conscious state during questioning of the subject. The technique is based on the premise that there will be an increase in the amount of information available because there will be less cognitive resistance. The problem of using this technique in practice is that when subjects are sedated, they may be highly suggestible (i.e., confused between their imagination and memory) and their answers to questions may correspond to what the interrogator expected them to say.

Constitutionally, the objections are more fundamental still. The State chemically alters the cognitive condition of the accused to extract information she has chosen not to disclose. The right to remain silent - protected under Article 20(3) and Article 21 - is precisely what the procedure is designed to bypass. As the Supreme Court held in *Selvi*, the fact that the intrusion employs pharmacology rather than physical force does not alter its constitutional character.¹³ The accused's conscious control over her own speech has been deliberately overridden by State action. This constitutes testimonial compulsion.

B. Polygraph Testing

Polygraph examinations measure physiological responses - pulse rate, respiration, galvanic skin response - while the subject answers questions, with investigators interpreting deviations as signs of deception. The scientific reliability of this technique remains contested internationally.¹⁴ Anxiety, fear, medical conditions, cultural difference, and simple

¹³ibid [195]–[200].

¹⁴National Research Council (US), *The Polygraph and Lie Detection* (National Academies Press 2003) 212–214.

nervousness can each produce physiological responses indistinguishable from those associated with deception. There is no scientific consensus that the polygraph reliably detects untruth.

In custodial settings, constitutional concerns intensify. The procedure depends upon psychological pressure: the accused is placed in a controlled environment designed to produce measurable stress. Even where the test is not physically painful, the surrounding custodial context may generate coercion sufficient to undermine voluntariness. The Court in *Selvi* rightly grouped polygraph testing with narco analysis and brain mapping as techniques capable of implicating Articles 20(3) and 21.¹⁵

C. Brain Mapping (Brain Electrical Activity Profiling)

Brain Electrical Activity Profiling (BEAP) presents some of the most constitutionally novel questions of any contemporary forensic technique. By presenting stimuli associated with a criminal event and measuring corresponding neural responses, investigators attempt to identify whether the accused possesses concealed knowledge of those events - without requiring any verbal communication.¹⁶¹⁷

BEAP raises important constitutional issues due the protection it provides for mental privacy, which was established in *Puttaswamy* and *Selvi* and protects the thought process of individuals from State intrusion. The ability to remain quiet when given orders is important for all people in India; more importantly, however, being able to control what falls from your subconscious to the external world through your conscious mind has deeper implications for how we understand people from the outside world. Technologies that attempt to replace control over what occurs within one's mind by attempting to read neural activity instead of verbalizing parts of the brain are attacking the same fundamental value (that is, of being able to have control over your own thoughts) through a different but equally technological method, and will therefore not allow the ability to have the legal right to remain unknown or silent in regards to your own thoughts.

D. DNA Collection and Biometric Databases

DNA evidence has transformed criminal investigation, and its value - including in exonerating

¹⁵*Selvi* (n 1) [197]–[230] (Balakrishnan CJ).

¹⁶Lawrence Farwell, "Brain Fingerprinting: Corrections to Rosenfeld" (2012) 26 *Psychophysiology* 1856.

¹⁷JT Rosenfeld, "Brain Fingerprinting: A Critical Analysis" (2005) 14 *Scientific Review of Mental Health Practice* 50, 52.

the wrongly convicted - is well established.¹⁸ The constitutional objections are not to DNA evidence as such. They concern the conditions under which biological samples are collected and the governance of databases that aggregate the resulting information.

A DNA sample does not merely establish identity. It reveals genetic predispositions to disease, familial relationships, ethnic background, and other deeply personal characteristics.¹⁹ Compulsory extraction therefore implicates both bodily integrity and informational privacy. The Criminal Procedure (Identification) Act 2022, which permits collection of biological samples from arrested persons without requiring conviction,²⁰ has attracted criticism because it does not adequately address retention limits, purpose restriction, or independent oversight - all of which the proportionality framework in *Puttaswamy* demands.²¹

E. Digital Surveillance and Informational Extraction

The most pervasive site of contemporary forensic investigation is the personal digital device. Smartphones and laptops contain intimate details of communication, relationships, beliefs, financial transactions, and daily behaviour. Compelling access to such a device can, in effect, expose the entirety of a person's private life to investigative scrutiny.²²

Puttaswamy's recognition of informational privacy as a fundamental right means that digital extraction requires legality, necessity, and proportionality.²³ The absence of comprehensive digital evidence legislation in India - governing the scope of search, permitted retention periods, and disclosure rights - represents a significant constitutional deficiency. The Digital Personal Data Protection Act 2023, while a step forward, contains broad exemptions for State data processing in the interests of national security and law enforcement that substantially weaken its privacy protections precisely where they are most needed.²⁴

¹⁸Brandon Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* (HUP 2011) 7–10.

¹⁹George Annas, "Protecting Privacy and the Public — Limits on Police Use of Bioidentifiers in Europe" (2009) 361 *New England Journal of Medicine* 196, 197.

²⁰Criminal Procedure (Identification) Act 2022 (n 9), ss 2, 3.

²¹Law Commission of India, "Human DNA Profiling: A Draft Bill for the Use and Regulation of DNA-based Technology" (Report No 271, 2017) 17–22.

²²Information Technology Act 2000 (India), s 65B; see also *Anvar PV v PK Basheer* (2014) 10 SCC 473 (Supreme Court of India) (electronic evidence admissibility).

²³*Puttaswamy* (n 2) [157]–[162] (Chandrachud J).

²⁴Digital Personal Data Protection Act 2023 (n 10), s 17.

F. The Myth of Scientific Infallibility

One of the most troubling issues in Indian forensic discourse is the presumption that forensic techniques are objective and that they produce truth that is fool-proof. In the same way, courts, investigators, and the media all assume the veracity of forensic evidence simply based on the inherent authority of that evidence. This presumption has serious implications under the Constitution, as it applies a great deal of pressure to reduce protections under the guise of expediency, while ignoring the very real probability for error, confirmation bias, contamination, and misinterpretation that accompany even well-established forensic methods.

The Constitution requires scepticism towards concentrated power, including technological power, meaning that forensic methods must always be subject to sound judicial scrutiny, rather than received automatically as legitimate. Scientific certainty is not a constitutional exception to the guarantees of the rights to liberty and dignity; therefore, it cannot and should not be so treated.

IV. Article 20(3), Testimonial Compulsion, and Selvi

A. The Scope of Article 20(3)

Article 20(3) provides that no person accused of an offence shall be compelled to be a witness against himself.²⁵ The historical roots of this privilege lie in the abuses of coerced confession across legal traditions - it reflects the foundational principle that the State must prove its case against the accused, not compel the accused to do that work.²⁶

The provision has three operative elements. The person must be 'accused of an offence' - the protection applies to criminal proceedings. She must be 'compelled' - voluntary disclosure falls outside its scope. And she must be made to be 'a witness against herself' - the communication must be testimonial rather than purely physical.

B. Testimonial Compulsion: From Oghad to Selvi

In *State of Bombay v Kathi Kalu Oghad*, a Constitution Bench held that the production of

²⁵Constitution of India 1950, art 20(3).

²⁶John Henry Wigmore, *A Treatise on the Anglo-American System of Evidence* (3rd edn, Little, Brown 1940) vol 8, § 2250.

specimen handwriting and fingerprints does not amount to being a witness, as these are physical rather than testimonial acts.²⁷ This distinction was relatively clear in 1961. What it did not anticipate was the emergence of techniques like narco analysis and BEAP, which occupy an uncomfortable middle ground: they produce information originating within the accused's mind, but extract it without any voluntary act.

Selvi addressed this problem directly. The Supreme Court held that the protection in Article 20(3) extends to information extracted from the mind through compelled neuropsychological techniques, because such information is personal testimony - the product of the accused's own cognitive processes - even if she has not consciously chosen to communicate it. The vector differs from conventional oral testimony; the constitutional substance does not.

C. The Selvi Holding and its Significance

In her four principal assertions, *Selvi* settled on the following findings. First, performing narco-analysis or using polygraph tests or brain wave monitoring without the subject's consent is a violation of Article 20(3) against receiving compulsory testimony. Second, administering these techniques without a person's consent violates the individual's freedom and mental privacy guaranteed by Article 21 of the Constitution. Third, irrespective of whether these tests led to admissible evidence, any information derived from such procedures would be inadmissible as evidence. Fourth, an accused person may voluntarily consent to these procedures, but that consent must be genuine, informed, and recorded before a Judicial Magistrate; even then, the results are not admissible as substantive evidence and may only guide investigative direction.²⁸

In two ways, the judgment has important implications. First, it clarified that compulsion does not have to involve visible violence: psychological pressure, fear of being held in custody, or the disparity of information between the accused and the investigator can equally destroy free will without any physical abuse taking place. Second, for the first time clearly, it recognised that mental privacy is a protected aspect of a person's liberty, under Article 21, and establishes a constitutional limit on the State's ability to access someone's internal thoughts and feelings.

D. The Right to Silence as a Liberty Safeguard

It's important to think about what "the right to silence" means in this instance. Many readers

²⁷State of Bombay v Kathi Kalu Oghad AIR 1961 SC 1808 (Supreme Court of India).

²⁸*Selvi* (n 1) [252]-[255].

inadvertently treat the right to silence as a mere technical evidentiary privilege with little moral value. However, it is actually a liberty protection of significant constitutional dimension. The right to determine what information/ evidence to give or whether or not to provide nothing at all, is an expression of autonomy for the accused and reinforces the presumption of innocence and preserves the dignity of the accused by ensuring that the accused is not becoming the main point of the conviction against themselves by the State.

As such, a democratic criminal justice system must accept the possibility of some evidence remaining unavailable to law enforcement because of the constitutional restrictions that actually restrict the power of law enforcement to investigate. This is not a flaw in the system rather, it is a constitutional choice made to select the risk of occasional impunity rather than to have as a certainty systemic injustice.

V. Privacy Jurisprudence and Scientific Investigation

A. Puttaswamy and the Fundamental Right to Privacy

KS Puttaswamy v Union of India is among the most consequential constitutional judgments in Indian legal history. The nine-judge bench held unanimously that privacy is a fundamental right protected under Articles 14, 19, and 21. The Court clarified the definition of privacy as including several facets: spatial privacy – or privacy of one's home; relationally privacy – or privacy of close relations; informational privacy – or being able to control one's own data information; and decisional autonomy – or having the ability to decide personal issues/related issues. Privacy is not just a way of preventing others from invading into someone's space; it is also the ability for a person to control their own story and retain an "inner life" (territorially sovereign).

B. The Proportionality Framework

Puttaswamy did not hold that privacy is absolute. It established a proportionality framework requiring that any restriction must satisfy: (i) legality - a law, accessible and precise, must authorise the restriction; (ii) legitimate aim - the restriction must serve a legitimate State objective; (iii) necessity - less intrusive alternatives must have been considered and found inadequate; (iv) proportionality stricto sensu - the benefit to the legitimate aim must outweigh the severity of the rights restriction; and (v) procedural safeguards - adequate mechanisms must

exist against arbitrary or abusive exercise of the restricted power.^{29 30}

In terms of forensic investigation, this framework is very strong. If conventional investigation is enough, then narco analysis does not apply. Digital searches through accused's devices (also known as digital fishing) cannot replace a properly targeted, judicially authorised search. DNA profiles of persons found not guilty must be deleted immediately once you can no longer use them for general investigative purposes. Purpose Limitation is required to meet the Constitution, not merely desired for policy reasons.

C. Informational Privacy and the Governance of Forensic Databases

The convergence of DNA profiling, biometric identification, and digital surveillance creates a landscape of forensic data collection that goes far beyond anything the constitutional framers contemplated. Personal data possesses extraordinary power: it can reveal behavioural patterns, social networks, political associations, health conditions, and economic circumstances. In the hands of an unaccountable State, forensic databases can become instruments of persistent surveillance rather than tools of targeted investigation.

The constitutional requirement of purpose limitation - that data collected for one specific investigative purpose may not be repurposed for others without fresh justification and authorisation - is therefore a structural safeguard against the conversion of criminal investigation into continuous population-level surveillance.³¹ India's current legislative framework does not adequately discharge this constitutional obligation. The DPDPA 2023's broad exemptions for State processing effectively replicate the very risks that *Puttaswamy* held to be constitutionally impermissible without compelling justification.

D. Mental Privacy and Cognitive Liberty

Puttaswamy and *Selvi* together establish that constitutional privacy extends beyond the physical body to the inner realm of thought, memory, and cognition. Mental privacy protects individuals against forced disclosure of beliefs, intentions, or concealed knowledge. This

²⁹ibid [176]–[180] (Chandrachud J).

³⁰*Puttaswamy* (n 2) [180] (Chandrachud J); see also *Modern Dental College v State of Madhya Pradesh* (2016) 7 SCC 353 (Supreme Court of India) (proportionality in fundamental rights adjudication).

³¹Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data (GDPR) [2016] OJ L119/1, art 9.

principle is essential because freedom of thought forms the foundation of democratic citizenship. A constitutional democracy cannot permit unrestricted State access to a person's inner consciousness; the freedom to think, to remain silent, and to control one's own mental processes is central to both dignity and autonomy.

VI. Toward a Liberty-Centric Forensic Framework

Based on the preceding analysis, it is evident that there is a need for a new statutory regime to improve forensic investigation procedures in India, given first and foremost the law is outdated and contains gaps where there is an absence of law entirely. Therefore, it is imperative that the legislature enacts a new legislative scheme to regulate these types of investigations by setting forth statutory safeguards, oversight and accountability measures and an effective way to monitor compliance with those measures in order to provide protection against the wrongful use of intrusive investigative techniques. This Part of the article proposes the elements of a liberty-centered framework to regulate forensic investigations.

A. Mandatory Judicial Authorisation

The single most important structural reform is the introduction of a mandatory warrant requirement for all invasive forensic procedures.³² Prior judicial authorisation creates an institutional check upon executive discretion. A magistrate asked to approve narco analysis, compulsory DNA extraction, or extensive digital search must assess: whether reasonable grounds for suspicion exist; whether the procedure is necessary given the nature and gravity of the alleged offence; whether less intrusive alternatives are available; whether adequate safeguards are in place; and whether the scope of proposed extraction is proportionate to the investigative objective.

Search and seizure of physical premises already requires judicial authorisation in principle. There is no principled reason why intrusion into the body or mind should be more permissive than intrusion into a home.³³ If anything, the reverse holds: bodily and cognitive integrity are more central to personal liberty than physical space.

³²See *CBI v Vipin Mehrotra* (2014) 14 SCC 462 (Supreme Court of India) (on judicial authorisation requirements for investigative steps).

³³*DK Basu* (n 17).

B. Meaningful Consent and Mandatory Legal Representation

Framework should provide for no forensic procedure where constitutionality depends on the consent of the accused shall take place until the accused has an opportunity to consult privately and with sufficient time with a lawyer of the accused's choosing, or as an appointed legal aid counsel. Any consent obtained in the absence of legal representation shall be considered to be constitutionally invalid. The accused shall be clearly informed (in the language that the accused speaks) that if they refuse to consent, that will have no negative consequences against them. These requirements shall be codified in law rather than subject to ad hoc judicial oversight on a case by case basis; through the course of all forensic procedures.

C. Audio-Visual Recording and Transparency

All forensic procedures should be audio-visually recorded from commencement to completion. Recording serves multiple constitutional purposes: it deters coercion, creates an accurate record for judicial review, and provides evidence for any complaint of unconstitutional treatment. Protocols governing collection, storage, testing, retention, and eventual destruction of forensic data should be publicly accessible. These transparency requirements are a minimum condition of accountability in a constitutional democracy.

D. Statutory Regulation of DNA and Digital Databases

India requires comprehensive legislation governing forensic databases, drawing on the Law Commission's recommendations and international standards. Such legislation should embody: (i) strict purpose limitation - data collected for one investigation may not be repurposed without fresh judicial authorisation; (ii) data minimisation - only information strictly necessary for identification purposes may be extracted; (iii) independent authorisation for collection; (iv) secure storage standards; (v) rights of access and correction; (vi) automatic destruction of samples following acquittal or expiry of limitation periods; and (vii) an independent oversight body combining judicial, technical, and civil society expertise.

E. Enforceable Remedies

Constitutional rights without remedies are aspirations. An exclusionary rule should operate to exclude evidence obtained in violation of Articles 20(3) and 21 from criminal proceedings.³⁴

³⁴See generally *Kartar Singh v State of Punjab* (1994) 3 SCC 569 (Supreme Court of India) (on remedies for

Additionally, compensation should be available under Article 32 for unconstitutional forensic extraction, consistent with the Supreme Court's recognition of the constitutional tort in custodial rights cases.³⁵ These remedies would create meaningful deterrents against constitutional violation rather than simply generating post hoc declarations of unlawfulness.

VII. Conclusion

Tension is something which seems to thus exist at the very heart of this paper between two distinctly important components. The State is definitely interested in effective crime investigation. If properly regulated and interpreted, forensic science can readily fulfill this interest and decrease reliance on confessions obtained through physical coercion. Anyone seriously contemplating the ramifications of a wrongful conviction or the impunity about which organized crime operates cannot feel indifferent regarding stringent investigation.

But the accused-as she may be-whatever scheme was devised-is a human being entitled to dignity, autonomy, and all protections under the Constitution. Articles 20(3) and 21 do not stop being applicable when a person is arrested. They do not erode with the gravity of the alleged offence. And they recognize no exceptions in favor of science as far as fundamental rights are concerned.

Selvi & Puttaswamy's ruling establishes that constitutional democracy requires a specific form of restraint from the State in that it must treat all individuals (even if suspected of committing a crime) as individuals worthy of dignity and respect as opposed to simply resolving the problems posed by their suspected wrongdoing(s). Therefore, the Constitution provides for the following rights as collectively providing a constitutional boundary beyond which a (State) Government may not go, regardless of how compelling and reasonable (inside a reasonable person's mind) the justification is: the right of bodily integrity, the right of mental privacy; the right of decisional autonomy; and the right to remain silent before, during, and after the conviction or acquittal.

The liberty-centric approach outlined in this article is not extreme; it provides for: an independent judiciary pre-authorization of the intrusion; true voluntary consent for the

unconstitutional evidence gathering); *RM Malkani v State of Maharashtra* AIR 1973 SC 157.

³⁵See Article 32 of the Constitution of India 1950; *Nilabati Behera v State of Orissa* AIR 1993 SC 1960 (Supreme Court of India) (constitutional tort and compensation for custodial violations).

intrusion in the presence of an attorney; recording of the process with detailed documentation; proportional action taken with the data obtained post-intrusion; deterrent remedies available for violations of the individual's constitutional rights after the direction of the Government's action. These are basic tenets of any well-functioning democracy that respects the rule of law and the dignity of all individual citizens; therefore, any Government that does not provide for all four in the context of forensic anthropology has yet to mature as being a functioning democracy. The absence of the provisions above does not prove that they are unenforceable. Rather, it demonstrates how much work still needs to be accomplished to entrench these provisions.